# Application for Professor of the Graduate Division

Candidate:	Mikeal Roose		
College:	CNAS	Department:	BPSC
Last Review Date:	07/01/2020	Retirement Date:	January 4, 2022
		Effective Date of PGD Appointment:	January 1, 2022

Document Checklist:

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- Exception request & approval (if applicable)
- Self-Statement
- Current UC Biography and Bibliography or Current UC Biography and CV

Summary of scholarly activity during the past four years:

- List of publications
- Grant Activity
- Presentations and Invited Talks
- Graduate Student and/or Postdoctoral Training
- (The most recent personnel review file may be submitted if the review was held within the past 4 years)

Department Letter – must include faculty vote

Dean's Comments: (Use a separate sheet if necessary)

Dean's Signature	Date	
Submit completed file to:	Academic Senate, 221 University Office Building – attn: CAP or a pdf submitted electronically to <u>genie.mulari@ucr.edu</u>	
Graduate Dean Review:	Recommends Does Not Recommend (ma	y attach comments)
	Signature	Date
CAP Review:	CAP minute attached	
VPAP:	Recommends Does Not Recommend	
	Signature	Date
EVCP:	Recommends Does Not Approve	
	Signature	Date

Mikeal L. Roose

SELF STATEMENT

I request an appointment as Professor of the Graduate Division following my retirement from UCR in order to continue research in citrus genomics and breeding, supervise one remaining M.S. student, and perform limited service responsibilities for UC. An appointment for 2-3 years would be appropriate after which we can reassess the justification for renewal. I request to retain my current lab space on the 4<sup>th</sup> floor of Batchelor Hall, and to continue to have access to field and greenhouse space from Agricultural Operations and UC Research and Extension Centers.

**Planned Research** - I currently have several active research grants including three from USDA NIFA, two from the California Citrus Research Board, and one from the UC Multicampus Research Programs and Initiatives. Most of these grants have been extended for one year due to COVID issues. All of these projects include substantial focus on developing solutions to control citrus Huanglongbing (HLB) disease, a major problem facing the citrus industry in the US and currently spreading in southern California. I currently supervise one Associate Project Scientist, one Assistant Project Scientist, one Associate Specialist, two Staff Research Associates, and three postdoctoral researchers. All but one are expected to continue after my retirement at the end of December.

One NIFA project involves using CRISPR-CAS9 methods to silence citrus genes believed to be essential for HLB to spread in citrus tissue. This project is just now reaching the point where we will attempt to produce non-transgenic plants with edited genes. A second NIFA-funded project explores approaches to more rapidly develop and commercialize more tolerant varieties. My role is mostly in providing genomic analyses of various hybrids, and mapping genes for HLB tolerance and resistance, and important fruit quality traits. We have generated quite a bit of data that has not been fully analyzed as yet and this is one of my goals during the next year.

I also plan to continue to be involved in the UCR citrus breeding program. This CRB-funded project now includes 4 other PIs, Tracy Kahn, Danelle Seymour, Peggy Mauk, and Glenn Wright (U. Arizona) but I have the largest share of the current year budget. We are working to smoothly transition this project to these Co-PIs in coming years. I plan to continue to provide guidance, supervise some staff, and support with program with gift funds for at least several more years.

Finally, I have several manuscripts resulting from work by former students, postdocs, and visitors that needs to be published. Much of this from analysis of citrus with SNP arrays that we have developed and have applied to several problems. Potential manuscript topics include the following:

- Admixture analysis of 924 accessions from the citrus variety collection
- Local ancestry analysis of introgressed citrus accessions (assigning the origin of chromosome segments to specific ancestral species)
- Genotyping single pollen grains to infer haplotypes of many important citrus genotypes
- The frequency and characteristics of hemizygous deletions in citrus germplasm
- Improvement in genome assemblies using dense linkages maps of citrus
- Several papers summarizing citrus rootstock trials

**Planned Teaching** – I will continue to supervise one M.S. student (also an employee) whose progress has been slowed by COVID and long delays by external companies in analyzing samples we have submitted. I will also continue to serve on Dissertation Committees to which I have been appointed and any new committees for which there are no logical alternatives. We have one undergraduate employee in the lab who is

supervised by other staff and I expect a student volunteer to start a project in January. I do not expect to teach formal classes.

**Planned Service** – I am willing to serve on UCR and systemwide committees after my retirement. I currently serve on one systemwide subcommittee of UCPB – the Task Force on ANR and have been asked to continue this service. I have also agree to continue to serve on the UCR Agricultural Operations Committee.



## Academic Personnel Services Unit (APSU) Biography Form

#### TO BE FILLED OUT BY DEPARTMENT AP

Department: Botany and Plant Sciences	Position Title (include Rank and Step): Professor of Graduate Division
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#### TO BE FILLED OUT BY THE EMPLOYEE

Last Name, First Name and Middle Initial (exactly as it appears on your Passport or Social Security Card): Roose, Mikeal L Business/School E-mail: roose@ucr.edu Personal E-mail: mikealroose@charter.net Current Address, City, State, and Zip Code: Permanent/Foreign Address, City/Province, State/Country, and Zip/Postal Code: 170 E. Broadbent Dr., Riverside, CA 92507 NA Business/School Phone Number: 951-827-4137 Preferred Phone Number: 951-990-2943 US Citizen:  $\boxtimes$  Yes or  $\square$  No Visa Type: NA Visa Expiration: NA Do you have any family members employed by UCR? Name: Pamela Roose Relationship: spouse Department: Botanic 🛛 Yes or 🗆 No Garden

Educational Background: Please list in chronological order, beginning with the most recent degree first.

Degree	Date Awarded (MM/DD/YYYY)	Institution: Reed College
В.А.	05/20/1973	Specialization: <b>Biology</b>
Degree	Date Awarded (MM/DD/YYYY)	Institution: University of California, Davis
Ph.D.	09/1979	Specialization: Genetics

**Previous Applicable Employment:** Please show a full account of your time from the date of your first <u>academic employment</u> up to the present with most recent position first. <u>Please include all previous UC experience</u>. If needed, please insert more rows, or attach an additional page.

Dates (MM/DD/YYYY)	Institution, Organization and Location	Rank, Title or Position
FROM: 07/01/1998	University of California, Riverside	Professor of Genetics
TO:		
FROM: 07/01/1991	University of California, Riverside	Associate Professor of Genetics
TO: 06/30/1998		
FROM: 11/15/1982	University of California, Riverside	Assistant Professor of Genetics
TO: 06/30/1989		
FROM: 10/01/1979	University of Liverpool	Senior Research Assistant
TO: 10/30/1982		
FROM: 09/01/78	State University of New York, Stony Brook	Lecturer
TO: 06/30/1979		
FROM: 09/01/1974	University of California, Davis	Graduate Research Assistant, Teaching
TO: 08/30/1978		Assistant



## Academic Personnel Services Unit (APSU) Biography Form

Research Specialization: plant breeding and genetics		
Signature	Milleel L Rooze	Date 12/14/2021

#### Mikeal L. Roose Department of Botany and Plant Sciences

Phone: (951) 827-4137; Fax: (951) 827-4437; mikeal.roose@ucr.edu

https://profiles.ucr.edu/app/home/profile/roose.html

#### **EDUCATION**

Ph.D., 1979	University of California, Davis, Genetics (1	1974-1979)
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B.A., 1973 **Reed College,** Biology (1969-1973)

### PROFESSIONAL EXPERIENCE

1/22-present	Professor of Genetics Emeritus, University of California, Riverside
7/98-12/21	Professor of Genetics, University of California, Riverside
7/89-6/98	Associate Professor of Genetics, University of California, Riverside
11/82-6/89	Assistant Professor of Genetics, University of California, Riverside
10/79-10/82	Senior Research Assistant and University Fellow, Liverpool University
6/78-7/79	Lecturer, SUNY-Stony Brook

## **PROFESSIONAL ACTIVITIES**

- Member, Executive Committee, International Society for Citriculture (2014 )
- Secretary/Treasurer, International Society for Citriculture (2016-
- Chair, Department of Botany and Plant Sciences, University of California, Riverside (2010-2016)
- Interim Division Dean for Agriculture and Natural Resources, UC Riverside (2007-2008)
- Member International Citrus Genomics Consortium Steering Committee (2004-2014)

## **HONORS & AWARDS**

• Award of Excellence for Exceptional Service to the California Citrus Industry (2006)

## **TEACHING EXPERIECE**

- Foundations of Plant Biology
- Advanced Plant Breeding
- Introductory Genetics

## **GRANTS RECEIVED (partial list)**

- 1. Roose, M. L., Kahn, T. K. Wright, G. A., Mauk, P.A., 2021-2022. Integrated Citrus Breeding and Evaluation Program, California Citrus Research Board, \$508,662
- Wang, N, Grosser, J, Jones, JB, Louzada, ES, Roose, ML, Vashisth, and White, F, 2018-2023. Development Of Non-Transgenic HLB Resistant Citrus Varieties Using Crispr-Cas9, USDA (subcontract from U. Florida), \$479,688
- 3. Baldwin, E., Roose, M. L., Stover, E., Bai, J., Ferrarezi, R., and Gmitter, F., 2018-2023. Accelerating implementation of HLB tolerant hybrids as new commercial cultivars for fresh and processed citrus, USDA-cooperative agreement 59-6034-8-006m, \$580,366
- 4. Ramadugu, C., Dardik, C., Roose, M. L., McCollum, G., Patt, J., Kahn, T., Arpaia, M., Jetter, K., and Obenland, D. 2019-2023. Development of huanglongbing resistant/tolerant citrus through genomic approaches. USDA-NIFA, \$3,941,090 (total)
- Jia, Z. and Roose, M. L.2019-2022. Multiscale data analysis to identify networks of genetic variants and metabolomic variants that are associated with key traits in citrus. USDA-NIFA. \$498,816 (total).
- 6. Ramadugu, C., Roose, M., Cutler, S., Mauk, P. Albrecht, U., and Kunta, M., 2020-2023.

Novel, non-transgenic, hybrid citrus varieties with resistance to huanglongbing: evaluation and cultivar development. USDA-NIFA 2020-70029-33201, \$4,670,000 (total).

- 7. Ramadugu, C., Roose, M. 2021-22. Breeding for generating HLB resistant citrus, and field evaluation of selected HLB tolerant hybrids. California Citrus Research Board, \$140,000.
- Bowman, K., Albrecht, U., and Roose, M. 2020-22. Refinement and application of greenhouse methods to evaluate scion and rootstock tolerance to CLas. California Citrus Research Board, \$74,715.

## PUBLICATIONS (last 5 years, 128 total)

- 1. Ramadugu, C, Razi, M F, Keremane M L, Scora R W, and Roose, M L. 2017. Limes: Systematic classification, distribution and botany, in Khan, M M, Al-Yahyai R, and Al-Said F (Eds), The Lime, Botany Production and Uses. CABI, Wallingford.
- Wu, G, Terol, J, Ibanez, V, Lopez-Garcia, A, Perez-Roman, E, Borreda, C, Domingo, C, Tadeo, FR, Carbonell-Caballero, J, Alonso, R, Curk, F, Du, D, Ollitrault, P, Roose, ML, Dopazo, J, Gmitter, FG, Rokhsar, DS, and Talon M. 2018. Genomics of the origin and evolution of *Citrus*. Nature 554:311-317.
- 3. Huang, M, Roose, M L, Yu, Q, Du, D, Yu, Y, Zhang, Y, Deng, Z, Stover, E, and Gmitter F G Jr. 2018. Construction of high-density genetic maps and detection of QTLs associated with Huanglongbing tolerance in citrus. Frontiers in Plant Sci. 9:1694, doi: 10.3389/fpls.2018.01694.
- 4. Strazzer, P, Spelt, C E, Shuangjiang, L, Bliek, M, Federici, C T, Roose, M L, Koes, R, and Quattrocchio F M. 2019. Hyperacidification of Citrus fruits by a vacuolar proton-pumping P-ATPase complex. Nature Comm. Doi: 10.1038/s41467-019-08516-3.
- Simons, T J, McNeil C J, Pham, A D, Slupsky, C M, Roose, M L., and Guinard, J-X. 2019. Chemical, sensory, and consumer evaluations of 'DaisySL' mandarins grafted onto three different rootstocks. HortSci. 54:1217-1222. doi.org/10/21273/HORTSCI14023-19
- Xu, Q and Roose, M L. 2020. Citrus genomes: from sequence variations to epigenetic modifications. In: The Citrus Genome, Ed. A. Gentile, S. La Malfa, and Z. Deng. Springer. pp. 141-165.
- Li, R. Qi, H, 13 others, Ferrante, S, Roose, M L, and Jia Z. 2020. Inference of chromosomelength haplotypes using genomic data of three or a few more single gametes. Mol. Biol. Evol. 37(12):3684–3698. doi:10.1093/molbev/msaa176
- 8. Federici, C, Kupper, R, and Roose M. 2020 Rootstocks affect performance of 'Tango' mandarin. Citrograph 11(3): 56-60.
- 9. Federici, C, Kupper, R, and Roose, M. 2021. Ventura County lemon rootstock trial. Identifying choices and trade-offs. Citrograph 11(4): 52-57.
- Stover, E., Ramadudu, C., Roose, M., Krystel, J., Lee, R. F., and Keremane, M. 2021. Incidence of Asiatic citrus canker on trifoliate orange and its hybrid accessions in a Florida field planting. HortSci 56:525–531. <u>https://doi.org/10.21273/HORTSCI15684-20</u>
- 18. Keremane, M. L., McCollum, T. G., Roose, M. L., Lee, R. F., and Ramadugu, C. 2021. An improved reference gene for detection of "Candidatus Liberibacter asiaticus" associated with Citrus Huanglongbing by qPCR and digital droplet PCR assays. Plants 10:2111. <u>https://doi.org/10.3390/plants10102111</u>
- Mattia, M. R., Du, D., Yu, Q., Kahn, T., Roose, M., Hiraoka, Y., Wang, Y., Munoz, P., and Gmitter, F.G., Jr. 2022. Genome-wide association study of healthful flavonoids among diverse mandarin accessions. Plants 11: 317. <u>https://doi.org/10.3390/plants11030317</u>

# Mikeal Roose Advancement to Step VI (2019-2020)

Name: Mikeal Roose NetId: roose Title: Professor and Geneticist, Emeritus Review Department: D01047 - Botany and Plant Sciences Period of Review: 10/1997 - 09/2019 Review Type: Advancement to Step VI Generated: 03/02/2022 10:53 AM

# **Publications**

# Current Bibliography of Publications

## I. Technical/Scholarly

## A. Journal Articles

- Roose, M.L., Gottlieb, L.D. 1976. Genetic and biochemical consequences of polyploidy in *Tragopogon*. Evolution. Vol. 30: p.818-830. (Refereed) <u>View Publication</u>
- Roose, M.L., Gottlieb, L.D. 1978. Stability of structural gene number in diploid species with different amounts of DNA and different chromosome numbers. Heredity. Vol. 40: p.159-163. (Refereed) <u>View Publication</u>
- Roose, M.L., Gottlieb, L.D. 1980. Alcohol dehydrogenase in the diploid plant *Stephanomeria exigua* (Compositae) gene duplication, mode of inheritance, and linkage. Genetics. Vol. 95: p.171-186. (Refereed) <u>View Publication</u>
- Roose, M.L., Gottlieb, L.D. 1980. Biochemical properties and level of expression of alcohol dehydrogenases in the allotetraploid plant *Tragopogon miscellus* and its diploid progenitors. Biochem. Genet. Vol. 18: p.1065-1085. (Refereed) <u>View Publication</u>
- McNeilly, T., Roose, M.L. 1984. The distribution of perennial ryegrass genotypes in swards. New Phytol. Vol. 98: p.503-513. (Refereed) <u>View Publication</u>
- 6. Roose, M.L. 1984. Catalytic properties of alcohol dehydrogenase isozymes specified by duplicate genes in the dipl plant *Stephanomeria exigua*. Biochem. Genet. Vol. 22: p.631-643. (Refereed)

View Publication

- Colvill, K.E., Horsman, D.L., Roose, M.L., Roberts, T.M., Bradshaw, A.D. 1985. Field trials on the influence of ai pollutants, and sulphur dioxide in particular, on the growth of ryegrass (*Lolium perenne* L.). Environ. Poll. Vol. 39: p.235-266. (Refereed)
   <u>View Publication</u>
- Devey, M.E., Roose, M.L. 1987. Genetic analysis of verticillium wilt tolerance using pedigree data from three cotto crosses. Theoret. Appl. Genet. Vol. 74: p.162-167. (Refereed) <u>View Publication</u>
- 9. Wells, W.C., Roose, M.L., Guzy, M.R. 1987. Effects of selection parameters on effective population sizes for mass selection. Crop Sci. Vol. 27: p.1146-1149. (Refereed)
- Ellstrand, N.C., Roose, M.L. 1987. Patterns of genotypic diversity in clonal plant species. Ameri. J. Bot. Vol. 74: p.123-131. (Refereed) <u>View Publication</u>
- 11. Roose, M.L., Traugh, S.N. 1988. Identification and performance of citrus trees on nucellar and zygotic rootstocks. Amer. Soc. Hort. Sci. Vol. 113: p.100-105. (Refereed)
- 12. Khan, I., Roose, M.L. 1988. Frequency and characteristics of nucellar and zygotic seedlings in three cultivars of trifoliate orange. J. Amer. Soc. Hort. Sci. Vol. 113: p.105-110. (Refereed)
- Khan, I.A., Roose, M.L. 1988. Nucellar embryony detection and importance. Punjab Fruits J. Vol. 41: p.1-15. (Refereed)
- Xiang, C., Roose, M.L. 1988. Frequency and characteristics of nucellar and zygotic seedlings in 12 citrus rootstock Scientia Horticulturae . Vol. 37: p.47-59. (Refereed) <u>View Publication</u>
- 15. Kirchhoff, W.R., Hall, A.E., Roose, M.L. 1989. Inheritance of a mutation in cowpea influencing chlorophyll conten and composition. Crop Sci. Vol. 29: p.105-108. (Refereed)
- Roose, M.L., Cole, D.A., Atkin, D., Kupper, R.S. 1989. Yield and tree size of four citrus scions on 21 rootstocks in California. J. Amer. Soc. Hort Sci. Vol. 114: p.678-684. (Refereed)
- Tisserat, B., Roose, M.L. 1989. Inheritance patterns for juice vesicle branching in the Citrinae (Aurantiodeae). HortScience. Vol. 24: p.837-839. (Refereed)

- Garvin, D.F., Roose, M.L., Waines, J.G. 1989. Isozyme genetics and linkage in tepary bean, *Phaseolus acutifolius* Gray. J. Hered. Vol. 80: p.373-376. (Refereed) <u>View Publication</u>
- Jarrell, D.C., Roose, M.L., Traugh, S.N., Kupper, R.S. 1992. A genetic map of citrus based on the segregation of isozymes and RFLPs in an intergeneric cross. Theoret. Appl. Genet. Vol. 84: p.49-56. (Refereed) <u>View Publication</u>
- 20. Cheng, F.S., Roose, M.L. 1995. Origin and inheritance of dwarfing by the citrus rootstock *Poncirus trifoliata* `Flyi Dragon.'. J. Amer. Soc. Hort Sci. Vol. 120: p.286-291. (Refereed)
- 21. Canel, C., Bailey-Serres, J.N., Roose, M.L. 1995. In vitro [14C] citrate uptake by tonoplast vesicles of acidless Citu juice cells. J. Amer. Soc. Hort. Sci. Vol. 120: p.510-514. (Refereed)
- Canel, C., Bailey-Serres, J.N., Roose, M.L. 1995. Pummelo fruit transcript homologous to ripening-induced genes. Plant Physiol. Vol. 108: p.1323-1324. (Refereed) <u>View Publication</u>
- Niles, R.K., Freckman, D.K., Roose, M.L. 1995. Use of trifoliate orange as a comparative standard for assessing th resistance of citrus rootstocks to citrus nematode. Plant Disease. Vol. 79: p.813-818. (Refereed) <u>View Publication</u>
- Canel, C., Bailey-Serres, J.N., Roose, M.L. 1996. Molecular characterization of the mitochondrial citrate synthase gene of an acidless pummelo (*Citrus maxima*). Plant Molec. Biol. Vol. 31: p.143-147. (Refereed) <u>View Publication</u>
- 25. McNeilly, T., Roose, M.L. 1996. Co-adaptation between neighbors? A case study with *Lolium perenne* genotypes. Euphytica. Vol. 92: p.121-128. (Refereed)
- 26. Roose, M.L., Stone, N.K. 1996. Development of genetic markers to identify two asparagus cultivars. Acta Horticulturae. Vol. 415: p.129-135. (Non-Refereed)
- Kijas, J.M., Thomas, M.R., Fowler, J.C., Roose, M.L. 1997. Integration of trinucleotide microsatellites into a linka map of Citrus. Theoret. Appl. Genet. Vol. 94: p.701-706. (Refereed) <u>View Publication</u>
- Fang, D.Q., Roose, M.L., Krueger, R.R., Federici, C.T. 1997. Fingerprinting trifoliate orange germ plasm accession with isozymes, RFLPs, and inter-simple sequence repeat markers. Theoret. Appl. Genet. Vol. 95: p.211-219. (Refereed) View Publication

- Fang, D.Q., Roose, M.L. 1997. Identification of closely related citrus cultivars with inter-simple sequence repeat markers. Theoret. Appl. Genet. Vol. 95: p.408-417. (Refereed) <u>View Publication</u>
- Fang, D.Q., Federici, C.T., Roose, M.L. 1997. Development of molecular markers linked to a gene controlling fruit acidity in Citrus. Genome. Vol. 40: p.841-849. (Refereed) <u>View Publication</u>
- Roose, M.L., Schwarzacher, T., Heslop-Harrison, J.S. 1998. The chromosomes of *Citrus* and *Poncirus* species and hybrids: identification of characteristic chromosomes and physical mapping of rDNA loci using in situ hybridizatic and fluorochrome banding. J. Hered. Vol. 89: p.83-86. (Refereed) <u>View Publication</u>
- Federici, C.T., Fang, D.Q., Scora, R.W., Roose, M.L. 1998. Phylogenetic relation-ships within the genus *Citrus* (Rutaceae) and related genera as revealed by RFLP and RAPD analysis. Theoret. Appl. Genet. Vol. 96: p.812-822. (Refereed)
   <u>View Publication</u>
- Fang, D.Q., Krueger, R.R., Roose, M.L. 1998. Phylogenetic relationships among selected *Citrus* germplasm accessions revealed by inter-simple sequence repeat (ISSR) markers. J. Am. Soc. Hort. Sci. Vol. 123: p.612-617. (Refereed)
   <u>View Publication</u>
- Fang, D.Q., Federici, C.T., Roose, M.L. 1998. A high resolution linkage map of the citrus tristeza virus resistance gene region in *Poncirus trifoliata* (L.) Raf. Genetics. Vol. 150: p.883-890. (Refereed) <u>View Publication</u>
- Bond, J.E., Roose, M.L. 1998. Agrobacterium-mediated transformation of the commercially important citrus cultiv Washington navel orange. Plant Cell Rep. Vol. 18: p.229-234. (Refereed) <u>View Publication</u>
- Fang, D.Q., Roose, M.L. 1999. Inheritance of inter-simple sequence repeat markers in citrus. J. Hered. Vol. 90: p.247-249. (Refereed) <u>View Publication</u>
- Fang, D.Q., Roose, M.L. 1999. A novel gene conferring citrus tristeza virus resistance in *Citrus maxima* (Burm.) Merrill. HortSci. Vol. 34: p.334-335. (Refereed) <u>View Publication</u>
- 38. Gulsen, O., Roose, M.L. 2001. Chloroplast and nuclear genome analysis of the parentage of lemons. J. Amer. Soc.

- Gulsen, O., Roose, M.L. 2001. Lemons: diversity and relationships with selected *Citrus* genotypes as measured wit nuclear genome markers. J. Amer. Soc. Hort. Sci. Vol. 126: p.309-317. (Refereed) <u>View Publication</u>
- 40. Yang, Z.N., Ye, X.R., Choi, S.D., Molina, J., Moonan, F., Wing, R.A., Roose, M.L., Mirkov, T.E. 2001. Construct of a 1.2-Mb contig including the *Citrus tristeza virus* resistance gene locus using a bacterial artificial chromosome library of *Poncirus trifoliata* (L.) Raf. Genome. Vol. 44: p.382-393. (Refereed) <u>View Publication</u>
- Sadka, A., Dahan, E., Or, E., Roose, M.L., Marsh, K.B., Cohen, L. 2001. Comparative analysis of mitochondrial citrate synthase gene structure, transcript level and enzymatic activity in acidless and acid containing *Citrus* varieti Austral. J. Plant Physiol. Vol. 28: p.383-390. (Refereed) <u>View Publication</u>
- 42. Yang, Z.N., Ye, X.R., Molina, J., Roose, M.L., Mirkov, T.E. 2003. Sequence analysis of a 282-kb region surroundi the *Citrus tristeza virus* resistance gene (*Ctv*) locus in *Poncirus trifoliata*. Plant Physiol. Vol. 131: p.482-490. (Refereed)
  <u>View Publication</u>
- Krueger, R.R., Roose, M.L. 2003. Use of molecular markers in the management of citrus germplasm resources. J. Amer. Soc. Hort. Sci. Vol. 128: p.827-837. (Refereed) <u>View Publication</u>
- Cui, X., Xu, J., Asghar, R., Condamine, P., Svensson, J.T., Wanamaker, S., Stein, N., Roose, M., Close, T.J. 2005. Detecting single-feature polymorphisms using oligonucleotide arrays and robustified projection pursuit. Bioinformatics. Vol. 21: p.3852-3858. (Refereed) <u>View Publication</u>
- 45. Barkley, N.A., Roose, M.L., Krueger, R.R., Federici, C.T. 2006. Assessing genetic diversity and population structu in a citrus germplasm collection utilizing simple sequence repeat markers (SSRs). Theor. Appl. Genet. Vol. 112: p.1519-1531. (Refereed) <u>View Publication</u>

46. Rostoks, N., Ramsay, L., MacKensie, K., Cardle, L., Bhat, P.R., Roose, M.L., Svensson, J.T., Stein, N., Varshney, R.K., Marshall, D., Graner, A., Close, T.J., Waugh, R. 2006. A recent history of artificial outcrossing facilitates whole-genome association mapping in elite inbred crop varieties. Proc. Nat. Acad. Sci. USA. Vol. 103: 49 p.18656-18661. (Refereed)
<u>View Publication</u> <u>Publication Website</u>

- Caruso, M., Federici, C.T., Roose, M.L. 2008. EST-SSR markers for asparagus genetic diversity evaluation and cultivar identification. Molecular Breeding. Vol. 21: p.195-204. (Refereed) <u>View Publication</u>
- 48. Caruso, M., Distefano, G., Ye, X., La Malfa, S., Gentile, A., Tribulato, E., Roose, M.L. 2008. Generation of expressed sequence tags from carob (*Ceratonia siliqua* L.) flowers for gene identification and marker development Tree Genetics and Genomes. Vol. 4: p.869-879. (Refereed) <u>View Publication</u>
- 49. Chen, C., Lyon, M., O'Malley, D., Federici, C.T., Gmitter, J., Grosser, J.W., Chaparro, J.X., Roose, M.L., Gmitter, F.G. 2008. Origin and frequency of 2n gametes in *Citrus sinensis X Poncirus trifoliata* and their reciprocal crosses Plant Science. Vol. 74: p.1-8. (Refereed) <u>View Publication</u>
- 50. Kepiro, J.L., Roose, M.L. 2009. AFLP markers closely linked to a major gene essential for nucellar embryony (apomixis) in *Citrus maxima × Poncirus trifoliata*. Tree Genetics and Genomes. Vol. 6: p.1-11. (Refereed) <u>View Publication</u>
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## C. Conference And Symposia Proceedings

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#### **D.** Book Chapters

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#### Published

- Roose, M.L., Williams, T.E., Cameron, J.W., Soost, R.K. 2000. 'Gold Nugget' mandarin, a seedless, late-maturing hybrid. Information about the publication that was reviewed: HorSci. p. 1176-1178. Vol. 35. (Refereed)
- Roose, M.L., Williams, T.E., Soost, R.K., Cameron, J.W. 2002. 'TDE2' mandarin hybrid. Information about the publication that was reviewed: Released under the trademark name Shasta Gold<sup>™</sup> mandarin hybrid in June 2002. r US PP15,461. (Refereed)
- 3. Roose, M.L., Williams, T.E., Soost, R.K., Cameron, J.W. 2002. 'TDE3' mandarin hybrid. Information about the publication that was reviewed: Released under the trademark name Tahoe Gold<sup>™</sup> mandarin hybrid in June 2002. p US PP15,703.
- Roose, M.L., Williams, T.E., Soost, R.K., Cameron, J.W. 2002. 'TDE4' mandarin hybrid. Information about the publication that was reviewed: Released under the trademark name for Yosemite Gold<sup>™</sup> mandarin hybrid in June 2002. p. US PP 16,289. (Refereed) <u>View Publication</u>
- 5. Roose, M.L., Stone, N.K. 2006. 'DePaoli' asparagus. Patent pending. Released in January, 2006. (Refereed) <u>View Publication</u>
- Roose, M.L., Williams, T.E. 2006. 'Tango' mandarin. Released in June 2006. US PP17,863, July 10, 2007. (Reference) <u>View Publication</u>

## II. Semitechnical/Scholarly

#### A. Journal Articles

#### Published

 Roose, M.L., Bitters, W.P., Cole, D.A., Traugh, S.A. 1985. Progress report on rootstock studies. Calif. Citrograph. Vol. 70: p.127-131. (Non-Refereed) <u>View Publication</u>

- 2. Roose, M.L. 1990. Fig biology and improvement. Fruit Gardener. Vol. 22: p.14-15. (Non-Refereed) <u>View Publication</u>
- Roose, M.L. 1990. Genetics, breeding, and evaluation of citrus rootstocks. Calif. Grower. Vol. 14: 10 p.6-7. (Refereed) <u>View Publication</u>
- 4. Roose, M.L. 1990. New citrus rootstock characteristics. Calif. Grower. Vol. 14: 11 p.6-8. (Refereed) <u>View Publication</u>
- Kupper, R.S., Roose, M.L., Arpaia, M.L., Neja, R. 1994. Rootstocks for desert grapefruit evaluated. Calif. Grower. Vol. 18: p.32-34. (Refereed) <u>View Publication</u>
- Roose, M.L. 1995. Citrus rootstock breeding and evaluation. Citrograph. Vol. 80: 11 p.7, 9. (Non-Refereed) <u>View Publication</u>
- Roose, M.L., Kupper, R.S., Arpaia, M.L. 1996. Effects of rootstocks on quality of Lane Late navel orange. Citrograph. Vol. 81: 11 p.13-15. (Non-Refereed) <u>View Publication</u>

#### C. Conference And Symposia Proceedings

- Roose, M.L. 1986. Dwarfing rootstocks for citrus. Proc. 2nd World Congr. Int. Soc. Citrus Nurserymen. 6p. Riverside, CA. 08/01/1986. (Non-Refereed) <u>View Publication</u>
  - a. Roose, M.L. 1986. Dwarfing rootstocks for citrus. Calif. Citrograph 71. p.225-229. (Non-Refereed)
- Kupper, R.S., Roose, M.L. 1990. Citrus rootstocks breeding and evaluation at the University of California, Riversic Proceedings Third International Congress Citrus Nurserymen. 10p. (Non-Refereed) <u>View Publication</u>
- Roose, M.L. 1990. Citrus rootstocks in California. Proceedings 1st International Seminar on Citrus Rootstocks. p.51-61. (Non-Refereed, Invited) <u>View Publication</u>
- Roose, M.L., Kupper, R.S. 1993. Probable impacts of biotechnology on citrus nursery practices. Proc. IVth World Congr., Int. Soc. of Citrus Nurserymen. p.180-187. (Non-Refereed, Invited) <u>View Publication</u>

### D. Book Chapters

### Published

 Roose, M.L., et al., 1988. Alternatives to preharvest chemical inputs in California citrus. Agricultural Chemicals in California Plant Production: Are There Alternatives?. Editors: N/A. Univ. Calif. Issues Center. p.99-147. (Non-Refereed) <u>View Publication</u>

### M. Technical Reports

### Published

- Federici, C.T., Kupper, R.S., Roose, M.L.2009. 'Bitters', 'Carpenter' and 'Furr' Trifoliate Hybrids: Three New Cit Rootstocks. web page. . Citrus Research Board. (Non-Refereed, Electronic) <u>View Publication</u> <u>Publication Website</u>
- Williams, T.E., Roose, M.L.2009. 'DaisySL' Mandarin. web page. . Citrus Research Board. (Non-Refereed, Electronic) <u>View Publication</u> <u>Publication Website</u>

### T. Other Publications

### Published

 Ferguson, L., Sakovich, N., Roose, M. 1990. California citrus rootstocks. 18p. Univ. of Calif., Div., Agric. and Nat Res. Publ. 21477. (Non-Refereed) <u>View Publication</u>

### III. Other

### L. Abstracts

### Published

- 1. Roose, M.L. 1979. Evidence for within population polymorphism in number of genes coding alcohol dehydrogenas in the annual plant *Stephanomeria exigua*. Genetics 9/S. p.106. (Non-Refereed)
- 2. Gottlieb, L.D., Roose, M.L. 1980. How does allopolyploidy affect enzyme expression?. Abstr. 2nd Int. Conf. Syste Evolut. Biol. (Non-Refereed)
- 3. Roose, M.L. 1986. Citrus trees on zygotic vs. nucellar rootstocks: identification by isozyme analysis and comparati performance. Hort. Sci. 21. p.727. (Non-Refereed)
- 4. Roose, M.L. 1987. DNA restriction fragment length polymorphisms in citrus. Hort. Sci. 22. p.1111. (Non-Refereed

- 5. Roose, M.L., Gottlieb, M.L., Traugh, S.N. 1988. A single gene specifies the small subunit of ribulose-1,5-bisphosphate carboxylase in citrus. Genome 30. p.452. (Non-Refereed)
- Roose, M.L., Federici, C.T., Copenhaver, G.P. 1992. Genetic diversity in pummelo (*Citrus maxima* [Burm.] Merril Citron (*C. medica* L.), and trifoliate orange (*Poncirus trifoliate* [L.] Raf.) evaluated using RFLPs. HortScience 27. p.624. (Non-Refereed)
- 7. Roose, M.L., Cheng, F.S., Federici, C.T. 1994. Origin, inheritance, and effects of a dwarfing gene from the citrus rootstock *Poncirus trifoliata* Flying Dragon.'. HortScience 29. p.482. (Non-Refereed)
- 8. Kepiro, J., Roose, M.L. 2003. Molecular genetic analysis of nucellar embryony (apomixis) in *Citrus maxima* x *Poncirus trifoliata* using AFLP. Proc. Intl. Soc. Citriculture 212. (Non-Refereed)
- 9. Williams, T.E., Roose, M.L. 2003. An improved method for rescuing triploid embryos from aborted fruit of diploic tetraploid hand-pollinated crosses. Proc. Intl. Soc. Citriculture 214. (Non-Refereed)
- 10. Williams, T.E., Roose, M.L. 2003. Determination and remediation of the factors causing budbreak and growth problems in California citrus nurseries. Proc. Intl. Soc. Citriculture 701. (Non-Refereed)

### T. Other Publications

### Published

- Roose, M.L. 1989. Citrus scion breeding at UCR. 1p. Calif. Citrus Nurserymen's Assoc. Newsletter. (Non-Refereed View Publication
- 2. Roose, M.L. 1989. Rootstocks. 2p. Calif. Citrus Nurserymen's Assoc. Newsletter. (Non-Refereed) <u>View Publication</u>
- Roose, M.L. 1991. New rootstock cultivar descriptions. p. 4-5. Calif. Citrus Nursery Soc. Newsletter. Vol. 3. (Non-Refereed) <u>View Publication</u>
- 4. Roose, M.L., Kupper, R.S. 1991. Methods for rootstock and scion cultivar identification. p. 10-12. Calif. Citrus Nursery Soc. Newsletter. Vol. 3. (Non-Refereed)
- Roose, M.L. 1992. DNA tests for citrus cultivar identification. p. 8-9. Calif. Citrus Nursery Soc. Newsletter. Vol. 4 (Non-Refereed) <u>View Publication</u>
- 6. Roose, M.L., Kupper, R.S., Federici, C.T., Atkin, D.R. 1993. Evaluation of citrus rootstocks in replant situations. p

10-11. Calif. Citrus Nursery Soc. Newsletter. Vol. 5. (Non-Refereed) <u>View Publication</u>

- Roose, M.L., Stone, N.K. 1995. Commercial testing for identification of UC157-F1. p. 3. Calif. Asparagus Comm. Newsletter. Vol. 4. Iss. 2. (Non-Refereed) <u>View Publication</u>
- Roose, M.L. 1996. High resolution mapping of a citrus tristeza virus resistance. p. 6. Calif. Citrus Nursery Adv. Board News. Vol. Feb. 1996. (Non-Refereed) <u>View Publication</u>
- Roose, M.L. 1996. Evaluation of seediness and pollenizer requirements in citrus cultivars. p. 13. Calif. Citrus Nurs Adv. Board News. Vol. Feb. 1996. (Non-Refereed) <u>View Publication</u>
- 10. Roose, M.L., Williams, T.E., Soost, R.K., Cameron, J.W. 2000. Gold Nugget a seedless, late-maturing mandarin cultivar. p. 7. Subtrop. Fruit News. Vol. 8. Iss. 1-2. (Non-Refereed)

## Difference List of Publications (10/1997 - 09/2019)

### I. Technical/Scholarly

### A. Journal Articles

### Published

53. Close, T.J., Bhat, P.R., Lonardi, S., Wu, Y., Rostocks, N., Ramsay, L., Druka, A., Stein, N., Svensson, J., Wanamaker, S., Bozdag, S., Roose, M.L., Moscou, M., Chao, S., Varshney, R.K., Szucs, P., Sato, K., Hayes, P.M., Matthews, D.E., Kleinhofs, A., Muehlbauer, G.J., DeYoung, J., Marshall, D.F., Madishetty, K., Fenton, R.D., Condamine, P., Graner, A., Waugh, R. 2009. Development and implementation of high-throughput SNP genotypin in barley. BMC Genomics. Vol. 10: 13p. (Refereed) <u>View Publication</u>

### Comments:

<u>Candidate's Contribution and Attribution of Authors:</u> Assisted with mapping, edited manuscript. Contribution about 2%.

 Bowman, K.D., McCollum, T.G., Stover, E.W., Kahn, T.L., Roose, M.L., Krueger, R.R., Wright, G.C. 2010. Regis of New Fruit and Nut Cultivars List 45: Citrus. HortScience. Vol. 45: p.723-727. (Refereed) <u>View Publication</u>

### Comments:

Candidate's Contribution and Attribution of Authors: Wrote descriptions of 5 of 31 cultivars in Citrus section: 16%

55. Bowman, K.D., McCollum, T.G., Stover, E.W., Kahn, T.L., Roose, M.L., Krueger, R.R., Wright, G.C. 2010. Regis of New Fruit and Nut Cultivars List 45: Citrus Rootstock. HortScience. Vol. 45: p.727-728. (Refereed) <u>View Publication</u>

#### Comments:

Candidate's Contribution and Attribution of Authors: Wrote descriptions of 4 of 10 rootstocks, 40% of total

56. Aprile, A., Federici, C.T., Close, T.J., De Bellis, L., Cattivelli, L., Roose, M.L. 2011. Expression of the H+-ATPase AHA10 proton pump is associated with citric acid accumulation in lemon juice sac cells. Funct. Integr. Genomics. Vol. 11: p.551-563. (Refereed) <u>View Publication</u>

#### Comments:

Candidate's Contribution and Attribution of Authors:

I designed the study with Professor Close and it was funded from a joint grant. Federici (SRA ini Roose lab) and Aprile (visiting researcher in Roose lab) conducted the work with guidance from Roose and Close. De Bellis and Cattivelli were Aprile's supervisors in Italy. Aprile wrote the first draft and all authors contributed to editing the manuscript. Aprile was corresponding author.

57. Ollitrault, P., Terol, J., Chen, C., Federici, C.T., Lofty, S., Hippolyte, I., Berard, A., Chauveau, A., Cuenca, J., Costantino, G., Kacar, Y., Mu, L., Garcia-Lor, A., Froelicher, Y., Aleza, P., Boland, A., Billot, C., Navarro, L., Lui F., Roose, M.L., Gmitter, F.G., Talon, M., Brunel, D. 2012. A reference genetic map of *C. clementina* hort. ex Tan citrus evolution inferences from comparative mapping. BMC Genomics. Vol. 13: p.593-613. (Refereed) <u>View Publication</u>

#### Comments:

Candidate's Contribution and Attribution of Authors: Analyzed 67 SSR markers in one of the mapping populations. Edited draft of manuscript. Contribution 5%.

Xu, Q., Chen, L., Ruan, X., Chen, D., Zhu, A., Chen, C., Bertrand, D., Jiao, W., Hao, B., Lyon, M.P., Chen, J., Gac S., Xing, F., Lan, H., Chang, J., Ge, X., Lei, Y., Xu, Q., Miao, Y., Wang, L., Xiao, S., Biswas, M.K., Zeng, W., Gu F., Cao, H., Yang, X., Xu, X., Cheng, Y., Xu, J., Liu, J., Luo, O., Tang, Z., Guo, W., Kuang, H., Zhang, H., Roose, M.L., Nagarajan, N., Deng, X., Ruan, Y. 2012. The draft genome of sweet orange (*Citrus sinensis*). Nature Genetic 45: 59-66. DOI: <u>10.1038/ng.2472</u> (Refereed) <u>View Publication</u>

Comments:

Candidate's Contribution and Attribution of Authors:

The linkage map used to develop the pseudochromosome assembly was developed by my PhD student, Matthew Lyon. I also edited the manuscript. Overall contribution: 3%

59. Zhao, H, Sun, R, Albrecht, U., Padmanabhan, C., Wang, A., Coffey, M., Girke, T., Wang, Z., Close, T.J., Roose, N Yokomi, R., Folimonova, S., Vidalakis, G., Rouse, R., Bowman, K., Jin, H. 2013. Small RNA profiling reveals phosphorus deficiency as a contributing factor in symptom expression for citrus Huanglongbing disease. Molecular Plant. Vol. 6: p.301-310. (Refereed) <u>https://doi.org/10.1093/mp/sst002</u> <u>View Publication</u>

### Comments:

UCR coauthors were in labs of Professors Close, Coffey, Girke, Jin, or Vidalakis

Candidate's Contribution and Attribution of Authors: Provided access to EST sequence data including unreleased sequences, advised on statistical analysis, edited manuscript

60. Ferrante, S., Roose, M. 2013. Identification of *Citrus sinensis* BAC clones containing genes relevant to fruit quality by two-dimensional overgo hybridization. Tree Genetics and Genomes. Vol. 9: p.1065-1074. (Refereed) <u>https://doi.org/10.1007/s11295-013-0621-0</u> <u>View Publication</u>

#### Comments:

<u>Candidate's Contribution and Attribution of Authors:</u> Nearly all of the research was conducted in my laboratory by Dr. Ferrante who was a visiting scientist. I supervised the research and edited the manuscript.

 Ramadugu, C., Pfeil, B., Keremane, M., Lee, R., Maureira-Butler, I., Roose, M. 2013. A six nuclear gene phylogen of Citrus (Rutaceae) taking into account hybridization and lineage sorting. PLoS One. Vol. 8: 15p. Article ID: e68410. (Refereed) <u>https://doi.org/10.1371/journal.pone.0068410</u> <u>View Publication</u>

### Comments:

### Candidate's Contribution and Attribution of Authors:

I helped designed the study and obtained funding for the UCR portion of the sequencing (5 of the 6 genes) and advised on the analysis. Ramadugu (Assistant Project Scientist, Roose lab) and Keremane performed sequencing and some of the analysis. Pfeil sequenced one gene and conducted the coalescence simulation with Maureira-Butler, and drafted these portions of the manuscript. Lee contributed to experimental design and provided funding for Ramadugu and Keremane.

62. Germana, M.A., Aleza, P., Carrera, E., Chen, C., Chiancone, B., Constantino, G., Dambier, D., Deng, X., Federici, C.T., Froelicher, Y., Guo, W., Ibanez, V., Juarez, J., Kwok, K., Luro, F., Machado, M., Naranjo, M., Navarro, L., Ollitrault, P., Rios, G., Roose, M., Talon, M., Xu, Q., Gmitter, F. 2013. Cytological and molecular characterization

three gametoclones of *Citrus clementina*. BMC Plant Biology. Vol. 13: p.129. 8p. DOI:<u>10.1186/1471-2229-13-129</u> (Refereed)

View Publication Publication Website

#### Comments:

#### Candidate's Contribution and Attribution of Authors:

I helped plan the project and provided funding for my portion. Undergraduate Kevin Kwok and SRA Claire Federici from my lab analyzed 107 SSR markers on Clementine and three putative haploid plant samples. I wrote the portion of the manuscript describing this part of the project. Other labs contributed the various other data reported.

63. Razi, M., Keremane, M., Ramadugu, C., Roose, M., Khan, I., Lee, R. 2014. Detection of Citrus Huanglongbing Associated '*Candidatus* Liberibacter asiaticus' in Citrus and *Diaphorina citri* in Pakistan, Seasonal Variability and Implications on Disease Management. Phytopathology. Vol. 104: p.257-268. Doi: <u>10.1094/PHYTO-08-13-0224-R</u> (Refereed) View Publication

#### Comments:

Ramadugu (Assistant Project Scientist, Roose lab), Keremane (USDA-ARS) and Lee (USDA-ARS) helped advise Razi during his visit. Lee helped design project and assisted in obtaining grant that funded project.

#### Candidate's Contribution and Attribution of Authors:

I was PI on the grant that funded the project and helped supervise M. Razi during his visit to UCR when he completed much of the PCR-based testing of insects and plants. I edited the manuscript. Minor role overall.

64. Wu, G.A., Prochnik, S., 53\_Others, 2014. Sequencing of diverse mandarin, pummelo and orange genomes reveals complex history of admixture during citrus domestication. Nature Biotechnology. Vol. 32: p.656-662. (Refereed) <u>https://doi.org/10.1038/nbt.2906</u> <u>View Publication</u>

#### Comments:

#### Candidate's Contribution and Attribution of Authors:

G.A.Wu, development and application of methods to analyze citrus genetic diversity, population history and ancestry; S. Prochnik, genome annotation and initial analysis of genetic diversity; J.Jenkins, J.Grimwood and J.Chapman, sequence assembly and map integration of haploid Clementine reference; J. Salse and F.Murat, analysis of synteny and genome evolution.; U.Hellsten, analysis of population history and ancestry; K.Labadie, J.P.-Perez, A.Couloux, J.Poulain, D.Brunel and K.Jabbari, dideoxy shotgun sequencing and analysis of haploid Clementine reference; S.Scalabrin, S. Pinosio, A.Zuccolo, C.D.Fabbro, X.Perrier and M. Ruiz, analysis of sequencing and resequencing data, and repetitive sequence annotation and analysis; F.Cattonaro, Sanger and Illumina sequencing; A.Lomsadze, P.Burns and M.Borodovsky, sweet-orange gene model predictions; C.Chen and W.G.Farmerie, 454 sequencing of sweet orange and Illumina sequencing of Siamese Sweet pummelo; C.Chen, contributions to sweet-orange transcriptome, annotation and strategic rationale for comparative analyses; P.Aleza, J.P.-Perez and L.Navarro, haploid Clementine DNA; J.P.-Perez and D. Ramón, haploid Clementine transcriptome; J.T., F.R.T., L.H.E., J.V.M.-S., V.I., A.H.-O. and M.T., generation of BAC clones of the haploid Clementine and contribution of genome sequences of sweet orange, Ponkan, diploid Clementine and Willowleaf mandarins; B.Desany, C.Kodira, M. Mohiuddin, T.Harkins and K.Fredrikson, sweet-orange 454 transcriptome and genome sequencing and assembly; M.A.Machado and M.A.Takita, Ponkan shotgun sequence; M. Roose, W. Murcott shotgun sequence; M. Morgante, Chandler pummelo and Seville sour-orange shotgun sequence; G.Reforgiato, J.F.-Astua., F.Quetier, L.Navarro, F.Luro and M. Roose, project coordination; D. Rokhsar, F.Gmitter, G.A.Wu and S. Prochnik, writing of the paper with substantial input from M.Talon, P.Ollitrault, M. Mohiuddin, O.Jaillon and M. Roose; F.Gmitter, D. Rokhsar, O.Jaillon, P.Ollitrault, M.A.Machado, M. Morgante, M.Talon, J. Schmutz and P.Wincker, project coordination and scientific leadership.

65. Keremane, M. L., Ramadugu, C., Rodriguez, E., Kubota, R., Shibata, S., Hall, D. G., Roose, M. L., Jenkins, D., and Lee, R. F. 2015. A rapid field detection system for citrus huanglongbing associated '*Candidatus* Liberibacter asiaticus' from the psyllid vector, *Diaphorina citri* Kuwayama and its implications in disease management. Crop Prot. Vol. 68: p. 41-48. (Refereed) <u>https://doi.org/10.1016/j.cropro.2014.10.026</u> <u>View Publication</u>

#### Comments:

Keremane (supervised by Lee) and Ramadugu (Assistant Project Scientist, Roose's Lab) led analysis of samples, many analyzed by Rodriguez (supervised by Ramadugu), the detection device was developed by Kubota, Shibata, and Jenkins with periodic tests by Kermane and Ramadugu using psyllid samples provided by Hall. Project was funded by a grant to Lee from the California Citrus Nursery Board.

Candidate's Contribution and Attribution of Authors:

*My* contribution was minor - *I* met periodically with Ramadugu and other project participants to discuss methods and results and helped edit the manuscript.

66. Ramadugu, C, Keremane, M L, Hu, X, Karp, D, Federici, C T, Kahn, T, Roose, M L, and Lee, R F. 2015. Genetic analysis of citron (*Citrus medica* L.) using simple sequence repeats and single nucleotide polymorphisms. Sci. Horticult. Vol 193: p.124-137. (Refereed) <u>https://doi.org/10.1016/j.scienta.2015.09.004</u> <u>View Publication</u>

#### Comments:

This paper resulted from a visit to Dr. Lee's laboratory by Dr. Hu. Hu, Karp, and Kahn provided citron samples and information about them. Ramadugu (Assistant Project Scientist, Roose's Lab), Keremane (supervised by Lee), and Federici (SRA, Roose's Lab) collected data on microsatellite markers and DNA sequences. The manuscript was drafted by Ramadugu and edited by all authors.

#### Candidate's Contribution and Attribution of Authors:

This project was supported by a Cooperative Agreement between USDA and UCR (Roose). I suggested markers to analyze and guided much of the molecular data analysis.

67. Ramadugu, C, Keremane, M L, Halbert, S E, Duan, Y P, Roose, M L, Stover, E, and Lee, R F. 2016. Long term fivevaluation reveals HLB resistance in *Citrus* relatives. Plant Disease Vol. 100: p.1858-1869. (Refereed) <a href="https://doi.org/10.1094/PDIS-03-16-0271-RE">https://doi.org/10.1094/PDIS-03-16-0271-RE</a> View Publication

#### Comments:

Research was planned by Lee, Ramadugu, Stover and Halbert and funded by a grant to Lee from the California Citrus Research Board. Stover supervised the field planting. Ramadugu (Assistant Project Scientist, Roose's Lab) collected most of the field data, and Ramadugu and Keremane conducted qPCR to measure bacterial titer. Halbert provided expertise on sampling.

#### Candidate's Contribution and Attribution of Authors:

I helped choose accessions to include in the study, guided Ramadugu in some of the analysis and edited the manuscript. A fairly minor contribution overall.

68. Wu, G, Terol, J, Ibanez, V, Lopez-Garcia, A, Perez-Roman, E, Borreda, C, Domingo, C, Tadeo, FR, Carbonell-Caballero, J, Alonso, R, Curk, F, Du, D, Ollitrault, P, Roose, ML, Dopazo, J, Gmitter, FG, Rokhsar, DS, and Talon M. 2018. Genomics of the origin and evolution of *Citrus*. Nature Vol. 554: p. 311-317. (Refereed) <u>https://doi.org/10.1038/nature25447</u> <u>View Publication</u>

#### Comments:

M.Talon, D.S.Rokhsar and G.A.Wu developed the project and acted as project coordinators and provided scientific leadership; G.A.Wu developed methods for admixture analysis and interspecific phasing, and performed comparative genome analysis. J.Terol., V.banez., A.L.-Garcia, E.P.-Roman, C.Borreda, C.Domingo, F.R.Tadeo, J.C.-Caballero, R.Alonso, J.Dopazo and M.Talon contributed 26 genomes; J.Terol., J.C.-Caballero, R.Alonso and J.Dopazo provided bioinformatics support; J.Terol and E.P.-Roman contributed to the study of the IDH gene; V.Iibanez, E.P.-Roman and C.Borreda contributed to the variant analysis of candidate genes using genome-wide association studies; A.L.-Garcia and C.Borreda assisted in the biogeographic study; A.L.-Garcia and F.G.Gmitter contributed to the description of citrus accessions and discriminatory characteristics; P.Ollitrault and F.Curk contributed to germplasm, admixture analysis and hypothesis on the origin of cultivated citrus species; D.Du and F.G.Gmitter contributed one citrus genome; M.L.Roose contributed seven citrus genomes; F.G.Gmitter contributed perspective garnered from more than 35 years of experience working on the genetic improvement of citrus; G.A.Wu, M.Talon, D.S.Rokhsar and F.G.Gmitter wrote the manuscript; G.A.Wu and M.Talon contributed the hypothesis on the origin and dispersal of citrus.

Candidate's Contribution and Attribution of Authors:

I contributed 7 of the genome sequences analyzed and helped edit the manuscript.

69. Huang, M, Roose, M L, Yu, Q, Du, D, Yu, Y, Zhang, Y, Deng, Z, Stover, E, and Gmitter F G. 2018. Construction high-density genetic maps and detection of QTLs associated with Huanglongbing tolerance in citrus. Frontiers in Plant Sci. Vol. 9: p. 1694. (Refereed) <u>https://doi.org/10.3389/fpls.2018.01694</u> <u>View Publication</u>

#### Comments:

*F.* Gmitter, E. Stover, M. Roose, Z. Deng, and M. Huang conceived the study. F. Gmitter and M. Roose developed the mapping population. M. Roose, M. Huang, and Q. Yu conducted the work of genotyping. M. Huang, Q. Yu, D. Du, Y. Yu, and Y. Zhang conducted the work of phenotyping. M. Huang and M. Roose analyzed the genotypic data. M. Huang analyzed the phenotypic data, performed the QTL mapping, and drafted the manuscript. All authors read and approved the final manuscript.

#### Candidate's Contribution and Attribution of Authors:

I developed the RADSeq marker data by contracting with Floragenex, funded by a subcontract from U Florida. I also edited the dataset to exclude progeny not belonging to this population and developed preliminary linkage map. I assisted MH in developing the final map. I also edited the manuscript fairly extensively.

 Strazzer, P, Spelt, C E, Shuangjiang, L, Bliek, M, Federici, C T, Roose, M L, Koes, R, and Quattrocchio F M. 2019 Hyperacidification of Citrus fruits by a vacuolar proton-pumping P-ATPase complex. Nature Comm. Vol. 10: p. 7
 . (Refereed, Electronic) <u>https://doi.org/10.1038/s41467-019-08516-3</u> <u>View Publication</u>

#### Comments:

P.Strazzer, S.Li, C.E.Spelt, and M.Bliek performed experiments. C.T.Federici and M.L.Roose suggested varieties for examination, collected plant material, and provided photos and background knowledge on Citrus varieties and genetics. P.Strazzer, C.E.Spelt, M.Bliek, F.M.Quattrocchio, and R.Koes analyzed data. P.Strazzer, F.M.Quattocchio, and R.Koes wrote the manuscript. All authors commented on the manuscript.

#### Candidate's Contribution and Attribution of Authors:

This paper derives in part from work in my lab to understand the basis of variation in acidity among citrus fruits. They contacted us to request our participation in the project. We provided most of the samples analyzed and provided expertise on citrus phylogeny to help interpret the data. Essentially all of the molecular work was conducted in the lab of *R*. Koes.

71. Simons, T J, McNeil C J, Pham, A D, Slupsky, C M, Roose, M L., and Guinard, J-X. 2019. Chemical, sensory, and consumer evaluations of 'DaisySL' mandarins grafted onto three different rootstocks. HortSci. Vol. 54: p. 1217-12 (Refereed) <u>https://doi.org/10/21273/HORTSCI14023-19</u> <u>View Publication</u>

### Comments:

### Candidate's Contribution and Attribution of Authors:

I suggested analysis of the DaisySL rootstock trial which was developed by my program using grants from the California Citrus Research Board. I also suggested the set of rootstocks to analyze as likely representing a wide range of diversity in fruit quality. I arranged for the fruit samples to be collected and reviewed and edited the manuscript.

### C. Conference And Symposia Proceedings

### Published

 Aprile, A., Federici, C.T., Close, T.J., Roose, M.L., De Bellis, L., Cattivelli, L. 2011. High and low acid lemons: origin and transcriptome comparisons. Acta Horticulturae 892. p.37-42. Second International Conference on Citrus Biotechnology. (Refereed) <u>View Publication</u>

Candidate is Corresponding Author

#### Comments:

Aprile was a visiting researcher in my laboratory and, with Federici (SRA Roose lab), performed the marker analyses reported. Professor Close helped with analysis of gene expression data.

<u>Candidate's Contribution and Attribution of Authors:</u> conceived, directed and funded project

 Roose, M. L. 2015. New genetic and genomic tools for citrus breeding. Acta Hort. 1065:63-65. (Proc. International Soc. Citriculture) (Refereed, Invited) <u>https://doi.org/10.17660/ActaHortic.2015.1065.5</u> <u>View Publication</u>

Candidate is Corresponding Author

Comments:

<u>Candidate's Contribution and Attribution of Authors:</u> *I wrote the manuscript based on a Plenary Lecture.* 

32. Roose, M. L., Gmitter, F. G. Jr., Lee, R., Hummer, K, Machado, M., Ashmore, S., Deng, X., Ancillo, G., Vives, M C., Volk, G. M., Kahn, T. L., and Luro, F. 2015. Development of a global conservation strategy for citrus genetic resources. Acta Hort. 1065: 75-83. (Proc. International Soc. Citriculture) (Refereed) <u>https://doi.org/10.17660/ActaHortic.2015.1065.7</u> <u>View Publication</u>

Comments:

T. Kahn is curator of the UCR Citrus Variety Collection and provided information on this collection.

<u>Candidate's Contribution and Attribution of Authors:</u> *I had a major role in surveying existing repositories and in drafting the manuscript.* 

 Stone, N. K., Thomas, Z. M., and Roose, M. L. 2018. A new robust codominant sex-linked STS marker for asparagus. Acta Hort. 1223: 51-58. doi 10.17660/ActaHortic.2018.1223.8 (Partially Refereed) <u>View Publication</u>

### Comments:

Candidate's Contribution and Attribution of Authors:

All work was done in my lab with funding from my grants. I advised on marker development and validation strategies and edited the manuscript.

### D. Book Chapters

### Published

 Ramadugu, C, Razi, M F, Keremane M L, Scora R W, and Roose, M L. 2017. Limes: Systematic classification, distribution and botany, in Khan, M M, Al-Yahyai R, and Al-Said F (Eds), The Lime, Botany Production and Uses CABI, Wallingford. p. 12-36. (Partially Refereed, Invited)

### Comments:

Ramadugu wrote the first draft with input from Razi, Keremane, and Scora. All authors edited at various stages. C. Ramadugu (corresponding author) was Assistant Project Scientist in my lab at UCR. R. W. Scora was Emeritus Professor in Botany and Plant Sciences at UCR,

<u>Candidate's Contribution and Attribution of Authors:</u> *I edited the chapter. Electronic copy is not available due to copyright.* 

## II. Semitechnical/Scholarly

### A. Journal Articles

### Published

 Roose, M.L., Williams, T.E. 2010. 'DaisySL' mandarin. Citrograph. Vol. Jan-Feb: p.14-15. (Non-Refereed) <u>View Publication</u>

### Comments:

Candidate's Contribution and Attribution of Authors: designed and developed funding for project, review manucscipt that was drafted by TEW

 Roose, M.L., Kupper, R.S., Federici, C.T. 2013. Core Citrus Breeding and Evaluation Program. Citrus rootstock tri on calcareous soils in California. Citrograph. Fall 2013 p.34-38. (Non-Refereed) <u>View Publication</u>

Candidate is Corresponding Author

### Comments:

Candidate's Contribution and Attribution of Authors: Designed experiments, helped collect data, analyzed data, drafted manuscript. R.S.Kupper and C.T.Federici (SRA, Roose's Lab) collected data, and edited manuscript.

 Ramadugu, C, Keremane, M L, McCollum, T G, Hall, D G, and Roose, M L. 2016. Developing resistance to HLB. Citrograph 7 (2): 46-51. (Non-Refereed) <u>View Publication</u>

Comments:

Dr. Ramadugu (Assistant Project Scientist, Roose's Lab) performed most of the research reported here with assistance from Dr. Keremane (USDA-ARS, Riverside). Drs. McCollum and Hall (USDA-ARS, Ft. Pierce FL) grew and infected the plants in a greenhouse in Ft. Pierce, FL.

<u>Candidate's Contribution and Attribution of Authors:</u> *I provided advice on crossing designs and interpretation of results.* 

 Roose, M L, Williams, T E, and Federici, C T. 2016. Development of low-seeded citrus by mutation breeding. Citrograph 7 (1):65-70. (Non-Refereed) <u>View Publication</u>

Candidate is Corresponding Author

Comments:

Mr. Williams and Dr. Federici were Staff Research Associates at UCR supervised by Roose.

Candidate's Contribution and Attribution of Authors:

I drafted the manuscript which was edited by Williams and Federici. The manuscript reports progress on our Citrus Research Board funded breeding project.

 Ramadugu, C, Keremane, M L, Lee, R F, Hall, D G, McCollum, T G, and Roose, M L. 2019. Novel citrus hybrids with HLB resistance. Citrograph 10: 60-64 (Non-Refereed) <u>View Publication</u>

### Comments:

Dr. Ramadugu (Associate Project Scientist, supervised by Roose) performed most of the research, Dr. Keremane (USDA-ARS, supervised by Dr. Lee, USDA-ARS) assisted with qPCR evaluation, Drs. Hall and McCollum (USDA-ARS) grew and infected plants in Florida with HLB.

Candidate's Contribution and Attribution of Authors:

I recommended crossing designs, assisted in data interpretation and edited the manuscript. Research funded by a grant to Ramadugu.

### D. Book Chapters

### Published

 Roose, M.L. 2014. Rootstocks. Citrus Production Manual. Editors: Louise Ferguson, Elizabeth E. Grafton-Cardwel University of California, Agriculture and Natural Resources. p.95-105. (Refereed, Invited) <u>View Publication</u>

Candidate is Corresponding Author

Comments:

Candidate's Contribution and Attribution of Authors:

 Roose, M. 2014. Biotechnology. Citrus Production Manual. Editors: Louise Ferguson, Elizabeth E. Grafton-Cardwell. University of California, Agriculture and Natural Resources. p.409-414. (Refereed, Invited)

### View Publication

Candidate is Corresponding Author

Comments:

Candidate's Contribution and Attribution of Authors:

# **Creative Activities**

# Current Bibliography of Creative Activities

No records found.

## Creative Activities at Last Advance

No records found.

## Difference List of Creative Activities (10/1997 - 09/2019)

No records found.

# **Patents**

## **Current Patents**

Title	Patent Status	UCR Status	UC Case #	Date Disclosed	Date Patent Filed	Patent Number	Date Patent Issued
Asparagus F1 'DePaoli'	Issued	Active				200700127	09/11/2014
Female Asparagus Plant Named "FCE4"	Issued	Active	2017-663	03/10/2017	03/10/2019	PP30,433	04/24/2019
Mandarin Tree Named 'KinnowLS'	Issued	Active	2010-254	06/27/2011	10/18/2011	PP23,743 P3	07/16/2013
Mandarin Tree Named 'FairchildLS'	Issued	Active	2010-169-1	09/24/2009	11/12/2009	PP22,649 P3	04/17/2012
Mandarin Tree Named 'DaisySL'	Issued	Active	2009-501-1	06/02/2009	06/22/2009	PP22,096 P3	08/30/2011
Male Asparagus Hybrid 'M256'	Issued	Active	2004-517	07/11/2006	04/02/2007	PP20,629 P3	01/05/2010
Tango mandarin	Issued	Active		06/13/2005	09/06/2005	pp17,863	07/10/2007
Mandarin hybrid tree named 'TDE4'	Issued	Active		04/03/2002	06/20/2002	PP 16,289	02/28/2006
Mandarin hybrid tree named 'TDE3'	Issued	Active		04/03/2002	06/20/2002	PP15,703	03/29/2005
Mandarin hybrid tree named 'TDE2'	Issued	Active		04/03/2002	06/20/2002	PP15,461	01/04/2005

# Last Advance of Patents

Title	Patent Status		UC Case #	Date Disclosed	Date Patent Filed	Patent Number	Date Patent Issued
Tango mandarin	Issued	Active		06/13/2005	09/06/2005	pp17,863	07/10/2007
Mandarin hybrid tree named 'TDE4'	Issued	Active		04/03/2002	06/20/2002	PP 16,289	02/28/2006
Mandarin hybrid tree named 'TDE3'	Issued	Active		04/03/2002	06/20/2002	PP15,703	03/29/2005
Mandarin hybrid tree named 'TDE2'	Issued	Active		04/03/2002	06/20/2002	PP15,461	01/04/2005

# Difference List of Patents (10/1997 - 09/2019)

Title		UCR Status	UC Case #	Date Disclosed	Date Patent Filed	Patent Number	Date Patent Issued
Asparagus F1 'DePaoli'	Issued	Active				200700127	09/11/2014
Female Asparagus Plant Named "FCE4"	Issued	Active	2017-663	03/10/2017	03/10/2019	PP30,433	04/24/2019
Mandarin Tree Named 'KinnowLS'	Issued	Active	2010-254	06/27/2011	10/18/2011	PP23,743 P3	07/16/2013
Mandarin Tree Named 'FairchildLS'	Issued	Active	2010-169-1	09/24/2009	11/12/2009	PP22,649 P3	04/17/2012
Mandarin Tree Named 'DaisySL'	Issued	Active	2009-501-1	06/02/2009	06/22/2009	PP22,096 P3	08/30/2011
Male Asparagus Hybrid 'M256'	Issued	Active	2004-517	07/11/2006	04/02/2007	PP20,629 P3	01/05/2010

# **Professional Services (10/1997 - 09/2019)**

## Reviewer Activity - Manuscripts

Journal/Agency	Number Reviewed	Date	Comments
BMC Genomics	1	10/2009 - 09/2019	
HortTechnology	1	10/2009 - 09/2019	
Theor Appl Genet	1	10/2009 - 09/2019	
Annuals Botany	3	10/2009 - 09/2019	
BMC Genetics	1	10/2009 - 09/2019	
California Agriculture	1	10/2009 - 09/2019	
Intern J Molec Sci	1	10/2009 - 09/2019	
Scientific Reports	1	10/2009 - 09/2019	
Plant Disease	1	10/2009 - 09/2019	
HortScience	17	10/2009 - 09/2019	
Scientia Horticulturae	1	10/2009 - 09/2019	
Euphytica	2	10/2009 - 09/2019	
Plant Cell Reports	1	10/2009 - 09/2019	
Plant J	1	10/2009 - 09/2019	
Molecular Breeding	1	10/2009 - 09/2019	
Plant Sci	2	10/2009 - 09/2019	
Genome	1	10/2009 - 09/2019	
Tree Genetics Genomes	5	10/2009 - 09/2019	
J Amer Soc Hort Sci	2	10/2009 - 09/2019	
Acta Horticulturae	4	10/2009 - 09/2019	
Molecular Genetics Genomics	1	10/2009 - 09/2019	
Frontiers Plant Sci	1	10/2009 - 09/2019	
Horticulture Res	1	10/2009 - 09/2019	
Breeding Science	1	10/2009 - 09/2019	
Genes	1	10/2009 - 09/2019	
J Integrative Plant Biology	1	10/2009 - 09/2019	
Plant Cell Tissue Organ Culture	1	10/2009 - 09/2019	
Plant Physiology	2	10/2009 - 09/2019	
PLOS One	4	10/2009 - 09/2019	
Physiology Molecular Biology Plants	1	10/2009 - 09/2019	
J. Heredity	1	10/2006 - 09/2009	
Tree Genetics and Genomes	2	10/2006 - 09/2009	
Plant Molecular Biol. Reporter	1	10/2006 - 09/2009	
Plant Science	1	10/2006 - 09/2009	

Int. Review Plant Genomics	1	10/2006 - 09/2009
Australian Systematic Botany	1	10/2006 - 09/2009
J. Exp. Botany	2	10/2006 - 09/2009
Scientia Horticulturae	4	10/2006 - 09/2009
BMC Genomics	4	10/2006 - 09/2009
Journal Amer. Soc. Hort. Sci.	3	10/2006 - 09/2009
HortScience	5	10/2006 - 09/2009
J. Integrative Plant Biol.	1	10/2006 - 09/2009
Plant Breeding	1	10/2006 - 09/2009
Euphytica	3	10/2006 - 09/2009
Genetics	1	10/2006 - 09/2009
Plant Cell Reports	1	10/2006 - 09/2009
Physiol. and Molec. Biol. Plants	1	10/2006 - 09/2009
HortTechnology	1	10/2004 - 09/2006
Genetics	2	10/2004 - 09/2006
Heredity	1	10/2004 - 09/2006
Phytopathology	1	10/2004 - 09/2006
Molecular Breeding	1	10/2004 - 09/2006
J. Heredity	1	10/2004 - 09/2006
Genetica	1	10/2004 - 09/2006
Euphytica	4	10/2004 - 09/2006
California Agriculture	1	10/2004 - 09/2006
BMC Genetics	1	10/2004 - 09/2006
Tree Genetics and Genomes	1	10/2004 - 09/2006
Theoretical and Applied Genetics	1	10/2004 - 09/2006
Sexual Plant Reproduction	1	10/2004 - 09/2006
Scientia Horticulturae	5	10/2004 - 09/2006
Plant Molecular Biol.	1	10/2004 - 09/2006
Plant Cell Reports	1	10/2004 - 09/2006
Australian J. Botany	1	10/2004 - 09/2006
J. Am. Soc. Hort. Sci.	3	10/2004 - 09/2006
International Society for Citriculture	3	10/2004 - 09/2006
Acta Horticulturae	2	10/2004 - 09/2006
New Phytologist	1	10/1997 - 09/2004
Plant Cell Rep	2	10/1997 - 09/2004
Acta Horticulturae	3	10/1997 - 09/2004
Euphytica	7	10/1997 - 09/2004
Fruit Varieties Journal	1	10/1997 - 09/2004
Genetics	1	10/1997 - 09/2004
Genome	3	10/1997 - 09/2004
Theor Appl Genet	7	10/1997 - 09/2004
in Vitro Cellular and Developmental Biology - Plant	1	10/1997 - 09/2004
Horticultural Reviews	1	10/1997 - 09/2004
HortScience	3	10/1997 - 09/2004
Annals Botany	2	10/1997 - 09/2004
J Genetics and Breeding	1	10/1997 - 09/2004
J Heredity	4	10/1997 - 09/2004
J Amer Soc Horticultural Sci	5	10/1997 - 09/2004
Int J Plant Sciences	1	10/1997 - 09/2004
Molecular Breeding	1	10/1997 - 09/2004
Molecular Ecology	2	10/1997 - 09/2004
Scientia Horticulturae	8	10/1997 - 09/2004

Proc Int Soc Citrus Virologists	1	10/1997 - 09/2004
Plant Cell Tissue Organ Culture	2	10/1997 - 09/2004
Monographs in Systematic Botany	1	10/1997 - 09/2004

# Reviewer Activity - Grant Proposals

Journal/Agency	Number Reviewed	Date	Comments
BARD Israel	1	10/2017 - 09/2019	
UC-ANR	1	10/2014 - 09/2019	
National Geographic Society	1	10/2014 - 09/2019	
Citrus Research and Development Foundation	11	01/2012 - 09/2019	
Natural Sciences and Engineering Research Council of Canada	1	10/2009 - 09/2014	
Rutgers University	1	10/2009 - 09/2014	
CDFA Pierce's Disease Research Program	1	10/2009 - 09/2014	
NSF	4	10/2006 - 09/2019	
KBBE	2	10/2006 - 09/2009	EU program
IUCRP (UC Discovery)	1	10/2006 - 09/2009	
UCR-PIRE	5	10/2006 - 09/2009	
USDA-NRI	3	10/2006 - 09/2019	
ARI	1	10/2006 - 09/2009	
Ontario Ministry of Agriculture and Food, Sustainable Production Systems Research	1	10/2004 - 09/2006	
ERA-NET (Plant Genomics)	1	10/2004 - 09/2006	
US-ISRAEL BARD	2	10/2004 - 09/2006	
Kentucky Tobacco Research and Development Center	1	10/2004 - 09/2006	
NSF	2	10/2004 - 09/2006	
IUCRP (UC Discovery)	2	10/2004 - 09/2006	
USDA-NRI	2	10/2004 - 09/2006	
USDA-SBIR	1	10/2004 - 09/2006	
California Pierce's Disease Research Program	1	10/2004 - 09/2006	
UC-ANR	1	10/1997 - 09/2004	
NSF	2	10/1997 - 09/2004	
USDA	1	10/1997 - 09/2004	
USDA-SBIR	1	10/1997 - 09/2004	
Idaho Board of Educ	1	10/1997 - 09/2004	
US-Israel Binational Agricultural Research and Development	4	09/1997 - 10/2004	

# Reviewer Activity - Grant Panels

Panel	Role	Grants Reviewed	Location	Service Date	Comments
USDA-SCRI	Member	13	Washington DC	01/2016 - 12/2016	
Citrus Research Board Scientific Advisory Panel	Member	15		08/2009 - 09/2009	
Citrus Research Board Scientific Advisory Panel	Chair	23		08/2007 - 10/2008	Also summarized all reviews
California Avocado Commission	Chair	16		07/2007 - 08/2009	Also summarize all reviews

# Reviewer Activity - Letters of Recommendations

Туре	Institution	Date	Comments
Advancement		01/2018	
Appointment		06/2016	
Advancement		07/2011	
Appointment		11/2009	

## Professional Committee Service

Committee		Role	Service Date	Comments
Variety Committee	California Citrus Nursery Society	Member	01/2005 - 12/2010	
Citrus Variety Development Management Committee	Citrus Research Board	Member	01/2005 - 12/2010	unclear when committee was terminated
International Citrus Genomics Consortium Steering Committee		Member	01/2004 - 01/2013	
UCR Citrus Variety Collection Advisory Committee		Member	01/2003 - 10/2007	Not clear when service ended. Committee had no activity.
USDA-ARS Citrus And Dates Germplasm Committee		Member	01/2003 - To Present	
US Citrus Genomics Steering Committee		Member	01/2003 - 12/2010	

# Professional Boards and Societies

Society	Role	Service Date	Comments
International Society of Citriculture	Executive Secretary/Treasurer	09/2016 - To Present	
International Society for Citriculture	Executive Committee member	01/2014 - To Present	

## Presentations

Title	Event Name	Society/Institution	Role	Туре	National/International	Invited	Location	Date
Integrated Citrus Breeding and Evaluation for California	CRB Variety Committee Meeting	California Citrus Research Board	Speaker	Presentation	Regional		Visalia	05/2019
Adventures in Citrus Germplasm	Joint Conference of the International Association of Citrus Virologists XXII and the VI International Research Conference on Huanglongbing	IOCV/IRCHLB	Keynote Speaker	Lecture/Seminar	International	Yes	Riverside	03/2019
Comments: Shared w	vith Tracy Kahn, ~	50% each						
Developing Field Detection Systems and Characterizing Other Liberibacters Associated with Citrus HLB	Joint Conference of the International Association of Citrus Virologists XXII and the VI International Research Conference on Huanglongbing	IOCV/IRCHLB	Co-Author	Presentation	International		Riverside	03/2019
Comments: Large m	ulti-institution pro	ject led by Dr. Ramadugu in my group		ł	L.		1	1
Application of KASP Markers to Improve Studies of HLB Tolerance	Joint Conference of the International Association of Citrus Virologists XXII and the VI International	IOCV/IRCHLB	Speaker	Presentation	International		Riverside	03/2019

	Research Conference on							
	Huanglongbing							
A deeper gene expression analysis of HLB pathogen and host to understand their complex relationship	Joint Conference of the International Association of Citrus Virologists XXII and the VI International Research Conference on Huanglongbing	IOCV/IRCHLB	Co-Author	Poster	International		Riverside	03/2019
Comments: work by	postdoc in my lab	)	1	I			1	
Resistance to huanglongbing developed in hybrids of citrus crossed with Australian limes	Joint Conference of the International Association of Citrus Virologists XXII and the VI International Research Conference on Huanglongbing	IOCV/IRCHLB	Co-Author	Presentation	International		Riverside	03/2019
Comments: work in		ect led by Dr. Ramadugu	ļ	<u> </u>			Į	L
Frequency and Characteristics of Large Apparent Deletions in Citrus Germplasm	XXVII Plant and Animal Genome Meeting		Speaker	Presentation	International	Yes	San Diego, CA	01/2019
Admixture Inference in 936 Accessions of Citrus with High Density SNP Array	XXVII Plant and Animal Genome Meeting		Co-Author	Poster	International		San Diego, CA	01/2019
Comments: Work by	my PhD student							
Citrus Breeding and Genomics at UCR	Plant Breeding Retreat	Plant Breeding Program UC Davis	Speaker	Presentation	Regional		Monterey, CA	12/2018
UCR Citrus Breeding Program – Toward Knowledge-Based Breeding	BPSC 250 Seminar	University of California Riverside	Speaker	Lecture/Seminar	Regional		Riverside	11/2018
Development of Non-Transgenic HLB Resistant Citrus Varieties for California Using CRISPR-Cas9	2018 CRB Citrus Conference	California Citrus Research Board	Co-Author	Poster	Regional		Visalia	10/2018
Comments: work by	postdoc in my lab	)						
A Deeper Insight into the Coordinated and Complex Relationship of Citrus and Liberibacter	2018 CRB Citrus Conference	California Citrus Research Board	Co-Author	Poster	Regional		Visalia, CAW	10/2018
Key Questions and Area of Focus	Regulatory Summit to Address the Interstate Movement of Citrus Plant Materials		Speaker	Presentation	National	Yes	Denver	10/2018
Comments: shared w	vith 2 other presen	ters					•	
The Puzzle of Fukumoto Decline	2018 CRB Citrus Conference	California Citrus Research Board	Presenter	Poster	Regional		Visalia	10/2018
SNP Marker Analysis of Nucellar Embryony	2018 CRB Citrus	California Citrus Research Board	Co-Author	Poster	Regional		Visalia, CA	10/2018

in Citrus and Its Close Relatives	Conference							
Comments: work by	my PhD student							
Integrated Citrus Breeding and Evaluation for California	Citrus Research Board Meeting		Speaker	Presentation	Regional		Visalia	08/2018
Genome-wide analysis of small RNA and mRNA expression profiles during fruit development in grafted citrus	XXVI Plant and Animal Genome Meeting		Co-Author	Presentation	International		San Diego	01/2018
Comments: work from	m my PhD studen	t						
Diving Into Citrus Genomes	CCNS annual meeting	California Citrus Nursery Society	Speaker	Presentation	Regional		Temecula, CA	11/2017
Citrus Breeding: Powerful New Tools and Daunting New Challenges	CNAS Homecoming Lecture	UCR	Speaker	Presentation	Regional	Yes	Riverside	11/2017
Citrus Breeding for California: New Tools to Meet the Challenge of HLB	CA Citrus Research Conf	Citrus Research Board	Speaker	Presentation	Regional	Yes	Visalia, CA	10/2017
A new robust codominant sex-linked STS marker for asparagus	Symposium	International Society for Horticultural Science	Co-Author	Presentation	International		Potsdam, Germany	09/2017
Comments: most wor	k from my lab							
Update on the Asparagus Breeding Program at the University of California, Riverside	14th International Asparagus Symposium	International Society for Horticultural Science	Co-Author	Poster	International		Potsdam, Germany	09/2017
Comments: all work	from my lab							
SNP Arrays for Citrus Breeding and Germplasm Analysis	National Association of Plant Breeders 2017 Meeting	National Association of Plant Breeders	Presenter	Poster	National		Davis, CA	08/2017
SNP Arrays for	IV International Symposium on Molecular Markers in Horticulture	International Society for Horticultural Science	Speaker	Presentation	International		Napier, New Zealand	03/2017
Application of High-Density SNP Genotyping Array for Citrus	XXV Plant and Animal Genome Meeting		Co-Author	Presentation	International		San Diego	01/2017
Comments: nearly all	work from my la	b						
Whole Genome Amplification of Single Pollen Grains And SNP Array Data for Accurate Haplotype Determination in Citrus	XXV Plant and Animal Genome Meeting		Co-Author	Poster	International		San Diego	01/2017
Comments: all work	from my lab							
Loss of Heterozygosity Analysis in Citrus Using a High Density SNP Array	XXV Plant and Animal Genome Meeting		Co-Author	Poster	International		San Diego	01/2017
Comments: all work	from my lab							
Phylogeny of Citrus								

XIII International Citrus Congress	International Society of Citriculture	Co-Author	Presentation	International		Foz do Iguaçu, Brazil	09/2016
from my lab							
XIII International Citrus Congress	International Society of Citriculture	Presenter	Poster	International		Foz do Iguaçu, Brazil	09/2016
from my lab		·					
Citrus Congress	International Society of Citriculture	Co-Author	Poster	International		Foz do Iguaçu, Brazil	09/2016
n Roose and Kah	n labs at UCR				_		
XIII International Citrus Congress	International Society of Citriculture	Co-Author	Presentation	International		Foz do Iguaçu, Brazil	09/2016
ted but most work	a not from my lab						
XIII International Citrus Congress	International Society of Citriculture	Co-Author	Poster	International		Foz do Iguaçu, Brazil	09/2016
my graduate stude	ent						
XIII International Citrus Congress	International Society of Citriculture	Speaker	Presentation	International		Foz do Iguaçu, Brazil	09/2016
CRB-UC Cooperative Extension Grower Meeting		Speaker	Presentation	Regional	Yes	Loomis, CA	07/2016
Citrus Crop Germplasm Committee	USDA	Speaker	Presentation	National		Riverside, CA	02/2016
	UCR-Research and Economic Development	Speaker	Presentation	Regional	Yes	Riverside, CA	02/2016
UCR Citrus Day		Speaker	Presentation	Regional		Riverside, CA	01/2016
California Citrus Nursery Society Variety Committee meeting	California Citrus Nursery Society	Speaker	Presentation	Regional		by phone	01/2016
XXIV Plant and Animal Genome Meeting		Co-Author	Poster	International		San Diego, CA	01/2016
m my lab by visit	ing scientist						
XXIV Plant and Animal Genome Meeting		Speaker	Presentation	International	Yes	San Diego, CA	01/2016
Watkins Society	LICP	Speaker	Lecture/Seminar	Bagional	Yes	Riverside	04/2015
	International Citrus Congresss from my lab XIII International Citrus Congresss from my lab XIII International Citrus Congresss an Roose and Kah XIII International Citrus Congresss ted but most work XIII International Citrus Congresss ted but most work XIII International Citrus Congresss my graduate studd XIII International Citrus Congresss CRB-UC Cooperative Extension Grower Meeting Citrus Congress CRB-UC Cooperative Extension Grower Meeting Citrus Congress California Citrus Nursery Society Variety Committee meeting XXIV Plant and Animal Genome Meeting Meeting	International Citrus Congresss International Society of Citriculture TMII International Citrus Congresss International Society of Citriculture TMII International Citrus Congress International Society of Citriculture TMII International International Society of Citriculture TMII International International Society of Citriculture TMII International Citrus Congress International Society of Citriculture TMII International Citrus 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Nursery Society MeetingSpeakerCalifornia Genome MeetingCalifornia Citrus Nursery Society Cooperative ExtensionSpeakerXXIV Plant and Animal Genome MeetingCalifornia Citrus Nursery Societ	International Citrus CongressInternational Society of CitricultureCo-AuthorPesentationIform ny labInternational Society of CitriculturePresenterPosterXIII International International Society of CitricultureCo-AuthorPosterXIII International International Society of CitricultureCo-AuthorPosterXIII International International Citrus CongressInternational Society of CitricultureCo-AuthorPosterXIII International Citrus CongressInternational Society of CitricultureCo-AuthorPosterXIII International Citrus CongressInternational Society of CitricultureCo-AuthorPosterXIII International Citrus CongressInternational Society of CitricultureCo-AuthorPosterXIII International Citrus CongressInternational Society of CitricultureSpeakerPosterXIII International Citrus CongressInternational Society of 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Breeding at UCR	Day		Speaker	Lecture/Seminar	Regional	Yes	Riverside	01/2015
High Density Linkage Maps in Two Citrus Populations Using	3rd International Citrus Biotechnology	International Society of Citriculture	Speaker	Presentation	International	Yes	Shizuoka, Japan	11/2014
RAD Sequencing Citrus Rootstocks - Soils, Densities and Compatibilities	Symposium Fall Citrus Meeting	UC-ANR	Speaker	Presentation	Regional	Yes	Tulare	10/2014
Application of RAD-sequencing to linkage mapping in Citrus	International Horticultural Congress	International Society for Horticultural Science	Speaker	Poster	International		Brisbane, Australia	08/2014
Conservation of Citrus germplasm - an international survey	International Horticultural Congress	International Society for Horticultural Science	Speaker	Presentation	International		Brisbane, Australia	08/2014
Citrus Breeding at UCRProgress and Challenges	Amer Soc Hort Sci Annual Meeting	ASHS	Speaker	Presentation	National		Palm Desert, CA	07/2013
Citrus rootstock trials on calcareous soils in California 	12th International Citrus Congress	International Society of Citriculture	Presenter	Poster	International		Valencia, Spain	11/2012
New Genetic and Genomic Tools for Citrus Breeding 	12th International Citrus Congress	International Society of Citriculture	Plenary Speaker	Presentation	International	Yes	Valencia, Spain	11/2012
Global conservation strategy for citrus genetic resources	12th International Citrus Congress	International Society of Citriculture	Speaker	Workshop	International		Valencia, Spain	11/2012
Model systems for a chemical genomics approach to HLB	3rd Citrus Health Research Forum	Citrus Health Response Program	Presenter	Poster	International		Ft. Collins, CO	08/2012
Mutation Breeding for Low Seed Content in Citrus	Amer Soc Hort Sci Annual Meeting	ASHS	Speaker	Presentation	National		Waikaloa, HI	11/2011
New Mandarin Varieties - Which are a "Fit" for Ventura ?	UC-CE/CRB Ventura Co. Growers' Educational Seminar		Speaker	Presentation	National	Yes	Santa Paula, CA	07/2009
Citrus Genomics for HLB Mitigation		National Research Council, Board on Agriculture and Natural Resources Study Committee on Strategic Planning for the Florida Citrus Industry	Presenter	Presentation	National	Yes	Internet presentation	07/2009
<i>Comments:</i> ~60 minu	ute seminar and di	-	I				I	
Citrus Rootstock and Varietal Development	Tulare Co. Spring Citrus Meeting		Speaker	Presentation	Regional	Yes	Tulare, CA	03/2009
CRB Variety Tour		CRB Variety Development Committee	Presenter	Presentation	National		Various in California	03/2009
Comments: 2 day tou	r of field trials in	cluding Visalia, Bakersfield, Indio, Irvine, Santa I	Paula					
The UCR Citrus Breeding Program New Selections for the Future	Friends of Citrus Lunch Group		Speaker	Presentation	National	Yes	UCR	02/2009
Citrus Commercialization	CNAS Board of Advisors meeting		Speaker	Presentation	National	Yes	UCR	12/2008
Citrus Genomics New Tools and Applications	Department Seminar	Dept. Plant Pathology	Speaker	Lecture/Seminar	Regional	Yes	UCR	11/2008
Citrus Breeding at the University of California, Riverside		Zhejiang Citrus Research Institute	Speaker	Presentation	International	Yes	Huangyan, China	11/2008
The Irradiation-Mutation Breeding Program at the University of California Riverside	11th International Citrus Congress	International Society of Citriculture	Co-Author	Presentation	International		Wuhan, China	10/2008

SL, and Kinnow SL mandarins: three new, low-seeded, mid-season irradiated mandarin selections from the University of California Riverside	11th International Citrus Congress	International Society of Citriculture	Co-Author Presentation	International		Wuhan, China	10/2008
Tango mandarin a new, very low-seeded, late-season irradiated selection of W. Murcott mandarin from the University of California Riverside	11th International Citrus Congress	International Society of Citriculture	Co-Author Presentation	International		Wuhan, China	10/2008
Bitters, Carpenter and Furr Trifoliate Hybrids, Three New Citrus Rootstocks from USDA and UCR	2008 meeting	Internation Society of Citrus Nurserymen	Speaker Presentation	International		Chongqing, China	10/2008
Comparative SSR Marker Maps of Sweet Orange, Trifoliate Orange, Citranges, and Mandarins	11th International Citrus Congress	International Society of Citriculture	Speaker Presentation	International		Wuhan, China	10/2008
Citrus Genomics and Breeding	11th International Citrus Congress	International Society of Citriculture	Plenary Speaker Presentation	International	Yes	Wuhan, China	10/2008
Citrus tristeza virus resistance genes from Poncirus and Citrus	CTV Workshop	Citrus Research Board	Speaker Presentation	National	Yes	Oakland, CA	08/2008
New Citrus Varieties from the UCR Breeding Programs	Spring Mandarins Roundtable meeting		Speaker Presentation	International	Yes	Huelva, Spain	03/2008
Citrus Varieties and Rootstocks	Visiting Scientists from Turkey		Speaker Presentation	National		UCR	12/2007
Citrus Genomics at UC Riverside	Citrus Genomics Workshop	National Citrus Genomics Workgroup	Speaker Presentation	National		Bethesda, MD	08/2007
Online Bioinformatics for Citrus	Citrus Genomics Workshop	National Citrus Genomics Workgroup	Speaker Presentation	National		Bethesda, MD	08/2007
Citrus Rootstock and Scion Cultivars	Citrus Scientists from Mexico		Speaker Presentation	International	Yes	UCR	07/2007
Citrus Rootstock and Scion Cultivars	Citrus Scientists from Mexico		Speaker Presentation	International	Yes	UCR	06/2007
Citrus Genomics in USA	International Citrus Genome Consortium Steering Committee meeting		Speaker Presentation	International		Joint Genome Institite, Walnut Creek, CA	01/2007
Update on Asparagus Research at UC Riverside	California Asparagus Day meeting	California Asparagus Commission/UCCE	Speaker Presentation	National		Stockton, CA	12/2006
Field tours of scion and rootstock trials at Lindcove REC	CCNS Field Day	California Citrus Nursery Society (CCNS)	Speaker Presentation	National	Yes	Exeter, CA	12/2006
New Citrus Varieties from the UCR Breeding Programs	Annual meeting	California Citrus Nursery Society	Speaker Presentation	National	Yes	Fallbrook. CA	11/2006
Status of Citrus Genomics	Annual meeting	National Citrus Research Council	Speaker Presentation	National		Denver	10/2006
Citrus Rootstock Research	Citrus Research Board-UC Cooperative Extension Seminar		Speaker Presentation	National		Bakersfield, CA	08/2006
Citrus Rootstock Research	CRB Grower Seminar Series	Citrus Research Board-UC Cooperative Extension	Speaker Presentation	National	Yes	Exeter, CA	08/2006

Citrus Genome Sequencing by JGI	National Citrus Genomics Workshop		Speaker	Presentation	National		Albany, CA	07/2006
New Releases from the UCR Citrus Breeding Program		California Citrus Nursery Society, Variety Committee	Speaker	Presentation	National		Riverside, CA	06/2006
Status of JGI Citrus Genome Sequencing Program	5th Annual Citrus Research Board Biotechnology Conference		Speaker	Presentation	National		Emeryville, CA	04/2006
UC Riverside Contributions to California Agriculture		California State Board of Food and Agriculture	Speaker	Presentation	National		Sacramento, CA	01/2006
New Releases from the UCR Citrus Breeding Program	California Citrus Nursery Society Annual Meeting		Speaker	Presentation	National		Sacramento, CA	10/2005
Advances in the study of citrus by application of molecular markers		University of Veracruz, Mexico	Speaker	Presentation	International		Veracruz, Mexico	07/2005
Mapping Genes for Spear Quality in Asparagus	XIth International Asparagus Symposium		Speaker	Presentation	International		Horst, Netherlands	06/2005
Comments: with N. S	Stone							
Basic Technology of Irradiation	Annual Citrus Research Board Biotechnology Conference		Speaker	Presentation	National		Oakland, CA	04/2005
Citrus Genomics	Annual Biotechnology Conference	Citrus Research Board	Speaker	Presentation	National	Yes	Oakland, CA	04/2005
New Seedless Mandarin Cultivars		Kern Spring Citrus Grower Meeting	Speaker	Presentation	National		Bakersfield, CA	03/2005
Harvesting Genes- Agricultural Genomics to Biotechnology		7th National Biotechnology Congress	Speaker	Presentation	International		Catania, Italy	09/2004
Positional Cloning of a CTV Resistance Gene from Poncirus trifoliata.	National Citrus Disease Symposium		Speaker	Presentation	National		Denver, CO	06/2004
Citrus Breeding Systems	4th Annual Citrus Research Board Biotechnology Conference		Speaker	Presentation	National		Oakland, CA	04/2004
QTL Analysis of Polyembryony in a Poncirus trifoliata x Chander Pummelo Cross		Xth International Citrus Congress	Speaker	Presentation	International		Agadir, Morocco	02/2004
Expressed Sequence Tag Resources for Citrus		Xth International Citrus Congress	Speaker	Presentation	International		Agadir, Morocco	02/2004
Citrus EST Sequencing and Prospects for a High-Density Microarray		Plant and Animal Genome	Speaker	Presentation	National		San Diego, CA	01/2004
Breeding New Citrus Scion Varieties		Citrus Nursery Society	Speaker	Presentation	National		Riverside, CA	11/2003
Positional Cloning of Citrus Tristeza Virus Resistance		Dept. of Plant Pathology	Speaker	Presentation	National		UCR, Riverside, CA	10/2003

# Conference Organizing

Conference	Society/Institution	Role	National/International	Invited	Location		Conference Date	Comments
9th Citrus Genomics Workshop		Organizer	National	Yes	Riverside, CA	09/2009 - 11/2010	10/2010 - 10/2010	
2nd International Citrus Biotechnology Symposium		Member, Inter. Scientific Advisory Comm	International	Yes	Catania, Italy	03/2009 - 06/2010	11/2009 - 12/2009	
11th International Congress of Citriculture	International Society of Citriculture	Organizing Committee	International	Yes	Wuhan, China	10/2007 - 10/2008	10/2008 -	
XIth International Asparagus Symposium	International Society for Horticultural Science	Organizer	International		Math and and a	04/2005 - 06/2005	06/2005 - 06/2005	Organized workshop entitled "DNA Markers for Genetic Diversity and Breeding"

## Other

Organization	Role	Quantity	Description	Service Date	Comments
Foreign Scientific Research Organization	Examiner	1	Evaluation of promotion case	12/2017 - 01/2018	
Foreign University	External Examiner for PhD	1	review PhD dissertation	10/2013 - 11/2013	
Foreign University	Examiner	1	Review appointment file	06/2011 - 07/2011	
Foreign University	Examiner	1	Review tenure case	11/2009 - 11/2009	
Foreign University	External Examiner for Ph.D.	1	review Ph.D. dissertation	10/2004 - 09/2009	
US and Foreign Universities	Evaluations	2	Tenure evaluations	10/2004 - 09/2009	

# University Services (10/1997 - 09/2019)

Type of Service	Role	Name of Committee, Service or Activity	Service Date	Invited	Description of Service	Comments
Department	Chair	Space Committee	07/2018	Yes	Review space issues. Little activity during 18-19.	
Department	Member	Space Committee	07/2016 - 06/2018	Yes	Occasional consultation on space issues	
Department	Member	Ad Hoc Personnel Reappointment Committee	06/2016	Yes	Review and vote on about 15 non-Senate reappointment files per year	
Department	Member	Advancement Committee	09/2012 - 07/2016	Yes	About 10 meetings per year to develop fundraising plans	
Department	ex officio member	Academic Planning Committee	09/2010 - 06/2016	Yes	several meetings per year, major work revising Academic Plans	
Department	Chair	Department Chair	07/2010 - 06/2016	Yes	manage Department affairs, write letters on promotions, manage recruitments, attend meetings of Life Science Council of Chairs, CNAS Chairs and Directors, etc.	
Department	Vice Chair	Vice Chair for Teaching	07/2009 - 06/2010	Yes	Responsible for organization of departmental teaching including staffing courses, assignment of teaching assistants, and coordination of graduate student financial support.	
Department	ex-officio	Graduate Educational Advisory Committee	10/2006 - 04/2007			

Department	Member	Search Committee for Assistant Professor in Plant Evolutionary Genomics	10/2006 - 06/2006	Yes		
Department	Chair	Graduate Educational Advisory Committee	10/2005 - 09/2006	Yes		
Department	Graduate Advisor	Graduate Advisor	10/2005 - 09/2006	Yes		
Department	Vice Chair	Vice Chair of Teaching	10/2003 - 04/2007	Yes		
Department	ex-officio	Undergraduate Educational Advisory Committee	10/2003 - 04/2007	Yes		
Department	Advisor	Computer Advisor	10/2003 - 09/2005	Yes		
Department	ex-officio	Graduate Educational Advisory Committee	10/2003 - 09/2005			
College	Member	Academic Oversight Committee for Field Research	06/2014	Yes	Rare meetings to review proposals or other issues affecting Agricultural Operations	
College	Chair	Plant Transformation Research Center Steering Committee	07/2013	Yes		
College	Member	CNAS Biological Sciences TA Allocation Committee	07/2009 - 06/2010			
College	Interim Divisional Dean	Interim Divisional Dean for Agriculture and Natural Resources	01/2008 - 06/2008	Yes	100% Administrative appointment requiring attendance at numerous on campus meetings and monthly 2-day off-campus meetings of ANR Program Council.	
College	Associate Dean	Associate Dean of Agricultural Experiment Station and Cooperative Extension	03/2007 - 12/2007	Yes	50% Administrative Appointment requiring attendance at many campus meetings, monthly 2-day meetings of ANR Program Council, generally off-campus.	
College	Member	CNAS Biological Sciences TA Allocation Committee	01/2004 - 04/2007		generally on-campus.	
College	Chair	Plant Transformation Research Center Advisory Committee	01/2004 - 04/2007			
Campus	Chair	Search Committee for Citrus Cluster Hire	07/2017 - 06/2018	Yes	Chaired search for citrus breeding position	
Campus	Member	Pierce/Batchelor Renovation Committee	01/2016 - 07/2017		periodic long meetings to discuss renovation, select architects etc.	Activity had some other names
Campus	Member	Plant Growth Environments/Greenhouse Planning Committee	02/2014 - 09/2017		Several meetings on initial planning of new greenhouse and plant growth facilties	
Campus	Member	UCR School of Medicine Research Enterprise Planning Committee	09/2007 - 01/2008	Yes	biweekly meetings	
Campus	Member	Search Committee for Assistant Vice Chancellor, Technology Commercialization	01/2006 - 06/2006	Yes		
Campus	Member	100th Anniversary Symposium Subcommittee	01/2006 - 06/2006			

Senate	Member	Planning and Budget Committee	07/2017	Yes	3 meetings per month, about 5 hours total, plus review of various documents regarding planning and budget issues	
Senate	Member	Faculty Welfare Committee	09/2012 - 08/2015	Yes	About 10 meetings per year	
Senate	Member	Committee on Academic Freedom	09/2009 - 08/2012		about 9 meetings per year	
Senate	Member	Committee on Research	01/2004 - 04/2007		Several meetings per year, review of grant applications and certain research proposals	
Systemwide	Member	UC Planning & Budget Task Force on ANR	12/2018	Yes	approximately monthly online meetings to discuss relationship of ANR to UC system	
Systemwide	Member	Academic Council Special Committee on Agriculture and Natural Resources	07/2012 - 06/2013	Yes	About 2 meetings per year	
Systemwide	Member	UC Advisory Committee to the California Citrus Research Board	07/2009 - 06/2011	Yes	Review about 12 proposals per year, attend about 4 days of meetings	
Systemwide	Chair	UC Scientific Advisory Committee to the California Avocado Commission	07/2007 - 06/2008		Chair committee that reviews proposals and provides summaries to California Avocado Commission. Also Review 3-6 proposals per year. 1-2 days of meetings	
Systemwide	Chair	UC Advisory Committee to the California Citrus Research Board	07/2007 - 09/2008		Chair committee, review about 12 proposals per year, prepare summaries of reviews of 20-40 proposals, attend about 4 days of meetings	requested the CNAS Divisional Dean chair committee due to possible conflict of interest issues
Systemwide	Member	ANR Program Council	03/2007 - 06/2008		monthly 1-2 day meetings	
Systemwide	Member	Search Committee for the Center Director, Lindcove Research and Extension Center	01/2006 - 06/2006	Yes		
Systemwide	Member	UC-ANR, Subtropical Fruit Workgroup	01/1993		Attend and/or speak at periodic workgroup meetings	
Systemwide	Member	UC-ANR, Agricultural Biotechnology Workgroup	01/1993 - 07/2014		Occasional meetings and development of outreach materials	Workgroup terminated by UC-ANR

# Public Services (10/1997 - 09/2019)

Role	Organization/Institution	Service Date	Description of Service	Comments
Science Fair Judging	RUSD Science Fair	0 - 10 0 1 1	reviewed science projects several times - about 3 hours each time	
Member	J. W. North High School	01/2004 - 01/2005	Member of the J.W. North High School Site Council	

# **Teaching Information and Student Support Activities**

# Teaching Records (10/1997 - 09/2019)

Campus	Quarter	Team Taught	Course	Title	Units	Enrollment	Cross List	Evaluation Explanation	Evaluation
UC Riverside	Spring 2019		BPSC 104	FOUNDATIONS OF PLANT BIOLOGY	4	79	BIOL 104	-	Attached below
UC Riverside	Spring 2019	Yes	BPSC 200B	PLANT BIOLOGY CORE	2	13			Attached below
UC Riverside	Spring 2018		BPSC 221	ADVANCED PLANT BREEDING	4	2		low enrollment but several auditors	
UC Riverside	Winter 2018		BPSC 104	FOUNDATIONS OF PLANT BIOLOGY	4	36	BIOL 104		Attached below
UC Riverside	Fall 2016		NASC 093	FRSHMN ADVIS SEM:NAT & AGR SCI	2.00	24			
UC Riverside	Spring 2016		BPSC 197	RESEARCH FOR UNDERGRADUATES	VAR	1			
UC Riverside	Spring 2016		BPSC 221	ADVANCED PLANT BREEDING	4.00	1			
UC Riverside	Winter 2016	Yes	BPSC 193	SENIOR SEMINAR	2.00	9			Attached below
UC Riverside	Fall 2015		NASC 093	FRSHMN ADVIS SEM:NAT & AGR SCI	2.00	24			Attached below
UC Riverside	Spring 2015	Yes	BPSC 104	FOUNDATIONS OF PLANT BIOLOGY	4.00	73	BIOL 104		Attached below
UC Riverside	Spring 2015		BPSC 199	SENIOR RESEARCH	VAR	1			
UC Riverside	Winter 2015	Yes	BPSC 193	SENIOR SEMINAR	2.00	8			Attached below
UC Riverside	Fall 2014		BPSC 302	TEACHING PRACTICUM	VAR	5			
UC Riverside	Spring 2014	Yes	BPSC 104	FOUNDATIONS OF PLANT BIOLOGY	4.00	75	BIOL 104		Attached below
UC Riverside	Spring 2014	Yes	BPSC 221	ADVANCED PLANT BREEDING	4.00	3			Attached below
UC Riverside	Spring 2014		BPSC 199	SENIOR RESEARCH	VAR	2			
UC Riverside	Spring 2014	Yes	BPSC 302	TEACHING PRACTICUM	VAR	1			
UC Riverside	Winter 2014	Yes	BPSC 193	SENIOR SEMINAR	2.00	7			Attached below
UC Riverside	Spring 2013	Yes	BPSC 104	FOUNDATIONS OF PLANT BIOLOGY	4.00	75	BIOL 104		Attached below
UC Riverside	Spring 2013		BPSC 302	TEACHING PRACTICUM	VAR	2			
UC Riverside	Spring 2013		BPSC 197	RESEARCH FOR UNDERGRADUATES	VAR	1			
UC Riverside	Winter 2013	Yes	BPSC 193	SENIOR SEMINAR	2.00	7			Attached below
UC Riverside	Spring 2012		BPSC 221	ADVANCED PLANT BREEDING	4.00	4			Attached below
UC Riverside	Spring 2011		BIOL 102	INTRO:GENETICS	4.00	107			Attached below
UC Riverside	Spring 2011	Yes	BPSC 200B	PLANT BIOLOGY CORE	2.00	15			Attached below
UC Riverside	Fall 2010	Yes	BPSC 200A	PLANT BIOLOGY CORE	2.00	15			Attached below
UC Riverside	Winter 2010	Yes	BPSC 150	PRINCIPLES OF PLANT BREEDING	4.00	2			
UC Riverside	Winter 2010		BIOL 102	INTRO:GENETICS	4.00	192			Attached below

UC Riverside	Fall 2009		NASC 093	FRESHMN ADVIS SEM:NAT & AGR SCI	2.00	23		Attached below
UC Riverside	Spring 2009		BIOL 102	INTRO:GENETICS	4.00	142		Attached below
UC Riverside	Winter 2009		BPSC 197	RESEARCH FOR UNDERGRADUATES	VAR	1		
UC Riverside	Spring 2008		BPSC 221	ADVANCED PLANT BREEDING	4.00	1		
UC Riverside	Spring 2008		BPSC 197	RESEARCH FOR UNDERGRADUATES	VAR	1		
UC Riverside	Spring 2008		BPSC 199	SENIOR RESEARCH	VAR	1		
UC Riverside	Spring 2008	Yes	BPSC 252	SPECIAL TOPICS IN BOT/PLANT SCI	1.00	5		
UC Riverside	Winter 2008		BPSC 199	SENIOR RESEARCH	VAR	1		
UC Riverside	Winter 2008	Yes	BPSC 150	PRINCIPLES OF PLANT BREEDING	4	9		Attached below
UC Riverside	Fall 2007		BPSC 199	SENIOR RESEARCH	VAR	1		
UC Riverside	Spring 2007		BPSC 302	TEACHING PRACTICUM	VAR	1		
UC Riverside	Spring	Yes	GEN 240B	Advances in Bioinformatics & Genomics	4.00	6		Attached below
UC Riverside	Spring		BIOL 102	INTRO: GENETICS	4.00	229		Attached below
UC Riverside	Winter		BPSC 197	RESEARCH FOR UNDERGRADUATES	VAR	1		
UC Riverside	Winter	Yes	BPSC 240	SPECIAL TOPICS IN PLANT BIOLOGY	2.00	5		Attached below
UC Riverside	Spring	Yes	GEN 240B	Advances in Bioinformatics & Genomics	4	3		
UC Riverside	Winter		BPSC 199	Senior Research	var	1		
UC Riverside	Fall		NASC 091	Freshman Advising Seminar	1	23		
UC Riverside	Spring 2005		BPSC 199	Senior Research	var	1		
UC Riverside	Spring		GEN 240B	Advances in Bioinformatics & Genomics	4	3		
UC Riverside	Spring 2005		BPSC 250	Plant Biology Seminar	1	36		
UC Riverside	Winter 2005		BPSC 197	Research for Undergraduates	var	1		
UC Riverside	Winter 2005		Biol 102	Intro - Genetics	4	226		
UC Riverside	Winter		BPSC 302	Teaching Practicum	var	2		
UC Riverside	Spring		BPSC 221	Advanced Plant Breeding	4	4		
UC Riverside	Spring			Intro - Genetics	4	196		
UC Riverside	Spring		BPSC 199	Senior Research	var	1		
UC Riverside	Winter	Yes	BPSC 150	Princ. of Plant Breeding	4	3		
UC Riverside	Spring	Yes	GEN 240B	Bioinformatics	4	6	Taught too little of course	
UC Riverside	Winter		BIOL 102	Introductory Genetics	4	130		Attached below
UC	Spring		BPSC					Attached

Riverside	2002		221	Advanced Plant Breeding	4	3			below
UC Riverside	Winter 2002	Yes	BPSC 150	Principles of Plant Breeding	4	4		Enrollment too low	
UC Riverside	Spring 2001		BIOL 102	Introductory Genetics	4	120			Attached below
UC Riverside	Spring 2000		BPSC 221	Advanced Plant Breeding	4	2		Enrollment too low	
UC Riverside	Winter 2000	Yes	BPSC 150	Principles of Plant Breeding	4	9			Attached below
UC Riverside	Fall 1999		BIOL 102	Introductory Genetics	4	125			Attached below
UC Riverside	Winter 1999	Yes	BPSC 130	General Botany	4	58	BIOL 130		Attached below
UC Riverside	Fall 1998		BPSC 201X	Methods in Plant Biology-Starch Gel Electrophoresis	2	3		Enrollment too low	
UC Riverside	Spring 1998		BPSC 221	Advanced Plant Breeding	4	5			Attached below
UC Riverside	Winter 1998		BIOL 102	Introductory Genetics	4	175			Attached below
UC Riverside	Fall 1997		BPSC 201X	Methods in Plant Biology - Starch Gel Electrophorsis	2	2		Enrollment too low	

# Teaching Releases (10/1997 - 09/2019)

Quarter	Year	Reason	Subject	Course Number	Course Title
Spring	2017	Sabbatical			
Winter	2017	Sabbatical			
Fall	2010	Service as Chair - 2010-2016			
Winter	2009	Sabbatical			
Fall	2008	Sabbatical			
Spring	2008	100% Adminstrative appointment as Divisional Dean			
Winter	2008	100% Adminstrative appointment as Divisional Dean			
Fall	2007	50% Administrative appointment as Associate Dean			

# Teaching Statements (10/1997 - 09/2019)

Year	Statement
2019	Attached below

# Other Teaching Info (10/1997 - 09/2019)

Date	First Name	Last Name	Subject and Course Number	Course Title	Units	Role
06/2018 - 09/2019	Karl	Haro von Mogel				Supervisor
06/2017 -	Marta	Ruiz				Supervisor
09/2019 03/2007	MC ( 1 11	D				
- 09/2007 06/2004	Mitchell	Provance				
- 01/2005	Yildiz	Kacar				Postdoctoral Research Associate
- 06/2006	Xinrong	Ye				Postdoctoral Research Associate
- 11/2014	Zaheer	Muhammad				
01/2014 - 08/2014	Rozina	Aslam				
01/2014 - 08/2014	Sarwar	Yaqub				
08/2010 - 02/2011	Muhammad	Fakhar-ud-Din Razi				mostly with USDA Germplasm Repository
07/2016 - 07/2017	Tulsi	Dey				Supervisor
12/2014 - 02/2019	Sergio	Ferrante				Research Collaborator
06/2011 - 09/2011	Yildiz	Kacar				
01/2011 - 06/2012	Rogerio	Ritzinger				
08/2009 - 11/2009	Luis	Barbosa				
07/2009 - 09/2009	Atefeh	Nik				
08/2008 - 09/2009	Rui	Fan				Visiting graduate student from China
03/2008 - 08/2008	Sergio	Ferrante				
08/2005 - 01/2006	Sergio	Ferrante				
06/2005 - 09/2007	Chandrika	Ramadugu				Changed to Assistant Project Scientist, then Associate Project Scientist
	06/2018 - 09/2019 06/2017 - 09/2019 03/2007 - 09/2007 06/2004 - 01/2005 04/1998 - 06/2014 - 01/2014 - 08/2014 - 08/2014 01/2014 - 08/2014 - 08/2014 - 08/2014 - 08/2014 - 02/2011 07/2016 - 07/2017 12/2014 - 02/2011 07/2016 - 07/2017 12/2014 - 08/2011 07/2017 12/2014 - 09/2011 07/2017 12/2014 - 09/2011 07/2017 12/2014 - 09/2011 07/2016 - 07/2017 08/2008 - 09/2009 03/2008 - 09/2009 03/2008 - 09/2009 03/2008 - 09/2005 - 01/2006	Object         Object         Second	DateFirst NameLast Name06/2018 09/2019RarlHaro von Mogel06/2017 09/2019MartaRuiz03/2007 09/2007MartaRuiz03/2007 09/2007MartaRuiz03/2007 09/2007MitchellProvance03/2007 09/2007MitchellProvance03/2007 09/2007YildizKacar01/2004 09/2014 01/2014 08/2014RozinaAslam01/2014 08/2014RarwarRakhar-ud-Din Razi01/2014 09/2011MuhammadFashar-ud-Din Razi01/2014 09/2011RuisiDey01/2014 09/2011RogerioFerrante01/2014 09/2011RogerioRitzinger01/2014 09/2011RogerioRuitanger01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RogerioRitzinger01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2014 09/2019RuiRui01/2015 09/2009RuiRui01/2016 09/2009RuiRui01/2017 09/2009RuiRui01/2018 09/2009RuiRui01/2019 09/2009RuiRui01/2010 09/2009Rui	Image: series of the series	DateFirst NameLast NameCourse NumberCourse Fitle06/2018KarlHaro von Mogel06/2017MartaRuiz06/2017MartaRuiz09/2007MartaProvance09/2007MitchellProvance09/2007MitchellProvance09/2007MitchellProvance06/2004YildizKacar06/2004ZaheerMuhammad01/2014RozinaAslam08/2010MuhammadFakhar-ud-Din Razi08/2010MuhammadFakhar-ud-Din Razi07/2016TulsiDey07/2017YildizKacar07/2018RegrioFerrante07/2019LuisBarbosa08/2004AtefehNik07/2009AtefehNik08/2008SergioFerrante08/2008RuiFan08/2008RuisFerrante08/2008SergioFerrante08/2008SergioFerrante08/2008SergioFerrante08/2008SergioFerrante08/2008SergioFerrante	DateFirst NameLast NameCourse NumberCourse TitleUnits06/2018KarlHaro von MogelImage State St

Undergraduate	04/2013	Erika	Kang	
	- 06/2014			
Undergraduate	04/2013 - 06/2014	Julie	Nguyen	
Undergraduate	04/2013	Karene	Trunelle	
Undergraduate	10/2010	Michelle	Lu	
Undergraduate	07/2009 - 09/2009	Leo	Lara	participant in CNAS Freshman Scholars summer fellowship program
Undergraduate	07/2009 - 09/2009	Sam	Close	
Undergraduate	09/2007 - 06/2009	Heather	Mitchell	Research volunteer, later enrolled for research units
Undergraduate	09/2007 - 06/2008	Melissa	McGinnis	Research Volunteer, later supervised Honors project
Undergraduate	06/2006 - 09/2006	Jeff	Covey	Research volunteer
Undergraduate	06/2006 - 10/2006	Paul	Kim	Research Volunteer
Undergraduate	01/2006 - 06/2006	Tien	Nghiem	Research Volunteer
Undergraduate	01/2006 - 06/2009	Chuong	Vu	Research Volunteer, in 2008-2009 received undergraduate research grant, presented at UCR Symposium for Undergraduate Research.
Undergraduate	04/2005 - 06/2006	Charlemagne	Quinitio	Research Volunteer
Undergraduate	04/2004 - 06/2006	John	Ikeda	Research Volunteer
Undergraduate	03/2004 - 12/2004	Amy	Shah	Research Volunteer
Other	09/2005 - 12/2005			Matt Collin- Rotating PhD. student
Other	07/2005 - 09/2005			Jennifer Crowley- rotating Ph.D. student
Other	04/2005 - 12/2005			Marco Caruso- Visiting Scientist
Other	01/2005 - 03/2005			Ilknur Polat- Visiting Scientist

# **Student Instruction And Sponsorship**

# <u>Student Instruction (10/1997 - 09/2019)</u>

First Name	Last Name	Degree	Department/ Degree Program	Committee	Roles	Notes	Date	Reason Ended
		Master Of					09/2018 -	

Zachary	Thomas	Science	Plant Biology	Masters Thesis	Major Professor	Present	
Eric	Focht	PhD	Plant Biology	Advisory Committee	, Member	12/2017 - Present	
Ira	Herniter	PhD	Plant Biology	Qualifying Exam	, Chair	12/2016 - 06/2017	Completed
Daniel	Chen	PhD	Plant Pathology	Qualifying Exam	, Member	10/2016 - 10/2016	Completed
Sassoum	Lo	PhD	Plant Biology	Qualifying Exam	, Chair	08/2016 - 11/2016	Completed
Kelley	Clark	PhD	Microbiology	PhD Dissertation	, Member	07/2016 - Present	
Kelley	Clark	PhD	Microbiology	Qualifying Exam	, Member	03/2016 - 06/2016	Completed
John	Chater	PhD	Plant Biology	PhD Dissertation	, Member	01/2015 - 08/2017	Completed
Christopher	Hohn	PhD	Plant Biology	Qualifying Exam	, Member	06/2014 - 06/2014	Completed
Arsenio	Ndeve	PhD	Plant Pathology	Qualifying Exam	, Member	04/2014 - 04/2014	Completed
Harun	Bektas	PhD	Plant Biology	PhD Dissertation	, Member	01/2013 - 12/2015	Completed
Harun	Bektas	PhD	Plant Biology	Qualifying Exam	, Member	01/2013 - 01/2013	Completed
Mitchell	Lucas	PhD	GGB	Qualifying Exam	, Chair	10/2012 - 10/2012	Completed
Mitchell	Lucas	PhD	GGB	PhD Dissertation	, Member	10/2012 - 12/2014	Completed
Yoko	Hiraoka (Eck)	PhD	Plant Biology	PhD Dissertation	Major Professor	09/2012 - Present	
Rejbana	Alam	PhD	Plant Biology	Qualifying Exam	, Member	08/2012 - 08/2012	Completed
Lisa	Tang	PhD	Plant Biology	PhD Dissertation	, Member	03/2012 - 08/2017	Completed
Rachel	Rattner	PhD	Plant Biology	PhD Dissertation	Major Professor	09/2011 - 06/2019	Completed
Yi	Zhu	PhD	Plant Biology	PhD Dissertation	Major Professor	06/2011 - 06/2018	Completed
Marti	Pottorff	PhD	Plant Biology (Genetics)	PhD Dissertation	, Member	03/2010 - 08/2014	Completed
Lei	Zhu	PhD	Plant Biology	Qualifying Exam	, Member	07/2009 - 09/2009	Completed
Jennifer	Crowley	PhD	GGB	PhD Dissertation	Major Professor	12/2008 - 12/2011	Completed
Marti	Porttoff	PhD	Botany and Plant Sciences	Qualifying Exam	, Chair	11/2008 - 04/2010	Completed
Sai	Patne	PhD	Plant Biology	PhD Dissertation	Major Professor	09/2008 - 03/2015	Completed
Alice	Kan	PhD	GGB	Qualifying Exam	, Member	09/2008 - 09/2008	Completed
Li	Yao	PhD	Botany and Plant Sciences	Qualifying Exam	, Member	09/2007 - 09/2007	Completed
Sayan	Das	PhD	Botany and Plant Sciences	PhD Dissertation	, Member	12/2005 - 12/2008	Completed
Mitchell	Provence	PhD	Botany and Plant Sciences	PhD Dissertation	, Member	03/2004 - 12/2006	Completed
Matthew	Lyon	PhD	Plant Biology (Plant Genetics)	PhD Dissertation	Major Professor	09/2003 - 06/2008	Completed
Haofeng	Chen	PhD	GGB	PhD Dissertation	, Member	09/2003 - 12/2006	Completed
Pesach	Lubinsky	PhD	Botany and Plant Sciences	PhD Dissertation	, Member	07/2003 - 12/2007	Completed

Shane	Mansfield	Master Of Science	Botany	Oral Exam	, Chair	08/2002 - 09/2002	Completed
Janet Aree	Garcia	PhD	Botany	Qualifying Exam	, Member	07/2002 - 07/2006	Completed
Araceli	Aguilar	PhD	Botany	PhD Dissertation	, Member	06/2002 - 06/2006	Completed
Congli	Wang	PhD	Botany	Qualifying Exam	, Member	03/2002 - 03/2006	Completed
Sundrish	Sharma	PhD	Botany	Qualifying Exam	, Member	01/2002 - 01/2006	Completed
Lang	Luo	PhD	Botany	Qualifying Exam	, Chair	12/2001 - 12/2005	Completed
Harkamal	Walia	PhD	Botany	Qualifying Exam	, Member	12/2001 - 12/2005	Completed
Caroline Eli	Ridley	PhD	Botany	Qualifying Exam	, Chair	07/2001 - 07/2005	Completed
Virginia	Alonzo	PhD	Botany and Plant Sciences	PhD Dissertation	, Member	12/2000 - 06/2008	Completed
Noelle L.	Barkley (Anglin)	PhD	Botany	PhD Dissertation	Major Professor , Chair	12/1999 - 12/2003	Completed
Joseph	Kepiro	PhD	Botany	PhD Dissertation	Major Professor , Chair	12/1999 - 12/2003	Completed
Yun	Lu	Master Of Science	Botany	Advisory Committee	, Member	12/1999 - 12/2003	Completed
Nisao	Ogata	PhD	Botany	PhD Dissertation	, Member	12/1999 - 12/2002	Completed
Marcela	Pierce	PhD	Botany	Qualifying Exam	, Member	12/1999 - 12/2003	Completed
Thomas Allen	Laver	PhD	Botany	Qualifying Exam	, Member	11/1999 - 11/2003	Completed
Osman	Gulsen	Master Of Science	Botany	Masters Thesis	Major Professor	09/1997 - 12/1999	Completed
Miki	Okada	PhD	Botany	PhD Dissertation	, Member	09/1996 - 12/1997	Completed

# Student Sponsorship (10/1997 - 09/2019)

No records found

# Fellowship, Grant, and Gift Activities

# Grants (10/1997 - 09/2019)

Granting Agency	Title	Date	Total Award	UCR Amount	Amount to Candidate		Status	Is Multi-Investigator Grant	Comments
USDA-NIFA	Development of huanglongbing resistant/tolerant citrus through genomic approaches	06/01/2019 - 05/31/2023	\$3941000	\$2916173		Co-PI	Current	Yes	Candidate supervises UCR PI Ramadugu
USDA-NIFA	Multiscale Data Analysis to Identify Novel Networks Involving Genetic Variants and Metabolomic Variants that are Associated with Key Traits in Citrus	02/01/2019 - 01/31/2022		\$499204		Co-PI	Current	Ves	Funds will be managed by Professor Jia
California Citrus Research Board	Refinement and application of greenhouse methods to evaluate scion and rootstock	10/01/2018 -		\$57915	\$57915	Co-PI	Expired	Yes	renewal pending

	tolerance to CLas. Accelerating implementation	09/30/2019							
USDA-NIFA	of HLB tolerant hybrids as new commercial cultivars	02/01/2018 - 01/31/2022	\$2922014	\$580366	\$580366	PI	Current	Yes	
USDA-NIFA (via U Florida)	Development of non-transgenic HLB resistant citrus varieties using CRISPR-Cas9	01/01/2018 - 12/31/2022	\$3652166	\$479688	\$479688	Co-PI	Current	Yes	
California Citrus Research Board	Inducible flowering for accelerated citrus breeding	10/01/2017 - 09/30/2019	\$167242	\$167242		Co-PI	Expired	Yes	Funded as two one-year projects. Renewal pending.
USDA-SCRI (subcontract from New Mexico Consortium)	Design and Delivery of Therapeutic Proteins for HLB Protection	02/01/2016 - 01/31/2019	\$3320000	\$244065	\$244065	Co-PI	Expired	Yes	
Eurosemillas, S.A.	Asparagus Breeding and Cultivar Evaluation	12/01/2015 - 12/31/2018	\$775072	\$775072	\$775072	PI	Expired		Sum of annual funding during period listed. Developing new funding plan that involves additional sponsors
California Citrus Research Board	Integrated Citrus Breeding and Evaluation for California	10/01/2015 - 09/30/2019	\$2906497	\$2810320	\$2123625	PI	Expired	Yes	Sum of annual funding during period shown. Renewal pending
USDA-NIFA	Characterization of Liberibacter populations and development of field detection system for citrus huanglongbing	12/01/2014 - 11/30/2019	\$1683420	\$600000		Co-PI	Current	Yes	Candidate supervises UCR PI Ramadugu
NSF-IUCRC	Sensory Sciences and Innovation	04/01/2014 - 03/31/2015	\$26000	\$11500		Co-PI	Expired	Yes	Funds for planning meetings
USDA-NIFA	Development and application of a high-density SNP genotyping array for citrus	09/01/2013 - 08/31/2015	\$450000	\$450000	\$450000	PI	Expired	Yes	Co-PI: T. Close
USDA-NIFA	Dynamic Genome: U.S.D.A. Summer Scholars	09/01/2013 - 08/31/2016	\$245000	\$245000		Co-PI	Expired	Yes	Funds for training program.
USDA Agricultural Research Service	Identifying genetic relationships among citrus and citrus relatives using molecular markers	05/01/2013 - 04/30/2015	\$85000	\$85000	\$85000	PI	Expired		Cooperative Agreement
California Citrus Research Board	Integrated Citrus Breeding and Evaluation for California	10/01/2011 - 09/30/2015	\$1390266	\$1368857	\$1279276	PI	Expired	Yes	Sum of annual funding during period shown
California Citrus Nursery Board	Citrus Rootstock Breeding	01/01/2011 - 12/31/2011	\$22000	\$22000	\$22000	PI	Expired		

Citrus Research and Development Foundation	A Chemical Genomics Approach to Identify Targets for Control of Asian Citrus Psyllid and HLB	09/01/2010 - 01/31/2014	\$166280	\$166280	\$166280	PI	Expired		
California Citrus Nursery Board	Breeding of New Citrus Scion Varieties	01/01/2010 - 12/31/2010	\$20000	\$20000	\$20000	PI	Expired		
University of Florida	International Citrus Genome Consortium (ICGC): Providing Tools to Address HLB and Other Challenges	02/10/2009 - 07/01/2013	\$200000	\$200000	\$200000	PI	Expired		Total award not known, UCR amount shown
Eurosemillas, S.A.	Asparagus Breeding and Cultivar Evaluation	01/01/2009 - 12/31/2018	\$1879815	\$1879815	\$1879815	PI	Expired		Total of annual awards for period indicated. Developing new funding plan that involves additional sponsors
California Asparagus Commission	Asparagus Breeding and Cultivar Evaluation	01/01/2009 - 12/31/2014	\$120160	\$120160	\$120160	PI	Expired		
USDA AGRICULTURE RESEARCH SERVICE	Use of molecular markers to determine genetic relationships of citrus and citrus relatives	07/03/2008 - 07/02/2013	\$132705	\$132705	\$132705	PI	Expired		
NATIONAL ACADEMY OF SCIENCE	Management of greening by producing healthy plants, monitoring vectors and identification of tolerance	07/01/2008 - 06/30/2011	\$159500	\$159500	\$159500	PI	Expired		Grant for collaborative research with Pakistan
Eurosemillas, SA	Analysis of DNA from six different citrus trees using the Affymetrix Citrus WholeGenome Array	05/01/2008 - 08/31/2008	\$10000	\$10000	\$10000	PI	Expired		
California Citrus Nursery Advisory Board	Emergency funds for related project, "breeding of new citrus scion varieties"	06/01/2007 - 12/31/2007	\$10000	\$10000	\$10000	PI	Expired		
Eurosemillas, SA	Mandarin Cutlivars Data Analyses for Eurosemillas, S.A.	03/01/2007 - 11/15/2007	\$25600	\$25600	\$25600	PI	Expired		
USDA Agricultural Research Service	Production of Genomic Resources for Citrus Sinensis (L) Osbeck	04/11/2006 - 01/01/2011	\$50000			PI	Expired		Actual grant amount not disclosed to me.
USDA Cooperative State Research, Education and Ext Service	Positional Cloning Analysis of the Citrus Tristeza Virus Resistance Gene	09/01/2005 - 08/31/2006	\$92068			PI	Expired		
California Citrus Research Board	Citrus Rootstock Breeding and Evaluation	11/01/2004 - 10/31/2010	\$575363	\$575363	\$575363	Ы	Expired		Grant renewed annually. Amount shown is total for period.
California Citrus Research Board	Breeding of New Citrus Scion Varieties	11/01/2004 - 10/31/2010	\$761825	\$761825	\$761825	Ы	Expired	_	Grant renewed annually. Amount

									shown is total for period.
California Citrus Research Board	Microarrays for Gene Expression and Mapping in Citrus	11/01/2004 - 10/31/2005	\$30000	\$30000	\$30000	PI	Expired		
UC Discovery	Bioinformatics for Citrus Microarrays Applied to Gene Expression Profiling and Genome Mapping	02/01/2004 - 01/31/2008	\$589749	\$589749	\$294875	PI	Expired		Amount to candidate is approximate. No record.
California Citrus Research Board	Genetic Maps of Sweet Orange and Trifoliate Orange	11/01/2003 - 10/31/2008	\$150000	\$150000	\$150000	Co-PI	Expired		
Texas A & M University	Positional Cloning and Analysis of the Citrus Tristeza Virus Resistance	10/01/2003 - 08/31/2006	\$322000	\$161438	\$161438	Co-PI	Expired	Yes	Total award amount is approximate
UC Mexus/ Conacyt	Molecular Ethnobotanical Studies of Tropical Trees in Mexico	07/01/2003 - 07/31/2008	\$13200	\$13200	\$13200	PI	Expired		Grant to support research by Ph.D. student. I served as PI because student's supervisor was program director.
UC Biostar	Development of EST resources and new genetic markers for California citrus Improvement	01/28/2003 - 01/24/2005	\$69050	\$69050		PI	Expired		
California Department of Food and Agriculture	Mapping Quality Traits to Develop Improved Asparagus Cultivars for California	12/01/2002 - 09/30/2004	\$100000	\$100000	\$100000	PI	Expired		
California Citrus Research Board	EST Libraries and Bioinformatics for California Citrus	11/01/2002 - 10/31/2006	\$285050	\$285050		Co-PI	Expired		
USDA Agricultural Research Service	Molecular Markers for Citrus Germplasm Evaluation Screening and Enhancement	09/27/2002 - 06/30/2007	\$117875	\$117875	\$117857	PI	Expired		
California Citrus Nursery Advisory Board/CDFA	Molecular Genetic Analysis of Nucellar Embryony and Thornlessness in Citrus	07/02/2002 - 06/30/2004	\$24475	\$24475	\$24475	PI	Expired		
California Citrus Nursery Advisory Board/CDFA	Breeding of New Citrus Scion Varieties	07/01/2002 - 06/30/2004	\$42920	\$42920	\$42920	PI	Expired		This grant was renewed once. This is the total amount over the 2-year period.
Texas A&M University	Transformation with Candidate Genes for a Citrus Tristeza Virus Resistance Gene	09/15/2001 - 09/30/2003	\$85915	\$35604	\$35604	Co-PI	Expired	Yes	USDA Grant, subcontract from Texas A&M
California Citrus Research Board	Citrus Variety Evaluation for Trueness-to-Type and Commercial Potential	11/01/2000 - 10/31/2003	\$165900	\$165900		Co-PI	Expired	Yes	This grant has been renewed annually. This is the total amount awarded over this 3-year period.

California Citrus Research Board	Molecular Genetic Analysis of Nucellar Embryony in Citrus	11/01/2000 - 10/31/2001	\$14229	\$14229	\$14229	PI	Expired		
California Citrus Research Board	Citrus Rootstock Breeding and Evaluation	11/01/2000 - 10/31/2003	\$233835	\$233835	\$233835	PI	Expired		This grant has been renewed annually. This is the total amount awarded over this 3-year period.
California Citrus Research Board	Development and Application of Methods for Transformation of Citrus	11/01/2000 - 10/31/2001	\$64620	\$64620	\$64620	PI	Expired	Yes	
California Citrus Research Board	Breeding of New Citrus Scion Varieties	11/01/2000 - 10/31/2003	\$200648	\$200648	\$200648	PI	Expired		This grant has been renewed annually. This is the total amount awarded over this 3-year period.
California Citrus Research Board	Evaluation of New Citrus Varieties - Sensory and Post-Harvest Evaluations	11/01/2000 - 10/31/2001	\$21053	\$21053		Co-PI	Expired	Yes	
California Citrus Research Board	High Resolution Mapping and Cloning of a Gene for Citrus Tristeza Virus Resistance	10/01/2000 - 09/30/2002	\$22000	\$22000	\$22000	PI	Expired		This grant has been renewed annually. This is the total amount awarded over the 3-year period.
USDA	Positional Cloning and Analysis of the Citrus Tristeza Virus Resistance Gene	09/01/2000 - 09/14/2003	\$237532	\$158381	\$158381	PI	Expired	Yes	
California Asparagus Commission	Asparagus Breeding and Cultivar Evaluation	01/01/2000 - 12/31/2003	\$269112	\$269112	\$269112	PI	Expired		This grant has been renewed annually. This is the total amount awarded over this 4-year period.
California Citrus Research Board	Development of Microsatellite Markers for Distinguishing Citrus Cultivars	11/01/1997 - 10/31/2002	\$14300	\$14300	\$14300	PI	Expired		Single year award with no-cost extensions to 10/31/2002

#### <u>Gifts (10/1997 - 09/2019)</u>

Donor Organization	Donor Name	Award Description	 Award Amount
		Gift in support of citrus breeding research from inventor's share of	

UCR Mikeal Ro	se royalties	12/2008	\$30000
Thomas Delfino	gift in aid of citrus research	03/2008	\$500

#### Memberships/Certifications/Licensures

#### Memberships (10/1997 - 09/2019)

Name of Organization	Date From	Date To	Role	Description
Genetics Society of America	09/1977	Present	Member	
International Society of Citrus Nurserymen	01/1985	12/2011	Member	
American Society for Horticultural Sciences	01/1985	Present	Member	
International Society of Citriculture	07/1986	Present	Member	
California Citrus Nursery Society	10/2003	Present	Member	From Date is approximate
American Society of Plant Biologists	12/2011	Present	Member	

#### Certifications/Licensures (10/1997 - 09/2019)

No records found

#### Honors and Awards (10/1997 - 09/2019)

Year	Туре	Location	Society/Organization	Description
2006	Award of Excellence for Exceptional Service to the California Citrus Industry		Citrus Research Board	

#### Employment History (10/1997 - 09/2019)

From Date	To Date	Organization/Institution/Firm	Location	Rank, Title or Position
07/1998	Present	Dept. of Botany and Plant Sciences, UC Riverside		Professor of Genetics & Geneticist, Step I, II, III, IV and V
07/1989	06/1998	Dept. of Botany and Plant Sciences, UC Riverside		Assoc. Professor of Genetics & Assoc. Geneticist, Step I, II, III
11/1982	06/1989	Dept. of Botany and Plant Sciences, UC Riverside		Assist. Professor of Genetics & Assist. Geneticist, Step I, II, III, IV
06/1979	07/1982	Liverpool University, Dept. of Botany, Liverpool, England		Senior Research Asst. & University Fellow
		U.C. Davis, Dept. of Genetics, Davis, CA		Instructor
06/1978	07/1979	St. University of New York, Dept. of Ecology & Evolution, Stony Brook, NY		Lecturer
06/1976	07/1977	U.C. Davis, Dept. of Genetics, Davis, CA		Teaching Asst.
06/1973	07/1974	Governor's Office, State of Oregon, Salem, OR		Researcher

#### Education History (10/1997 - 09/2019)

	School/ College/ University/ Hospital	Major Subject/ Field	Degree/ Certificate	Year Degree Received/ Planned	Location	Still in Progress		
$10^{\prime}/4 = 10^{\prime}/8$	UNIVERSITY OF CALIFORNIA	GENETICS	PHD	1979	Davis, CA	No		
1969 - 1973	Reed College	Biology	B.A.	1973	Portland, OR	No		

#### Self Statements (10/1997 - 09/2019)

Applicable Date	Action	Statement
09/2019	Advancement to Step VI	Attached below

#### **Other Information**

#### Non-Confidential Document (10/1997 - 09/2019)

Document Type	Document Date	Last Name	First Name	Attachment
Invitation Letters	01/2019	Vidalakis	Georgios	Attached below
Invitation Letters	01/2012	Navarro	Luis	Attached below
Invitation Letters	04/2008	Guo	Wenwu	Attached below

### Letter from Other Departments/Programs, Institutes and Centers (10/1997 - 09/2019)

There are no Letters from Other Departments/Programs, Institutes and Centers.



Enrollment: 79

Respondents: 21

Enrollment: 1268

Respondents: 566

Enrollment: 72507

Respondents: 29569

Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Cross Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences

Home Dept.: Botany and Plant Sciences					Re	espo	nse Ra	ate:	27%	Respo	nse R	late:	45%	Response Rate: 41%				
					Co	urse	!			Department				Campus				
Questions	<u>5</u> High	_	<u>3</u>	<u>2</u>	<u>1</u> Low		Mean	Med	I SD	% tile	Mean	Med	I SD	% tile	Mean	Med	SD	
1 I had a strong desire to take this course	2	9	4	4	2		3.24			13.16					3.99			
2 I attended class regularly	10	10	-	1	-		4.38			32.35	4.47	5.0	0.8	40.19	4.42	5.0	0.9	
3 I put considerable effort into this course	8	13		-	-		4.38			35.71					4.36			
4 I gained a good understanding of the course content	8	9	2	1	1	-	4.05	4.0	1.1	34.21	4.13	4.0	0.8	37.47	4.20	4.0	0.9	
5 I normally spent at least two hours preparing for each hour of class	7	5	6	3	-	-	3.76	4.0	1.1	55.88	3.75	4.0	1.1	38.07	3.88	4.0	1.1	
6 Instructor was prepared and organized	7	12	1	-	1	-	4.14	4.0	0.9	17.50	4.41	5.0	0.8	29.45	4.39	5.0	0.9	
7 Instructor used class time effectively	7	11	-	2	1	-	4.00	4.0	1.1	17.50	4.32	4.0	0.8	25.91	4.34	5.0	0.9	
8 Instructor was clear and understandable	5	9	5	1	1	-	3.76	4.0	1.0	18.42	4.26	4.0	0.9	19.88	4.29	5.0	1.0	
9 Instructor exhibited enthusiasm for subject and teaching	7	12	1	-	1	-	4.14	4.0	0.9	18.42	4.48	5.0	0.8	21.67	4.50	5.0	0.8	
10 Instructor respected students; sensitive to and concerned with their progress	9	10	1	-	1	-	4.24	4.0	0.9	44.12	4.31	4.0	0.8	33.55	4.42	5.0	0.9	
11 Instructor was available and helpful	7	11	2	-	1	-	4.10	4.0	0.9	20.59	4.27	4.0	0.8	26.28	4.38	5.0	0.9	
12 Instructor was fair in evaluating students	7	10	4	-	-	-	4.14	4.0	0.7	23.68	4.16	4.0	0.9	32.46	4.36	5.0	0.9	
13 Instructor was effective as a teacher overall	3	14	3	-	1	-	3.86	4.0	0.9	7.14	4.27	4.0	0.9	21.29	4.32	5.0	0.9	
14 The syllabus clearly explained the structure of the courses	9	12	-	-	-	-	4.43	4.0	0.5	50.00	4.27	4.0	0.8	49.10	4.43	5.0	0.8	
15 The examinations reflected the materials covered during the course	9	9	2	-	1	-	4.19	4.0	1.0	39.47	4.15	4.0	0.9	34.40	4.35	5.0	0.9	
16 The required readings contributed to my learning	4	10	3	3	1	-	3.62	4.0	1.1	2.94	3.93	4.0	1.0	10.81	4.22	4.0	0.9	
17 The assignments contributed to my learning	5	10	5	-	1	-	3.86	4.0	1.0	27.50	3.91	4.0	1.0	16.13	4.32	5.0	0.9	
18 Supplementary materials were informative (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc)	7	11	1	1	1	-	4.05	4.0	1.0	42.50	4.11	4.0	0.9	26.21	4.31	5.0	0.9	
19 The course overall as a learning experience was excellent	5	12	2	1	1	-	3.90	4.0	1.0	20.59	4.07	4.0	0.9	28.49	4.24	5.0	1.0	



Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Cross Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY

- The lectures were a good structure and used for preparation for the exams. The topics and important things to study were made clear by him. The study sheets and questions were helpful in preparing for the exam. The clickers were fun in checking our knowledge short term. The exams reflected the lecture material and the structure was easy to follow and allowed for partial credit. I listened to some of the podcasts but they weren't mandatory to my learning. Overall it was a great class to take and i enjoyed the topics and the lab together. Theres not much too criticize because his material prepared us well for the final.
- Great professor. Extremely kind. Made a very dry topic more enjoyable with his humor and personality.
- More clicker questions to stay more engaged in the material. Don't need to repeat self as much on slides that are self explanatory.
- The professor was very knowledgeable about the subject and taught the class at a very good pace but, he could make the class a little more engaging and was monotone most lectures.
- The class was interesting! I enjoyed the material. The exams were a bit long however.
- Professor Roose has made my experience of learning about plant biology a positive one. Professor Roose's class is very well structured. The
  syllabus reflects what will be learned in class clearly and the inclusion of the textbook pages to read to supplement in class lectures has been
  appreciated. Lectures were always filled with great explanations of the material and were always interesting. The only downsides that I have are
  regarding in-class clicker points as well as the material being a little on the dense side.
- Dr. Roose was very nice and seemed to enjoy the material. he always had a big smile on his face, making him approachable and easy to talk to. The class was very interesting and I really enjoyed it! He explained things pretty well and had very detailed slides.
- Dr. Roose is a professor with room for improvement. He clearly understands the material and enjoys talking about it. However, he is not very engaging as a teacher. As for ways to improve: Good teachers have a certain degree of relatability. They face the students directly at the beginning of class and ask a question or two about how we are doing (this shows that you believe we are important). They use fill-in-the-blank style statements to engage us, to get us thinking and talking. They learn some of our names most often (but certainly not exclusively) front row students. I believe this is the most important one. Also, in response to a question during lecture, they ask a question in turn to better understand where the confusion is coming from (this avoids unnecessary lengthy explanations). They sometimes tease us for not knowing the material (this sets up a level of expectation in a light-hearted manner). As for things done well: Generally, when we paid attention in class, we would get the clicker points correct this shows that the questions asked directly related to the information presented during lecture. Dr. Roose explained the materially thoroughly every lecture. Generally, however, I hope he can improve his teaching method for future students.
- A lot of info to learn in one qtr but the Professor's slides detailed all the information required for the exams and also the clicker questions help with attendance and participation.
- I didnt want to take this class because I dont like plant stuff but you made it cool and interesting so thank you. It made my last quarter here enjoyable. :)
- I wish the lecture was more interactive instead of us just listening to the professor talk about the slides. I wish there was weekly homework or weekly iLearn quizzes
- Professor Roose was an efficient professor who for the most part helped me learn more about plants than I ever appreciate. I feel like clickers were the main reason for class attendance for the majority of the class although this class can be a bit hard to attract the general population of students.

Awful professor



Enrollment: 13

Enrollment: 1268

Enrollment: 72507

Course: BPSC 200B Section: 001 - PLANT BIOLOGY CORE	
Instructor: Mikeal L. Roose	
Home Dept.: Botany and Plant Sciences	

Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		lespon nse Ra	den	ts: 5		spond onse R	ents:	566	Respondents: 29569 Response Rate: 41%				
					Сс	ourse	9			[	Depart	ment		Campus				
Questions	<u>5</u> High	<u>4</u> :	<u>3</u>	_	<u>1</u> Low		Mean	Me	d SD	% tile	Mear	n Mec	I SD	% tile	Mean	Med	SD	
1 I had a strong desire to take this course	-	4	1	-	-	-	3.80	4.0	0.4	39.47	3.94	4.0	1.0	35.06	3.99	4.0	1.1	
2 I attended class regularly	4	1	-	-	-	-	4.80	5.0	0.4	73.53	4.47	5.0	0.8	89.78	4.42	5.0	0.9	
3 I put considerable effort into this course	2	2	1	-	-	-	4.20	4.0	0.8	21.43	4.40	5.0	0.8	29.79	4.36	5.0	0.8	
4 I gained a good understanding of the course content	2	3	-	-	-	-	4.40	4.0	0.5	55.26	4.13	4.0	0.8	70.64	4.20	4.0	0.9	
5 I normally spent at least two hours preparing for each hour of class	1	3	-	1	-	-	3.80	4.0	) 1.1	61.76	3.75	4.0	1.1	41.17	3.88	4.0	1.1	
6 Instructor was prepared and organized	3	1	1	-	-	-	4.40	5.0	0.9	32.50	4.41	5.0	0.8	47.24	4.39	5.0	0.9	
7 Instructor used class time effectively	3	1	1	-	-	-	4.40	5.0	0.9	52.50	4.32	4.0	0.8	52.68	4.34	5.0	0.9	
8 Instructor was clear and understandable	3	2	-	-	-	-	4.60	5.0	0.5	71.05	4.26	4.0	0.9	73.76	4.29	5.0	1.0	
9 Instructor exhibited enthusiasm for subject and teaching	3	1	1	-	-	-	4.40	5.0	0.9	34.21	4.48	5.0	0.8	38.85	4.50	5.0	0.8	
10 Instructor respected students; sensitive to and concerned with their progress	3	2	-	-	-	-	4.60	5.0	0.5	67.65	4.31	4.0	0.8	67.99	4.42	5.0	0.9	
11 Instructor was available and helpful	3	2	-	-	-	-	4.60	5.0	0.5	55.88	4.27	4.0	0.8	71.41	4.38	5.0	0.9	
12 Instructor was fair in evaluating students	3	2	-	-	-	-	4.60	5.0	0.5	60.53	4.16	4.0	0.9	73.76	4.36	5.0	0.9	
13 Instructor was effective as a teacher overall	3	2	-	-	-	-	4.60	5.0	0.5	54.76	4.27	4.0	0.9	71.17	4.32	5.0	0.9	
14 The syllabus clearly explained the structure of the courses	3	2	-	-	-	-	4.60	5.0	0.5	73.53	4.27	4.0	0.8	69.62	4.43	5.0	0.8	
15 The examinations reflected the materials covered during the course	1	1 :	3	-	-	-	3.60	3.0	0.9	7.89	4.15	4.0	0.9	7.03	4.35	5.0	0.9	
16 The required readings contributed to my learning	1	3	1	-	-	-	4.00	4.0	0.7	38.24	3.93	4.0	1.0	30.52	4.22	4.0	0.9	
17 The assignments contributed to my learning	2	3	-	-	-	-	4.40	4.0	0.5	57.50	3.91	4.0	1.0	57.38	4.32	5.0	0.9	
18 Supplementary materials were informative (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc)	2	3	-	-	-	-	4.40	4.0	0.5	57.50	4.11	4.0	0.9	58.57	4.31	5.0	0.9	
19 The course overall as a learning experience was excellent	3	2	-	-	-	-	4.60	5.0	0.5	67.65	4.07	4.0	0.9	78.13	4.24	5.0	1.0	



Course: BPSC 200B Section: 001 - PLANT BIOLOGY CORE Instructor: Mikeal L. Roose

**Question # 20**: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and may be used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous.

• The course overall is useful for providing some experience with submitting publications, reviewing papers, and writing a proposal. The chalk talks are also useful but can also be somewhat difficult due to having only just joined the lab and still figuring put our projects. It is always hard to provide a good review of a published paper, which in theory shouldn't have much to review, perhaps papers from bio archive would be a good substitute. Some of the assignments for the proposal did start to feel like busy work but were useful to build off of for the final proposal. It might be useful to have examples for the assignments so it is understood what level of detail is required. The class time could also probably be shortened, because the lectures would be useful but sometimes seemed drawn out to fill the time. Mike was fine, sometimes his slides were a bit text heavy and it could get a little boring but he has a vast experience from which he could answer almost any question with a real life example as well as provide unique perspectives on topics covered in class. He also brought in some interesting guest lectures.



Enrollment: 36

Respondents: 24

Enrollment: 1524

Respondents: 648

Enrollment: 73633

Respondents: 42187

Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Cross Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences

Home Dept.: Botany and Plant Sciences	Response Rate: 67									Respo	nse R	ate:	43%	Respo	nse R	ate:	57%
					Со	urse	1			C	)epartı	ment			Camp	us	
Questions	<u>5</u> High	_	<u>3</u>	<u>2</u>	<u>1</u> Low		Mean	Med	I SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	4	14	2	4	-	-	3.75	4.0	0.9	23.68	4.00	4.0	0.9	37.61	3.93	4.0	1.1
2 I attended class regularly	15	9	-	-	-	-	4.63	5.0	0.5	57.69	4.51	5.0	0.8	72.21	4.46	5.0	0.8
3 I put considerable effort into this course	11	12	1	-	-	-	4.42	4.0	0.6	34.09	4.40	5.0	0.7	62.80	4.34	4.0	0.8
4 I gained a good understanding of the course content	10	10	4	-	-	-	4.25	4.0	0.7	34.09	4.19	4.0	0.8	57.52	4.18	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	4	16	4	-	-	-	4.00	4.0	0.6	57.50	3.82	4.0	1.0	62.00	3.84	4.0	1.1
6 Instructor was prepared and organized	8	14	-	1	-	-	4.26	4.0	0.7	22.50	4.37	5.0	0.8	35.91	4.38	5.0	0.9
7 Instructor used class time effectively	10	12	1	-	-	-	4.39	4.0	0.6	45.24	4.28	5.0	0.9	53.53	4.34	5.0	0.9
8 Instructor was clear and understandable	9	12	2	-	-	-	4.30	4.0	0.6	54.76	4.18	4.0	0.9	51.96	4.26	5.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	9	10	2	2	1	-	4.00	4.0	1.1	2.63	4.53	5.0	0.8	15.91	4.48	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	10	9	3	2	-	-	4.13	4.0	0.9	7.14	4.50	5.0	0.7	23.01	4.42	5.0	0.8
11 Instructor was available and helpful	10	8	6	-	-	-	4.17	4.0	0.8	2.50	4.45	5.0	0.8	28.99	4.38	5.0	0.8
12 Instructor was fair in evaluating students	13	10	1	-	-	-	4.50	5.0	0.6	57.50	4.39	5.0	0.8	68.32	4.36	5.0	0.9
13 Instructor was effective as a teacher overall	11	10	1	2	-	-	4.25	4.0	0.9	21.43	4.33	5.0	0.9	41.14	4.32	5.0	0.9
14 The syllabus clearly explained the structure of the courses	13	11	-	-	-	-	4.54	5.0	0.5	71.05	4.45	5.0	0.7	67.56	4.42	5.0	0.8
15 The examinations reflected the materials covered during the course	14	9	1	-	-	-	4.54	5.0	0.6	70.45	4.28	4.0	0.9	72.83	4.34	5.0	0.9
16 The required readings contributed to my learning	10	5	7	1	1	-	3.92	4.0	1.1	6.52	4.16	4.0	0.9	25.55	4.20	4.0	0.9
17 The assignments contributed to my learning	8	10	5	1	-	-	4.04	4.0	0.9	10.87	4.24	4.0	0.9	24.54	4.31	5.0	0.9
18 Supplementary materials were informative (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc)	9	12	1	1	1	-	4.13	4.0	1.0	18.75	4.22	4.0	0.8	32.74	4.29	4.0	0.9
19 The course overall as a learning experience was excellent	8	12	2	2	-	-	4.08	4.0	0.9	14.00	4.26	4.0	0.9	36.86	4.24	4.0	1.0



Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Cross Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY

- I loved this course and it is easy to see that the professor really cares about botany. I loved all the little jokes and side facts he would bring up during lecture because it made the material more fun and more relevant to real life. I think the class could have spent more time on the light and dark cycles because I found that to be the hardest part of the class but besides that everything was manageable and fun to learn. I really enjoyed the content and the way it was taught and I think I will look into taking more botany related classes in the future.
- Great course, learned a lot!
- Sometimes the information given in the powerpoints have too much detail compared to the information we are required to know for the exams.
- Through this course, I have a much more appreciative perspective of the world of plants and Professor Roose made it easy to understand everything there is to need to know about plants.
- Honestly, I don't really feel there is anything to critique or complain about.
- He was fine. He pretty much just read the slides. Nothing particularly special or fun.
- Dr. Roose is a very informative professor, however every lecture was read directly off the slides. I could have learned all of this just by reading the lecture. Very boring.
- Professor Roose is a really good professor! His material is to the point and the exams are perfectly in line with the material he provides us with. He needs to curve though.
- Class content was interesting but repetitive. Professor occasionally felt unprepared to teach what what on the slides, but was receptive to questions to further understanding. Tests were fair. Lectures could've covered the same information in 45 minutes with much higher levels of energy.
- Overall, a great professor. However, Professor Roose should use other methods in addition to powerpoint slides.
- Despite a few side tracks and a relatively hushed and gentle voice, the professor himself was helpful to the class.
- All the material was in the powerpoint. Studying for the tests was simple and you just needed to put in the time. The professor wasn't very enthusiastic and basically read off the power points but the class was over all a fair class.
- The slides helped knowing what was important to know in the readings.



Course: BPSC 193 Section: 001 Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		Enro Respon nse Ra	dent	is: 8		nrollme sponde onse R	ents:	838	En Respo Respo		ts: 54	4850
					Со	urse	9			[	Departi	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>		<u>1</u> Lov		<u>A</u> Mean	Med	d SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	3	3	1	_	-	-	4.3	4.0	0.8	50	4.1	4.0	0.9	72	3.9	4.0	1.0
2 I attended class regularly	7	1	-	-	-	-	4.9	5.0	0.4	86	4.5	5.0	0.8	94	4.4	5.0	0.9
3 I put considerable effort into this course	4	4	-	-	-	-	4.5	4.5	0.5	63	4.3	4.0	0.8	76	4.3	4.0	0.8
4 I gained a good understanding of the course content	4	2	1	1	-	-	4.1	4.5	1.1	29	4.2	4.0	0.8	59	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	2	-	5	-	1	-	3.3	3.0	1.3	27	3.7	4.0	1.1	43	3.9	4.0	1.1
6 Instructor was prepared and organized	4	3	1	-	-	-	4.4	4.5	0.7	44	4.5	5.0	0.7	74	4.3	5.0	0.8
7 Instructor used class time effectively	4	3	1	-	-	-	4.4	4.5	0.7	44	4.5	5.0	0.8	75	4.3	5.0	0.9
8 Instructor was clear and understandable	5	2	1	-	-	-	4.5	5.0	0.8	63	4.4	5.0	0.8	82	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	5	1	1	1	-	-	4.3	5.0	1.2	22	4.5	5.0	0.8	67	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	5	2	-	1	-	-	4.4	5.0	1.1	38	4.4	5.0	0.7	75	4.3	5.0	0.8
11 Instructor was available and helpful	4	3	1	-	-	-	4.4	4.5	0.7	50	4.4	5.0	0.8	74	4.3	4.0	0.8
12 Instructor was fair in evaluating students	5	2	1	-	-	-	4.5	5.0	0.8	56	4.4	5.0	0.8	78	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	5	2	1	-	-	-	4.5	5.0	0.8	50	4.4	5.0	0.8	81	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	5	3	-	-	-	-	4.6	5.0	0.5	75	4.4	5.0	0.7	85	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	5	2	1	-	-	-	4.5	5.0	0.8	60	4.3	4.0	0.8	77	4.3	4.0	0.8
16 The required readings contributed to my learning	5	2	1	-	-	-	4.5	5.0	0.8	67	4.2	4.0	0.9	79	4.2	4.0	0.9
17 The assignments contributed to my learning	4	4	-	-	-	-	4.5	4.5	0.5	67	4.2	4.0	0.9	78	4.3	4.0	0.8
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	4	2	1	1	-	-	4.1	4.5	1.1	38	4.2	4.0	0.8	55	4.2	4.0	0.8
19 The course overall as a learning experience was excellent	5	1	1	1	-	-	4.3	5.0	1.2	43	4.2	4.0	0.8	74	4.2	4.0	0.9



Course: BPSC 193 Section: 001 Instructor: Mikeal L. Roose

- Dr. Roose is a great teacher. He also is great at making students think about science and the scientific method through his questioning (like after a student is done with their presentation). It is clear that he strives for student success. In addition, he seems like a genuinely nice person. He always has a smile on his face!
- Dr. Roose is great at teaching his section of the class. He gave plenty of examples and recent studies to stimulate learning. I wish that this class could've more guess lecturers to talk about current research projects instead of a summary of the plant biology major.
- Very informative
- Dr. Roose was nice enough, and the concept of the class was good. I think it is valuable for all students to be exposed to scientific literature in different sub-areas of their field. However, the presentations were very frustrating. We were given a 15 minute length guideline, which was essentially impossible to follow. The average presentation time was 20-25 minutes, and that was with significant omissions of material in the review papers. Students who attempted to streamline the already over-time presentations by glossing over redundant charts were criticized for doing so, even though walking through them in detail would dramatically lengthen the presentation. I have no idea what the final will be like, as we were not tested throughout. Overall, I like Dr. Roose and the concept of this class. However, it would be good for him to limit his lecture components to give students enough time to present, and to be clearer and/or more lenient in presentation guidelines.



Enrollment: 24

Enrollment: 1130

Enrollment: 71198

Course: NASC 093 Section: 061 - FRSHMN ADVIS SEM:NAT & AGR SCI Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences

Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		espond	dents: 23 ate: 96%	Re	espond onse R	ents:	864		onden onse F	ts: 54	4400
					Со	ourse				Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>	<u>2</u>	<u>1</u> Lov		Mear	n Med SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	3	2	11	5	2	-	3.0	3.0 1.1	13	4.0	4.0	1.0	33	3.9	4.0	1.0
2 I attended class regularly	19	2	1	-	1		4.7	5.0 0.9	57	4.5	5.0	0.7	87	4.4	5.0	0.8
3 I put considerable effort into this course	4	11	4	3	1	-	3.6	4.0 1.1	33	4.2	4.0	0.8	46	4.3	4.0	0.8
4 I gained a good understanding of the course content	3	14	4	1	1	-	3.7	4.0 0.9	18	4.2	4.0	0.7	50	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	2	-	14	4	3	-	2.7	3.0 1.0	21	3.6	4.0	1.2	30	3.8	4.0	1.1
6 Instructor was prepared and organized	12	9	2	-	-	-	4.4	5.0 0.7	40	4.5	5.0	0.6	77	4.4	5.0	0.8
7 Instructor used class time effectively	7	13	1	1	1	-	4.0	4.0 1.0	30	4.5	5.0	0.7	62	4.3	5.0	0.9
8 Instructor was clear and understandable	7	12	3	1	-	-	4.1	4.0 0.8	38	4.4	5.0	0.8	69	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	12	8	1	1	1	-	4.3	5.0 1.1	38	4.6	5.0	0.6	71	4.5	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	9	12	2	-	-	-	4.3	4.0 0.6	30	4.5	5.0	0.7	72	4.4	5.0	0.8
11 Instructor was available and helpful	8	11	4	-	-	-	4.2	4.0 0.7	30	4.4	5.0	0.7	68	4.3	5.0	0.8
12 Instructor was fair in evaluating students	8	13	2	-	-	-	4.3	4.0 0.6	40	4.4	5.0	0.7	72	4.3	5.0	0.8
13 Instructor was effective as a teacher overall	6	13	3	-	1	-	4.0	4.0 0.9	25	4.5	5.0	0.7	63	4.3	5.0	0.9
14 The syllabus clearly explained the structure of the courses	13	9	1	-	-	-	4.5	5.0 0.6	70	4.5	5.0	0.6	80	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	5	10	8	-	-	-	3.9	4.0 0.8	25	4.3	5.0	0.8	56	4.3	5.0	0.8
16 The required readings contributed to my learning	4	4	13	8 1	1	-	3.4	3.0 1.0	18	4.1	4.0	0.9	36	4.2	4.0	0.9
17 The assignments contributed to my learning	5	10	7	-	1	-	3.8	4.0 1.0	27	4.3	4.0	0.8	52	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	9	6	7	-	1	-	4.0	4.0 1.1	30	4.3	4.0	0.7	60	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	3	13	5	1	1	-	3.7	4.0 0.9	17	4.3	4.0	0.8	52	4.2	4.0	0.9
20 Q1	1	-	-	-	-	-	5.0	5.0 0.0	100	4.4	5.0	0.8	100	4.1	4.0	0.9
21 Q2	-	1	-	-	-	-	4.0	4.0 0.0	50	4.4	5.0	0.8	62	4.1	4.0	0.9
22 Q3	1	-	-	-	-	-	5.0	5.0 0.0	100	4.4	5.0	0.8	100	4.1	4.0	0.9
23 Q4	-	1	-	-	-	-	4.0	4.0 0.0	50	4.4	5.0	0.8	62	4.1	4.0	0.9
24 Q5	1	-	-	-	-	-	5.0	5.0 0.0	100	4.4	5.0	0.8	100	4.1	4.0	0.9



Course: NASC 093 Section: 061 - FRSHMN ADVIS SEM:NAT & AGR SCI Instructor: Mikeal L. Roose

- Teacher was helpful in communicating information.
- Learning about citrus and HLB was very interesting. Research may not be my thing, but I did take interest in the current situation of the citrus industries in California and Florida. It was helpful indeed when biological concepts were focused on like genes, vectors, PCR, etc.
- This instructor was very passionate about his major. I was able to learn a lot about different types of Biology fields which is helpful for me in the future. He prepared presentation slides and brought in guest speakers.
- It seemed as if the same information was addressed to the class by each presenter. The class could be made more enjoyable if there was maybe more interaction between students. Watching slide shows was not enjoyable.
- This class was a very interesting class as we got to learn about what Professor Roose's ressearch in plant genetics is about. Overall easy class and very informative.
- The instructor showed a consistent enthusiasm to the topics of the course. This enabled for a better understanding and more engaging class period.
- Was very informative and helpful in explaining the concept of Citrus HLB. Very satisfied with what I got out of the course and will apply what I have learned in future practices.
- The class helped understand a certain topic and helped us learn about what goes on in the research process
- Professor Roose was very enthusiastic and well knowledgable in his studies and able to convey his thoughts to his students. Although the class was well organized and well taught, the material and teaching method was a bit mundane.
- The instructor's enthusiasm enabled a more engaging class period that created a better learning environment.
- The instructor was great at teaching and he was helpful and really nice. The stuff we were learning in the course in general was a bit hard to understand, he tried his best and was knowledgeable about the topic. The presentations at the end of the quarter helped me understand them a bit more.
- · Professor Roose was overall a good and interesting teacher.
- I like how the instructor was very enthusiastic about the subject course and very knowledgeable. Although admittedly this was not my favorite course I did gain knowledge about research and the likes. I liked how the professor invited guest speakers and brought in devices and such to provide us with a better learning experience. He also would provide us with as much aid as we would need and even planned out a field trip for us. While the course material was somewhat repetitive I feel as if I could at least take away a better understanding of what it is like to conduct research.
- Professor Roose was helpful in explaining the material pertaining to what the class was mainly concerned about, which was Citrus HLB. He was very organized so that helped in making sense of the content he taught along with the guest speakers he brought in to teach us the importance of the content we were learning. I wasn't too fond of the subject, however, I was able to understand it effectively for the presentation assignment. It was a pretty decent learning experience.

- I believe Professor Roose accomplished the goal he set for the class, which was to teach us about HLB. By learning about this disease, we then
  learned about the different forms of research involved in solving this issue. He taught the subject well with the usage of slides and articles. I
  personally did not learn the subject as well as I could have though since I was uninterested in the subject.
- As a learning community class, I often found myself questioning the worth of the class. Since I had chem discussion soon after, I found that many students also used this time to study for the chemistry quiz, especially when we were taught how to be a good college student. I did highly appreciate the parts of this class where we were taught about the campus and the deadlines, especially a week ago when we were taught how to sign up for our classes. The professor himself was always smiling and seemingly optimistic, though exhibiting some passive aggressive when the class talked too much (though that is understandable). His teachings were always organized and he always seemed to be prepared. With the short class, he tried to get a little bit of everything done, from group projects to talking to your neighbor to quick anonymous activities using our cell phones. Overall, interesting course with a hard working professor. I don't think I would have taken it without learning community, however.
- Everything that was taught in the class was irrelevant to our learning. Teacher spent hours and hours each week teaching us material that is not informative or useful in our learning. Absolutely a waste of a class as information was thrown at us that was not understandable or knowledgable.



Enrollment: 73

Respondents: 56

Enrollment: 853

Enrollment: 853 Respondents: 665

Enrollment: 63914

Respondents: 48805

Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept : Botany and Plant Sciences

Home Dept.: Botany and Plant Sciences					Re		•	ate: 77%		spond onse R			•	ondeni onse R		
					Со	urse				Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>		<u>1</u> Low		Mear	n Med SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	17	27	5	4	1	-	4.0	4.0 0.9	50	4.1	4.0	1.0	63	4.0	4.0	1.1
2 I attended class regularly	27	21	3	3	-	-	4.3	4.5 0.8	22	4.4	5.0	0.8	63	4.4	5.0	0.9
3 I put considerable effort into this course	18	36	1	-	-	-	4.3	4.0 0.5	50	4.2	4.0	0.8	71	4.3	4.0	0.8
4 I gained a good understanding of the course content	23	27	3	1	-	-	4.3	4.0 0.7	55	4.3	4.0	0.7	71	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	13	23	17	2	-	-	3.9	4.0 0.8	58	3.6	4.0	1.1	67	3.9	4.0	1.1
6 Instructor was prepared and organized	27	24	2	2	-	-	4.4	4.0 0.7	55	4.5	5.0	0.8	75	4.3	5.0	0.8
7 Instructor used class time effectively	28	22	2	3	-	-	4.4	5.0 0.8	58	4.4	5.0	0.8	75	4.3	5.0	0.9
8 Instructor was clear and understandable	25	24	5	1	-	-	4.3	4.0 0.7	36	4.4	5.0	0.8	76	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	27	17	7	3	1	-	4.2	4.0 1.0	42	4.5	5.0	0.7	60	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	27	20	6	2	-	-	4.3	4.0 0.8	33	4.5	5.0	0.7	71	4.3	5.0	0.9
11 Instructor was available and helpful	25	19	10	1	-	-	4.2	4.0 0.8	43	4.4	5.0	0.8	67	4.3	4.0	0.9
12 Instructor was fair in evaluating students	23	28	4	-	-	-	4.3	4.0 0.6	50	4.4	5.0	0.7	70	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	22	25	8	-	-	-	4.3	4.0 0.7	42	4.5	5.0	0.7	75	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	32	22	1	-	-	-	4.6	5.0 0.5	67	4.5	5.0	0.7	85	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	26	25	4	-	-	-	4.4	4.0 0.6	79	4.3	5.0	0.8	75	4.3	4.0	0.9
16 The required readings contributed to my learning	19	24	9	3	-	-	4.1	4.0 0.9	46	4.2	4.0	0.9	61	4.2	4.0	0.9
17 The assignments contributed to my learning	19	30	5	1	-	-	4.2	4.0 0.7	36	4.4	5.0	0.8	64	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	24	25	6	-	-	-	4.3	4.0 0.7	50	4.4	5.0	0.8	70	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	23	24	8	-	-	-	4.3	4.0 0.7	50	4.4	5.0	0.8	76	4.2	4.0	0.9
20 Q1	-	1	-	-	-	-	4.0	4.0 0.0	80	3.9	4.0	1.0	58	4.1	4.0	0.9
21 Q2	-	1	-	-	-	-	4.0	4.0 0.0	80	3.8	4.0	1.0	60	4.1	4.0	0.9
22 Q3	-	1	-	-	-	-	4.0	4.0 0.0	80	3.8	4.0	1.0	58	4.1	4.0	0.9
23 Q4	-	1	-	-	-	-	4.0	4.0 0.0	80	4.0	4.0	0.8	57	4.1	4.0	0.9
24 Q5	-	1	-	-	-	-	4.0	4.0 0.0	80	3.9	4.0	0.8	57	4.1	4.0	0.9



Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY

- Dr Roose is a great professor. When speaking briefly to him students may feel slightly intimidated but if engaged for a longer period he is very friendly and helpful. He is often aavailable and offer an immense insight into the subject matter and is very good to talk to. When lecturing you can tell he knows his stuff and is a great professor. Thank you.
- Very straightforward and fun course. I recently switched into biology from biochemistry because I wanted something more. Taking Plant Biology gave me this extra horizon of knowledge which I was looking for. Considering plants cover such a huge part of our world it was great to learn even the most basic concepts of them. Professor Roose's lectures and exams were very straightforward and fair they allowed me to get the most out of the class without having to stress out about tricky and misleading questions on the exam. The professor was very kind, patient, and straightforward when asked any questions on the material. I hope to take another class with you Profesor Roose! Take care.
- He was boring af
- I enjoyed class with Dr Roose. He is very knowledgeable of the material and was always well-prepared and available to help.
- great teacher! showed real interest in students progress. hes very approachable and knowledgeable.
- I wish I could write more in this iEval, but unfortunately I don't have the time to do so. Don't worry, I only had good things to say about this class and Professor Roose. Thank you for a great quarter! I love plant bio and this class did not disappoint!
- Dr. Roose's lectures were often dry and slow, but instructor was clear and understandable. Exams might have been a too challenging but instructors responding accordingly with an appropriate curve. Overall, fantastic learning experience.
- · Professor's lecture did tend to get on the boring side, but the material was interesting enough! Really approachable professor
- I wouldn't change nothing about his teach style.
- Dr. Roose seemed slightly unprepared and really did not know how to captivate students. He was also unresponsive to emails that I sent to him and when I tried to reach out for help into the area of scientific reasearch, he ignored me. College students who want to go on to research in graduate school need their professors to be there for them and try to give them a foundation in science. Dr. Roose was unable to do that.
- Professor Roose often sounds like he is guessing when lecturing which is off-putting when trying to gain a solid understanding of the material. He frequently pauses and looks confused, and seems to not know what order the slides are in as if he does not actually prepare them himself.
- Dr. Roose & Dr. Litt were both fair in their method of giving exams given the amount of information presented. However during Dr.Roose's
  lectures I did not feel as engaged when listening to his presentation. It is clear he knows the material well, so that is not a problem. I think it may
  just be his presentation style where there is a large amount of information and explaining, which all seems to run together after a period of time.
- Dr. Roose simply lectures his power point slides verbatim. I am at an UC, I can read. Though, he does write fair and challenging exams. I would suggest less power point reading.
- The lectures were straight forward and what you expect to see on the exam. I enjoyed this class a lot.
- Dr. Roose was a good professor. He was straightforward and clear in delivering the information in class. At times lecture got tedious due to the
  direct reading from the Powerpoint. However, it was clear that he was enthusiastic and knowledgeable about the subjects in class. His demeanor

was very welcoming and he encouraged questions. Overall a good experience.

- Very knowledgable, but the course covered many concepts that either went over most people's heads or was not tested on. When specifying what we should know from each lecture, Prof. Roose would pretty much say that we need a complete understanding of all concepts covered, and then would not test on those same concepts.
- Good professor. Straightforward. Exam was a little tricky
- Dr Roose was very effective overall
- Very tough class but Dr. Roose is a good professor.
- Based upon what I've experienced in class, the professor is very passionate about his studies and definitely enjoyed teaching us. I loved that fact that he incorporated materials from other courses like chemical reactions and biochemistry to help us better understand why plants grow a certain way or how they react to the environment around them. It makes me realize that plant biology isn't as "easy" of a subject as I once thought it to be.
- Powerpoint slides were packed with too much text and extra stuff that was interesting to know but not all relevant to what was needed on the test.



### UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Winter 2015

Course: BPSC 193 Section: 001 - SENIOR SEMINAR
Instructor: Mikeal L. Roose
Home Dept.: Botany and Plant Sciences

Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					R		Respo	nde	ent: 8 nts: 5 : 63%	Re	Enrollr spond onse R	ents:	740	Eni Respo Respo		s: 52	2598
					Со	ours	e			[	Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>	<u>2</u>	<u>1</u> Lov		<u>A</u> Mea	n M	ed SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	5	-	-	_	-	_	5.0	5	.0 0.0	100	4.0	4.0	1.0	100	4.0	4.0	1.1
2 I attended class regularly	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.5	5.0	0.8	100	4.4	5.0	0.8
3 I put considerable effort into this course	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.8
4 I gained a good understanding of the course content	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.1	4.0	0.8	100	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	4	1	-	-	-	-	4.8	5	.0 0.4	93	3.7	4.0	1.1	93	3.9	4.0	1.1
6 Instructor was prepared and organized	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	5.0	0.8
7 Instructor used class time effectively	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	5.0	0.9
8 Instructor was clear and understandable	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.1	4.0	0.9	100	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.5	5.0	0.7	100	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.4	5.0	0.7	100	4.4	5.0	0.8
11 Instructor was available and helpful	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	5.0	0.8
12 Instructor was fair in evaluating students	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.4	4.0	0.7	100	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	4	-	1	-	-	-	4.6	5	.0 0.9	73	4.3	4.0	0.8	83	4.3	4.0	0.8
16 The required readings contributed to my learning	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.1	4.0	0.9	100	4.2	4.0	0.9
17 The assignments contributed to my learning	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.1	4.0	0.8	100	4.3	4.0	0.8
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.2	4.0	0.8	100	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	5	-	-	-	-	-	5.0	5	.0 0.0	100	4.1	4.0	0.9	100	4.2	4.0	0.9



Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose

- Dr. Roose is a great instructor. His lectures and discussions convey how knowledgable he is in the field of plant genetics and breeding. I greatly appreciated his feedback and his opinions. Overall, I had a wonderful experience in this course. Thanks again Dr. Roose!
- I truthfully enjoyed this course and the lectures provided because it really made me think on a more global aspect and widen my understanding of genetic applications.
- Great



Enrollment: 75

Enrollment: 1596

Enrollment: 61909

Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose . . .

PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re	Re	spond	ment: 75 lents: 58 ate: 77%	Res	nrollme ponde onse R	nts: <sup>-</sup>	1210	Enr Respo Respo		ts: 46	6202
					Co	urse			I	Depart	ment			Camp	ous	
Questions	<u>5</u> High	<u>4</u>	<u>3</u>		<u>1</u> Low		Mear	Med SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course		23			1	-	3.9	4.0 1.0		4.1		0.9	56	4.0	4.0	
2 I attended class regularly		23			-	-	4.5	5.0 0.7		4.4		0.8	72	4.4	5.0	
3 I put considerable effort into this course				1		-	4.2	4.0 0.6		4.2		0.8	60	4.3	4.0	
4 I gained a good understanding of the course content		35			-	-	4.3	4.0 0.6		4.2		0.8	72	4.2	4.0	
5 I normally spent at least two hours preparing for each hour of class	12	31	8	6	1	-	3.8	4.0 0.9	44	3.8	4.0	1.1	57	3.9	4.0	1.1
6 Instructor was prepared and organized	26	28	3	-	1	-	4.3	4.0 0.7	54	4.3	4.0	0.7	72	4.3	5.0	0.9
7 Instructor used class time effectively		32			1	-	4.2		46	4.3		0.8	67	4.3	4.0	
8 Instructor was clear and understandable				1	1	-		4.0 0.7		4.2		0.9	79	4.2	4.0	
9 Instructor exhibited enthusiasm for subject and teaching		25			1	-	4.3			4.4		0.8	67	4.4	5.0	
10 Instructor respected students; sensitive to and concerned with their progress	25	26	5	-	1	-	4.3	4.0 0.8	57	4.3	4.0	0.8	71	4.3	5.0	0.9
11 Instructor was available and helpful	26	23	7	-	1	-	4.3	4.0 0.8	54	4.3	4.0	0.8	71	4.3	4.0	0.9
12 Instructor was fair in evaluating students	25	25	5	-	1	-	4.3	4.0 0.8	64	4.3	4.0	0.8	71	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	24	28	3	-	1	-	4.3	4.0 0.7	54	4.2	4.0	0.8	73	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	25	30	2	1	-	-	4.4	4.0 0.6	57	4.4	4.0	0.7	74	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	23	32	2	1	-	-	4.3	4.0 0.6	57	4.3	4.0	0.8	70	4.3	4.0	0.9
16 The required readings contributed to my learning	20	28	9	1	-	-	4.2	4.0 0.7	38	4.2	4.0	0.8	60	4.2	4.0	0.9
17 The assignments contributed to my learning	19	29	8	2	-	-	4.1	4.0 0.8	33	4.2	4.0	0.8	57	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	21	28	8	1	-	-	4.2	4.0 0.7	38	4.3	4.0	0.8	65	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	21	31	4	2	-	-	4.2	4.0 0.7	46	4.2	4.0	0.8	67	4.2	4.0	0.9
20 Q1	-	1	-	-	-	-	4.0	4.0 0.0	50	4.1	4.0	0.8	61	4.1	4.0	0.9



Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY

- The only issue I had was his notes they seemed unclear and unorganized at times. Other than that he did a great job at lecturing and wrote the exams clear.
- Of all the plant biology professors in Basics of Plant Biology, I enjoyed Professor Roose's lectures the most. His lectures are very
  straightforward, easy to understand, and they are taught in a very reasonable pace. You could tell that he is very passionate about the subject
  of plants, and that just makes you want to learn the subject even more. I enjoyed his lectures very much, and he always came prepared to
  teach.
- Dr. Roose always teaches the class with a huge smile. He loves plants and it can be seen when he teaches the class.
- Dr. Roose's teaching has helped me not only understand the processes of plants and their characteristics, but also has influenced me to have a genuine appreciation and a flowering passion to further my knowledge in botany. Dr. Roose's enthusiasm and experience in instructing as a professor are definitely evident because he teaches at a pace that students understand. His lecture slides and quizzes are effective tools to measure and reinforce the learned materials. Thanks, Dr. Roose!
- Dr. Roose was an excellent instructor. I enjoyed that he included fun facts throughout his presentations.
- I really enjoyed having him as a professor and the topics he taught were interesting. He was very knowledgeable on all the topics and seemed to care about his students a lot. I would get a little bored with the powerpoints half way through the lecture though because almost all of the information he said was directly on the powerpoint and I usually try to take notes to keep myself engaged. I think either making them a little less detailed so students have to take notes or having Monday/Wednesday/Friday lectures that aren't as long would help with this problem.
- Dr. Roose is an excellent teacher. He explains his material very well. Though there are times where it seems that he is not prepared for certain slides, but overall he is an excellent teacher.
- Mr. Roose is a good instructor but needs to manage time more effectively.
- There was a lot of material presented, but it was necessary to cover all topics of an intro course.
- I loved Dr. Roose's sense of humor! During every lecture we would find a side comment that would just be hilarious and make it easy to remember the concepts.
- · boring professor and made the material boring and dry
- Funny, smart, and awesome teacher. Just wished he expressed himself more often. His jokes lit up my day.
- Professor Roose was very knowledgeable and easy to talk to and ask questions if we were ever confused on any of the material presented in class. The lecture slides were easy to understand and very clear.
- Very clear
- None.

- Class was thorough in terms of lecturing and test preparation. I would like to recommend making the final non-cumulative for future classes to
  promote learning of the final weeks of lecture
- I did not particularly like the way you organized your lecture slides. I thought that they could have been a lot simpler. I prefer when teachers just
  put the main points on the slides and explain them in greater detail, rather that writing everything down on the power point and just read it.
  Seemed like you didn't really prepare a lecture, but you prepared an essay like project. Seemed a little lazy to me... And made class quite
  boring.
- Roose was a great professor. Nothing negative concerning his lectures come to mind.
- The course was good, nothing to complain
- Keep up the good work
- Good, understandable.
- I had a hard time focusing in the class throughout the quarter. There was consistent conversation among a few students and their behavior was
  not ever corrected by any of the professors. Additionally, students continued to trickle into the classroom well after class started and this was
  not addressed by any of the professors either. As a student who is easily distracted I felt this hurt my focus. I feel that much of the problem was
  in the implementation of in-class quizzes. I almost wish that disruptive students were allowed to skip out or else penalized for ruining the course
  for those of us who attend regularly.
- Dr. Roose was a somewhat effective professor. There were moments when he seemed to struggle with what to say about a certain topic and he did tend to just read information off of the slides. The good things that he did is he would try to emphasize parts that were important to know for the test and he would give exampled of what sort of question he would ask about a certain topic. He overall wasn't that effective of a teacher because he mainly read off of his slides and didn't provide much more information than what was on the slides.



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2014

Course: BPSC 221 Section: 001 - ADVANCED PLANT
BREEDING
Instructor: Mikeal L. Roose
Home Dept.: Botany and Plant Sciences

BREEDING Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re	espo		Enrol espon se Rate	dent	s: 3	Res	nrollme ponde onse R	nts:	1210	En Respo Respo		ts: 40	6202
					С	our	se				[	Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>	<u>2</u>	<u>1</u> Lo		<u>1/A</u>	Mean	Med	SD	% tile	Mean	Med	I SD	% tile	Mean	Med	I SD
1 I had a strong desire to take this course	3	-	-	_	_		-	5.0	5.0	0.0	100	4.1	4.0	0.9	100	4.0	4.0	1.0
2 I attended class regularly	3	-	-	-	-		-	5.0	5.0	0.0	100	4.4	5.0	0.8	100	4.4	5.0	0.9
3 I put considerable effort into this course	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.3	4.0	0.8
4 I gained a good understanding of the course content	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	2	1	-	-	-		-	4.7	5.0	0.6	94	3.8	4.0	1.1	89	3.9	4.0	1.1
6 Instructor was prepared and organized	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.7	100	4.3	5.0	0.9
7 Instructor used class time effectively	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
8 Instructor was clear and understandable	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.9	100	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	3	-	-	-	-		-	5.0	5.0	0.0	100	4.4	5.0	0.8	100	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.3	5.0	0.9
11 Instructor was available and helpful	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
12 Instructor was fair in evaluating students	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	2	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	3	-	-	-	-		-	5.0	5.0	0.0	100	4.4	4.0	0.7	100	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.3	4.0	0.9
16 The required readings contributed to my learning	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.2	4.0	0.9
17 The assignments contributed to my learning	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	3	-	-	-	-		-	5.0	5.0	0.0	100	4.3	4.0	0.8	100	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	3	-	-	-	-		-	5.0	5.0	0.0	100	4.2	4.0	0.8	100	4.2	4.0	0.9



Course: BPSC 221 Section: 001 - ADVANCED PLANT BREEDING Instructor: Mikeal L. Roose

- I am very honored to have learned this subject from Dr. Roose. The class was everything I hoped for and more in an advanced breeding class. And although I am not a practicing geneticist like the other students were this year, Dr. Roose answered my questions in an understandable manner and made sure I was on the same page as everyone else during the lectures. He even related topics with my line of research because we both work on tree crops. The assignments really helped me achieve a better understanding of marker-based selection and advanced breeding techniques such as GWAS (genome wide assisted selection). I asked a lot of questions during the class period and he would take the time to answer them in a way that I understood. He never made me feel that I had an inadequate knowledge base for the subject and would even make sure I was aware of the most basic genetic concepts as a premise, so that his explanations made sense. The information and knowledge gained from this class changed my perspective on breeding and using genetics to do amazing things with crop plants. It changed my perception of plant biology in general. I am very happy and grateful that I had to opportunity to learn from a successful tree crop breeder and I hope to use the technology I learned about in this class in the real world. The knowledge I gained from this class made me believe that my scientific goals are possible in a realistic and feasible way. Dr. Roose is an amazing professor and scientist with many inspirational, brilliant ideas. He is approachable and fair with his assignments and grading. The assignments required the students to use and develop their critical thinking skills and get immersed in the subject. The JoinMap software exercise was very important for me to get an understanding of the rudiments of MAS. Dr. Roose is a very important resource to a graduate student like me. He would answer my questions about methodologies and science equipment and this really helped me develop my dissertation proposal. I wish there were more professors and people like Dr. Roose. He is a world-class professor, more real, knowledgeable, honest and wise than one could ever hope for in life. Thank you for making this class available to a small number of students.
- Dr. Roose put a lot of effort into this course even though he was extremely busy. This course should remain available to students who are interested because there are very few classes at UCR which can match this class and at the graduate level this is the only class of its kind. It was very useful and I am glad I had the opportunity to take it. The knowledge that Dr. Roose has about plant breeding is something very valuable and he did a great job at helping all the students to learn the material. Also, Dr. Close helped teach a portion of the class and his added input was very helpful and valuable. Thank you!!!



### UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Winter 2014

Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences	Enrollment: Respondents: Response Rate: 100									Res	inrollm ponde onse R	nts:	1129		ollmer ondent onse R	ts: 50	450
					Сс	ourse	9				Depart	ment			Camp	ous	
Questions	<u>5</u> High	_	<u>3</u>	<u>2</u>	<u>1</u> Low	-	Mear	n Me	d SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	4	2	1	-	_	-	4.4	5.0	0.8	67	4.0	4.0	1.0	76	4.0	4.0	1.1
2 I attended class regularly	6	1	-	-	-	-	4.9	5.0	0.4	89	4.5	5.0	0.8	93	4.4	5.0	0.8
3 I put considerable effort into this course	2	4	1	-	-	-	4.1	4.0	0.7	40	4.2	4.0	0.8	53	4.3	4.0	0.8
4 I gained a good understanding of the course content	3	3	1	-	-	-	4.3		0.8	58	4.0	4.0	0.8	71	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	2	4	1	-	-	-	4.1	4.(	0.7	70	3.7	4.0	1.0	65	3.9	4.0	1.1
6 Instructor was prepared and organized	4	3	-	-	-	-	4.6	5.0	0.5	80	4.3	4.0	0.8	83	4.4	5.0	0.8
7 Instructor used class time effectively	3	4	-	-	-	-	4.4	4.0	0.5	45	4.3	4.0	0.8	74	4.3	5.0	0.9
8 Instructor was clear and understandable	3	4	-	-	-	-	4.4	4.0	0.5	54	4.1	4.0	0.9	80	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	3	4	-	-	-	-	4.4	4.0	0.5	45	4.3	4.0	0.9	71	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	4	3	-	-	-	-	4.6	5.0	0.5	67	4.3	4.0	0.8	82	4.4	5.0	0.9
11 Instructor was available and helpful	3	3	1	-	-	-	4.3	4.0	0.8	55	4.2	4.0	0.8	68	4.3	5.0	0.9
12 Instructor was fair in evaluating students	3	3	1	-	-	-	4.3	4.0	0.8	50	4.2	4.0	0.8	68	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	4	3	-	-	-	-	4.6	5.0	0.5	69	4.1	4.0	0.9	84	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	3	4	-	-	-	-	4.4	4.0	0.5	70	4.3	4.0	0.8	71	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	3	3	1	-	-	-	4.3	4.(	0.8	60	4.2	4.0	0.8	71	4.3	4.0	0.8
16 The required readings contributed to my learning	5	2	-	-	-	-	4.7	5.0	0.5	90	4.1	4.0	0.8	88	4.2	4.0	0.9
17 The assignments contributed to my learning	5	2	-	-	-	-	4.7	5.0	0.5	82	4.1	4.0	0.8	86	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	5	2	-	-	-	-	4.7	5.0	0.5	90	4.2	4.0	0.8	86	4.2	4.0	0.9

4 3 -

-

4.6 5.0 0.5

80

4.1 4.0 0.9

86

4.2 4.0 0.9

19 The course overall as a learning experience was excellent



Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose

- Dr. Roose was a fair professor and used his time effectively. I thought that he handled teaching about bioengineering quite well, even though it can be a controversial subject.
- Dr. Roose seem like a distant person but always shares his awesome oranges with us. Seem pretty laid back.



Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Dent · Bota d Dlant Said

Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re	Re	Enroll sponc nse Ra	lents	: 64	Res	nrollme ponde onse R	nts:	1245		rollme onden onse R	ts: 47	7978
					Co	urse				[	Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>		<u>1</u> Low		Mear	n Mec	SD	% tile	Mean	Med	SD	% tile	Mean	Med	I SD
1 I had a strong desire to take this course	19	25	13	4	1	-	3.9	4.0	1.0	27	4.1	4.0	0.9	59	4.0	4.0	1.0
2 I attended class regularly	33	20	5	2	-	-	4.4	5.0	0.8	33	4.4	5.0	0.8	67	4.4	5.0	0.9
3 I put considerable effort into this course	23	29	9	-	-	-	4.2	4.0	0.7	36	4.3	4.0	0.8	65	4.3	4.0	0.8
4 I gained a good understanding of the course content	20	34	7	-	-	-	4.2	4.0	0.6	30	4.2	4.0	0.8	67	4.2	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	21	27	10	3	-	-	4.1	4.0	0.8	60	3.8	4.0	1.0	69	3.9	4.0	1.1
6 Instructor was prepared and organized	25	31	5	-	-	-	4.3	4.0	0.6	42	4.4	5.0	0.7	70	4.3	5.0	0.8
7 Instructor used class time effectively	29	27	5	-	-	-	4.4	4.0	0.6	55	4.4	4.0	0.7	73	4.3	5.0	0.9
8 Instructor was clear and understandable	23	28	6	3	-	-	4.2	4.0	0.8	38	4.2	4.0	1.0	70	4.3	5.0	0.9
9 Instructor exhibited enthusiasm for subject and teaching	27	26	6	2	-	-	4.3	4.0	0.8	30	4.4	5.0	0.8	67	4.4	5.0	0.8
10 Instructor respected students; sensitive to and concerned with their progress	29	26	6	-	-	-	4.4	4.0	0.7	50	4.4	5.0	0.7	70	4.3	5.0	0.9
11 Instructor was available and helpful	27	23	11	-	-	-	4.3	4.0	0.8	46	4.3	4.0	0.8	68	4.3	5.0	0.9
12 Instructor was fair in evaluating students	27	22	12	-	-	-	4.2	4.0	0.8	43	4.3	4.0	0.8	62	4.3	4.0	0.9
13 Instructor was effective as a teacher overall	24	29	8	-	-	-	4.3	4.0	0.7	50	4.3	4.0	0.8	72	4.3	4.0	0.9
14 The syllabus clearly explained the structure of the courses	24	30	5	1	-	-	4.3	4.0	0.7	42	4.4	5.0	0.7	72	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	18	28	15	-	-	-	4.0	4.0	0.7	36	4.3	4.0	0.8	55	4.3	4.0	0.9
16 The required readings contributed to my learning	17	30	11	2	-	-	4.0	4.0	0.8	27	4.2	4.0	0.9	55	4.2	4.0	0.9
17 The assignments contributed to my learning	19	30	9	2	-	-	4.1	4.0	0.8	25	4.2	4.0	0.8	57	4.3	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	23	28	9	1	-	-	4.2	4.0	0.7	33	4.3	4.0	0.8	64	4.3	4.0	0.9
19 The course overall as a learning experience was excellent	22	31	7	1	-	-	4.2	4.0	0.7	36	4.2	4.0	0.8	67	4.2	4.0	0.9
20 Q1	-	5	1	-	-	-	3.8	4.0	0.4	33	4.0	4.0	0.7	52	4.2	4.0	0.9
21 Q2	2	3	1	-	-	-	4.2	4.0	0.8	63	4.1	4.0	0.8	68	4.2	4.0	0.9
22 Q3	1	4	1	-	-	-	4.0	4.0	0.6	33	4.1	4.0	0.7	60	4.2	4.0	0.9
23 Q4	2	3	1	-	-	-	4.2	4.0	0.8	57	4.1	4.0	0.8	68	4.2	4.0	0.9
24 Q5	1	4	1	-	-	-	4.0	4.0	0.6	50	4.1	4.0	0.7	60	4.2	4.0	0.9



Course: BPSC 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY Instructor: Mikeal L. Roose Cross Course: BIOL 104 Section: 001 - FOUNDATIONS OF PLANT BIOLOGY

- The professor showed enthusiasm for the material and peppered lectures with tidbits of cool information. He regularly visited my lab also and participated with the class. Greatly enjoyed this portion of the lecture.
- I set out running but I take my time A friend of the devil is a friend of mine If I get home before daylight I just might get some sleep tonight
- enthusiasm encourage learning in class. some of the slides seemed too wordy to understand.
- The professor was clear and organized. I liked the material he presented on, and the feedback that he gave when he attended our lab/discussion classes.
- He must practice teaching the material in a more cumulative manner.
- Great professor who is very enthusiastic about the subject and made everything very interesting. His questions can be a bit tricky though. Sometimes the questions would ask us something that is not always obvious from the lectures. I like that it makes us think about it a bit but for during the test, I'm afraid of not having enough time to properly analyze the question. I think certain questions should definitely be clearer. There were times when even the professor wasn't sure what the correct answer was because there could be more than one right answer.
- Dr. Roose had a good teaching style for a science course. He covered the details but focused on putting those details into perspective by constantly evaluating the "big Picture". His lectures slide although a bit dense were structure in a helpful and organized manner.
- The clicker questions where you are unsure of the answers are very effective because it gets us thinking and become very analytical of the evidence.
- Good lecturer material was very boring at times but his clicker questions were in right spots to help keep the class focused. Has a lot of knowledge on the material and gives extra interesting facts as he goes over the material.
- GREAT EXCELLENT
- A good professor.
- Enjoyed the second part of the class. I like that the professor is clear about what we are expected to know as he goes through his PowerPoint.
- There was so much content covered each day that it was a little hard to pay attention in class at times because of how much information was given to us. The clicker questions given were more challenging and they were helpful in applying the knowledge learned.
- Professor Roose knew his material well.
- · knows his stuff!
- This teacher is extremely boring putting one to sleep. In the future, he should show more enthusiasm toward subject.
- Great professor, always smiling and encouraging questions. Only thing is, he reads directly from his lecture notes, word for word. If it wasn't for

the clicker questions he gave, I wouldn't have attend class and just read the lectures on my own.



## UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Winter 2013

Course: BPSC 193 Section: 001 - SENIOR SEMINAR
Instructor: Mikeal L. Roose
Home Dept.: Botany and Plant Sciences

Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences	Enrollment: 7 Respondents: 4 Response Rate: 57%									Res	nrollme oondei onse R	nts: 1	1247	Enrollment: 65809 Respondents: 51754 Response Rate: 79%				
	Course									E	Departi							
Questions	<u>5</u> High	_	<u>3</u>	<u>2</u>	<u>1</u> Lov		<u>A</u> Mear	Me	d SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD	
1 I had a strong desire to take this course	2	1	1	-	-	-	4.3	4.5	5 1.0	50	4.2	4.0	0.9	72	4.0	4.0	1.0	
2 I attended class regularly	3	1	-	-	-	-	4.8	5.0	0.5	75	4.5	5.0	0.8	89	4.5	5.0	0.8	
3 I put considerable effort into this course	2	2	-	-	-	-	4.5	4.5	0.6	58	4.3	4.0	0.8	74	4.3	4.0	0.8	
4 I gained a good understanding of the course content	2	2	-	-	-	-	4.5	4.5	0.6	78	4.1	4.0	0.8	78	4.2	4.0	0.9	
5 I normally spent at least two hours preparing for each hour of class	1	2	1	-	-	-	4.0	4.0	0.8	50	3.7	4.0	1.1	63	3.9	4.0	1.0	
6 Instructor was prepared and organized	3	1	-	-	-	-	4.8	5.0	0.5	83	4.4	4.0	8.0	92	4.4	5.0	0.8	
7 Instructor used class time effectively	3	1	-	-	-	-	4.8	5.0	0.5	82	4.4	5.0	0.8	92	4.3	5.0	0.9	
8 Instructor was clear and understandable	3	1	-	-	-	-	4.8	5.0	0.5	85	4.3	4.0	0.8	93	4.2	4.0	1.0	
9 Instructor exhibited enthusiasm for subject and teaching	3	1	-	-	-	-	4.8	5.0	0.5	82	4.3	5.0	0.9	90	4.4	5.0	0.8	
10 Instructor respected students; sensitive to and concerned with their progress	3	1	-	-	-	-	4.8	5.0	0.5	85	4.3	4.0	0.8	90	4.4	5.0	0.8	
11 Instructor was available and helpful	3	1	-	-	-	-	4.8	5.0	0.5	91	4.2	4.0	0.8	91	4.3	5.0	0.9	
12 Instructor was fair in evaluating students	3	1	-	-	-	-	4.8	5.0	0.5	86	4.2	4.0	0.8	90	4.3	4.0	0.9	
13 Instructor was effective as a teacher overall	3	1	-	-	-	-	4.8	5.0	0.5	85	4.2	4.0	0.9	92	4.3	4.0	0.9	
14 The syllabus clearly explained the structure of the courses	2	2	-	-	-	-	4.5	4.5	0.6	64	4.3	4.0	0.8	76	4.4	5.0	0.8	
15 The examinations reflected the materials covered during the course	2	-	2	-	-	-	4.0	4.0	1.2	30	4.2	4.0	0.9	52	4.3	4.0	0.8	
16 The required readings contributed to my learning	2	2	-	-	-	-	4.5	4.5	0.6	73	4.2	4.0	0.8	76	4.2	4.0	0.9	
17 The assignments contributed to my learning	2	2	-	-	-	-	4.5	4.5	0.6	58	4.1	4.0	0.9	76	4.3	4.0	0.8	
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	2	2	-	-	-	-	4.5	4.5	0.6	64	4.2	4.0	0.8	76	4.3	4.0	0.9	
19 The course overall as a learning experience was excellent	3	1	-	-	-	-	4.8	5.0	0.5	100	4.2	4.0	0.9	92	4.2	4.0	0.9	



Course: BPSC 193 Section: 001 - SENIOR SEMINAR Instructor: Mikeal L. Roose

No Comments found



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2012

Course: BPSC 221 Section: 001 - ADVANCED PLANT
BREEDING
Instructor: Mikeal L. Roose
Home Dept.: Botany and Plant Sciences

BREEDING Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		Respo	ond	ment: 4 ents: 4 : 100%	Res	nrollm ponde onse R	nts:	1283	Enrollment: 61751 Respondents: 48484 Response Rate: 79%				
			Course									ment		Campus				
Questions	<u>5</u> High		<u>3</u>	<u>2</u>	<u>1</u> Lov		<u>A</u> Mea	an N	Med SD	% tile	Mean	Med	SD	% tile	Mean	Med	I SD	
1 I had a strong desire to take this course	3	1	-	-	-	_	4.8	3	5.0 0.5	93	4.0	4.0	1.0	93	4.0	4.0	1.0	
2 I attended class regularly	4	-	-	-	-	-	5.0	) !	5.0 0.0	100	4.3	5.0	0.9	100	4.4	5.0	0.9	
3 I put considerable effort into this course	2	2	-	-	-	-	4.5	5 4	4.5 0.6	57	4.2	4.0	0.8	74	4.3	4.0	0.8	
4 I gained a good understanding of the course content	2	2	-	-	-	-	4.5	5 4	4.5 0.6	70	4.1	4.0	0.8	77	4.1	4.0	0.9	
5 I normally spent at least two hours preparing for each hour of class	1	2	1	-	-	-	4.0	) 4	4.0 0.8	55	3.8	4.0	1.0	64	3.9	4.0	1.1	
6 Instructor was prepared and organized	2	2	-	-	-	-	4.5	5 4	4.5 0.6	55	4.2	4.0	0.8	78	4.3	5.0	0.9	
7 Instructor used class time effectively	3	1	-	-	-	-	4.8	3	5.0 0.5	80	4.2	4.0	0.9	91	4.3	4.0	0.9	
8 Instructor was clear and understandable	2	2	-	-	-	-	4.5	5 4	4.5 0.6	64	4.0	4.0	1.0	81	4.2	4.0	1.0	
9 Instructor exhibited enthusiasm for subject and teaching	2	1	1	-	-	-	4.3	3 4	4.5 1.0	36	4.3	5.0	0.9	65	4.4	5.0	0.8	
10 Instructor respected students; sensitive to and concerned with their progress	1	3	-	-	-	-	4.3	} 4	4.0 0.5	30	4.3	4.0	0.9	68	4.3	5.0	0.9	
11 Instructor was available and helpful	1	1	2	-	-	-	3.8	3	3.5 1.0	18	4.2	4.0	0.9	43	4.3	4.0	0.9	
12 Instructor was fair in evaluating students	3	1	-	-	-	-	4.8	3	5.0 0.5	90	4.2	4.0	0.9	91	4.2	4.0	0.9	
13 Instructor was effective as a teacher overall	2	2	-	-	-	-	4.5	5 4	4.5 0.6	58	4.1	4.0	1.0	79	4.2	4.0	0.9	
14 The syllabus clearly explained the structure of the courses	2	2	-	-	-	-	4.5	5 4	4.5 0.6	60	4.4	5.0	0.7	79	4.4	5.0	0.8	
15 The examinations reflected the materials covered during the course	1	1	2	-	-	-	3.8	3 :	3.5 1.0	27	4.1	4.0	0.9	45	4.3	4.0	0.9	
16 The required readings contributed to my learning	2	2	-	-	-	-	4.5	5 4	4.5 0.6	73	4.1	4.0	0.9	76	4.2	4.0	0.9	
17 The assignments contributed to my learning	3	1	-	-	-	-	4.8	3	5.0 0.5	91	4.1	4.0	0.9	91	4.3	4.0	0.9	
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	2	2	-	-	-	-	4.5	5 4	4.5 0.6	70	4.2	4.0	0.8	77	4.2	4.0	0.9	
19 The course overall as a learning experience was excellent	2	2	-	-	-	-	4.5	5 4	4.5 0.6	67	4.1	4.0	0.9	78	4.2	4.0	1.0	



Course: BPSC 221 Section: 001 - ADVANCED PLANT BREEDING Instructor: Mikeal L. Roose

**Question #25**: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous.

• Thank you to Dr. Roose for offering the course and for putting in a lot of work to bring it up to speed with current trends and recent advances. The assignments, lectures, and field trips were well organized and relevant to the subject area and student interests. I found the assignments to be among the most substantial learning experiences of my graduate education. Overall the course was very effective in developing knowledge of plant breeding for applications in academia or industry. Perhaps in future course offerings more attention could be given to opportunities in plant breeding such as the interests of financial supporters and job opportunities. One potential assignment which may be interesting is to ask students to write a review of breeding progress and outlook for a specific crop. The class could be adjusted to remove the discussion section and reallocate this time towards time working on assignments, which could then be made more demanding. The university should make an effort to continue and grow the course and interests in plant breeding because there is a demand for knowledge in this area that is currently not being adequately recognized by our land grant institution. It seems UCR continues to drift away from its unique qualities towards what could be considered fads.



Course: BIOL 102 Section: 002 - INTRO:GENETICS Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences	Enrollment: 107 Respondents: 88 Response Rate: 82%									Res	nrollme ponder onse R	nts:	1392	Enrollment: 55453 Respondents: 44589 Response Rate: 80%				
	Course									[	Departi	ment		Campus				
Questions	<u>5</u> High		<u>3</u>		<u>1</u> Low		Mean	Meo	SD	% tile	Mean	Med	SD	% tile	Mean	Med	I SD	
1 I had a strong desire to take this course	22	41	12	8	2	-	3.9	4.0	1.0	50	3.8	4.0	1.1	56	4.0	4.0	1.0	
2 I attended class regularly	59	20	6	-	-	-	4.6	5.0	0.6	67	4.3	5.0	1.0	76	4.4	5.0	0.8	
3 I put considerable effort into this course	30	44	6	4	1	-	4.2	4.0	0.8	55	4.1	4.0	0.9	62	4.3	4.0	0.8	
4 I gained a good understanding of the course content	24	39	17	5	-	-	4.0	4.0	0.9	45	3.9	4.0	0.9	58	4.1	4.0	0.9	
5 I normally spent at least two hours preparing for each hour of class	15	32	21	14	3	-	3.5	4.0	1.1	45	3.5	4.0	1.1	44	3.8	4.0	1.1	
6 Instructor was prepared and organized	28	45	7	3	2	-	4.1	4.0	0.9	36	4.0	4.0	1.1	63	4.3	5.0	0.8	
7 Instructor used class time effectively	29	39	8	7	2	-	4.0	4.0	1.0	23	3.9	4.0	1.1	63	4.3	4.0	0.9	
8 Instructor was clear and understandable	26	38	14	6	1	-	4.0	4.0	0.9	42	3.9	4.0	1.1	66	4.2	4.0	1.0	
9 Instructor exhibited enthusiasm for subject and teaching	16	36	12	15	6	-	3.5	4.0	1.2	15	4.0	4.0	1.1	38	4.4	5.0	0.9	
10 Instructor respected students; sensitive to and concerned with their progress	22	36	20	5	2	-	3.8	4.0	1.0	25	4.0	4.0	1.0	52	4.3	5.0	0.9	
11 Instructor was available and helpful	21	31	22	7	3	-	3.7	4.0	1.0	23	4.0	4.0	1.0	46	4.3	4.0	0.9	
12 Instructor was fair in evaluating students	20	38	22	4	1	-	3.8	4.0	0.9	30	4.0	4.0	1.0	50	4.2	4.0	0.9	
13 Instructor was effective as a teacher overall	16	40	14	10	4	-	3.6	4.0	1.1	29	3.9	4.0	1.2	48	4.2	4.0	0.9	
14 The syllabus clearly explained the structure of the courses	32	47	4	2	-	-	4.3	4.0	0.7	60	4.1	4.0	1.1	71	4.4	5.0	0.8	
15 The examinations reflected the materials covered during the course	33	39	5	7	-	-	4.2	4.0	0.9	55	4.1	4.0	1.0	65	4.3	4.0	0.9	
16 The required readings contributed to my learning	20	44	12	4	4	-	3.9	4.0	1.0	44	4.0	4.0	1.0	56	4.2	4.0	0.9	
17 The assignments contributed to my learning	21	43	13	6	1	-	3.9	4.0	0.9	33	3.9	4.0	1.0	54	4.2	4.0	0.9	
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	24	40	14	6	1	-	3.9	4.0	0.9	27	4.0	4.0	1.0	54	4.2	4.0	0.9	
19 The course overall as a learning experience was excellent	16	40	19	8	2	-	3.7	4.0	1.0	31	3.8	4.0	1.1	54	4.2	4.0	1.0	
20 Q1	1	3	1	1	-	-	3.7	4.0	1.0	38	4.0	4.0	0.9	43	4.1	4.0	0.9	
21 Q2	1	3	1	1	-	-	3.7	4.0	1.0	38	4.0	4.0	0.9	50	4.1	4.0	0.9	
22 Q3	1	3	1	1	-	-	3.7	4.0	1.0	50	4.0	4.0	0.9	48	4.1	4.0	0.9	
23 Q4	1	3	1	1	-	-	3.7	4.0	1.0	50	4.1	4.0	0.9	45	4.1	4.0	0.9	
24 Q5	1	3	1	1	-	-	3.7	4.0	1.0	44	4.1	4.0	0.9	48	4.1	4.0	0.9	



Course: BIOL 102 Section: 002 - INTRO:GENETICS Instructor: Mikeal L. Roose

- boring and unenthusiastic professor. he does not show any interest in his own class
- Prof Mikeal L. Roose, knows his genetics, he shows his passion when teaching, but just one down side he is very monotonic... He needs to learn how to be more "active" and "fun" with his lectures. He usually puts students to sleep/into their day dreams.. But overall Prof Roose is very professional and nice, very fair on grading and a very lenient prof.
- I love that you printed out the slides for us that was so helpful. Your test are very difficult.
- good teacher. kindoftalkslikethissothatitsreallyhardtopayattentionforalongtimeinhisclass. helpful lecture handouts before class. good at posting all materials online as well. i enjoyed this class overall and would take it again, his tests are written well and your grade does reflect your effort really well.
- Clear and understandable. Straight to the point and mentions key points and important stuff that we should know. Only suggestion is he shouldve done more written exercises in class.
- · I enjoyed taking Dr. Roose's genetics course and I learned a lot
- Professor Roose was organized and always arrived in a timely manner. There was little room for interaction with the students. Many times I felt uninterested because he would just read off slides, which leaves little room for interaction with the class.
- his lecture notes are very helpful and reflect his examinations. Overall as a professor, he was very nice and seemed approachable but his lectures themselves, did not seem to be very supplemental since he had the habit to read just directly from the notes.
- · monotone teacher. very hard to get enthusiastic about a subject when your professor can't even do it.
- It would've been easier to understand the materials if more short clips were shown in class, or if the professor used the board and drew how the DNA or RNA works, not just reading the lecture slides and talking.
- · I hate genetics
- Did not seem to engage with the class; spoke somewhat condescendingly to students. Everyone seemed scared to answer questions or ask their own.
- GREAT teacher!
- Excellent teacher!
- I LOVE PROFESSOR ROOSE! He was very helpful and clear in his explanations during the Clinics. His review sessions clearly addressed what to expect on the exams and although this was a very challenging class, I enjoyed learning about Genetics.
- Professor Roose was not an effective teacher for this course. When he teaches, he simply reads over his powerpoint slides. This does not help my learning. I went to a review session taught by him and when the students asked him to work out a practice problem, it seemed as if he was stalling until the time was up so that he didn't have to answer the problem. Instead of reading straight off of his slides, he should say the main

points of each slide and if there is a practice problem that could be worked out, he should actually do it. He never does practice problems in class.

- Good Teacher, I liked that he cared for us to pass the class
- Professor Roose lectured mostly from his slides, I wish he did more practice/ clicker problems in class and actually wrote each one out on the board. He should also assign graded homework problems to help boost student's grades.
- Prof. Roose was kinda boring but was a fair grader and did teach the subject. His review session was far from helpful because he doesn't answer question and just reads out his lectures notes. I would like more interaction with him.
- This professor knows his material, however, he is incredibly monotone and sometimes does not know how to share his knowledge! Not only is he monotone, but he reads off his slides almost word for word. It would be much more helpful if he were to be more interactive by writing out problems on the board.
- overall great class but lectures could be extremely confusing to the point were i would just give up trying to understand and instead just memorize. But honestly the class is very interesting and very useful.
- His lecture is really informative and helpful..however he is really monotone when he teaches..
- He did seem like he enjoyed the material, lectures were just too dry.
- The most unenthusiastic professor I've ever come across.
- Good teacher. Very thankful for making the review sessions prior to the midterm exams. However, I do wish the information was presented in a more interesting manner. There were some times the class got ridiculously boring (though this can also be attributed to the fact that the room was hot and not a very suitable learning environment). Otherwise, good job.
- The class is very useful for people who like to learn about human genes and inheritance. However, if you ca focus more specifically on the mechanism of how DNA replicate, RNA transcription, and more problem solving during class time, it will be very helpful.
- Should work on way he presents his clicker questions. Minimizing the question to show who has answered is inefficient.
- Professor's teaching style was like Ben Stein with an attempt at inflection. He did not repeat or emphasize key terms or concepts. He read from slides that had paragraphs of sentences on them and then driveled on about the concept without putting it into short, contextual steps or segmented ideas. Professor needs to use Powerpoint more effectively with more pictures and key phrases and less clutter and fluff. Clicker questions were effective at testing our knowledge, but further explanation or a better original explanation would have been more helpful.
- Pretty good professor. Straight to the point on what you should know. Spends most of the time lecturing off the slides and that is awesome so long as his midterms and exams reflect the slides. If there was a curve, I wish he would just tell us and not say maybe because it really throws me off and make me stress way to much especially when you are like point something off a 93%(A w/o curve)
- · Good class and guidance through the material.
- The professor was thorough, which helped me understand the material better.
- blah
- He should put the homework problems on the syllabus also for students who want to do the homework before each lecture. Also, he should post up the clicker excel sheet so student can have an easier time knowing how many clicker points they have instead of having to email the professor. It's easier on both sides. It's possible in other classes so why not this one?
- Okay class, can't complain.
- I enjoyed having Dr. Roose as a professor. Although he can be boring at times, the subject he teaches is very interesting. The only problem I had was him refusing to give the students a chance to see if their clicker was working on the first day.

- Professor Roose should stick to research and not teaching. He does a horrible job keeping students' attention during lecture. He can be very
  confusing at times and he is not approachable. I found it very difficult at times to ask him questions. He would respond in a way that made me
  feel stupid. His first exam was ok but the second one was very weird and ambiguous. The homeworks never helped because the questions very
  seldom appeared on the exam. I wish he cared more about his students and their success. It was obvious he was just there to teach, give a
  grade and leave. No passion or compassion. Clickers were useless as well.
- The professor was always well-prepared and gave out lecture notes at each class period. He provided all the materials needed to succeed in the class, however, I found him to be monotone and unenthusiastic in lectures which led me to believe that he did not enjoy teaching this subject very much.
- Really needs to be more enthusiastic during class. Too boring. Fighting to stay awake. Clickers cannot be the only motivation to attend lecture
- The information and handouts of slides was very helpful and clicker questions were pertaining to the notes and not too difficult, however I feel like there was never any outside information from the structured slides and it became extremely boring. I appreciate the given handouts but if the teacher does not have any extra knowledge to share or explain of his experiences or in various fieldwork then I do not even feel the need to be engaged in class and I really like genetics so I was a little disappointed after taking this course.



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2011

Course: BPSC 200B Section: 001 - PLANT BIOLOGY CORE Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		Enroll espond nse R	lents	: 12	Res	nrollme ponde onse R	nts:	1392	En Respo Respo		ts: 44	4589
					Сс	ourse	Э			[	Depart	ment			Camp	ous	
Questions	<u>5</u> High		<u>3</u>	<u>2</u>	<u>1</u> Low		Mear	n Meo	d SD	% tile	Mean	Med	SD	% tile	Mean	Med	I SD
1 I had a strong desire to take this course	4	3	3	1	1	-	3.7	4.0	1.3	33	3.8	4.0	1.1	48	4.0	4.0	1.0
2 I attended class regularly	10	2	-	-	-	-	4.8	5.0	0.4	83	4.3	5.0	1.0	88	4.4	5.0	0.8
3 I put considerable effort into this course	5	6	1	-	-	-	4.3	4.0	0.7	64	4.1	4.0	0.9	67	4.3	4.0	0.8
4 I gained a good understanding of the course content	6	3	3	-	-	-	4.3	4.5	0.9	73	3.9	4.0	0.9	71	4.1	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	5	4	2	1	-	-	4.1	4.0	1.0	73	3.5	4.0	1.1	67	3.8	4.0	1.1
6 Instructor was prepared and organized	6	4	1	1	-	-	4.3	4.5	1.0	45	4.0	4.0	1.1	71	4.3	5.0	0.8
7 Instructor used class time effectively	6	3	1	2	-	-	4.1	4.5	1.2	31	3.9	4.0	1.1	67	4.3	4.0	0.9
8 Instructor was clear and understandable	7	3	1	1	-	-	4.3	5.0	1.0	50	3.9	4.0	1.1	76	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	6	2	3	-	1	-	4.0	4.5	1.3	38	4.0	4.0	1.1	58	4.4	5.0	0.9
10 Instructor respected students; sensitive to and concerned with their progress	6	4	1	1	-	-	4.3	4.5	1.0	50	4.0	4.0	1.0	72	4.3	5.0	0.9
11 Instructor was available and helpful	6	4	1	1	-	-	4.3	4.5	1.0	54	4.0	4.0	1.0	71	4.3	4.0	0.9
12 Instructor was fair in evaluating students	6	3	2	-	-	-	4.4	5.0	0.8	70	4.0	4.0	1.0	75	4.2	4.0	0.9
13 Instructor was effective as a teacher overall	6	3	1	-	1	-	4.2	5.0	1.3	57	3.9	4.0	1.2	70	4.2	4.0	0.9
14 The syllabus clearly explained the structure of the courses	4	7	1	-	-	-	4.3	4.0	0.6	60	4.1	4.0	1.1	71	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	6	1	3	-	-	-	4.3	5.0	0.9	64	4.1	4.0	1.0	70	4.3	4.0	0.9
16 The required readings contributed to my learning	4	6	-	-	-	-	4.4	4.0	0.5	78	4.0	4.0	1.0	76	4.2	4.0	0.9
17 The assignments contributed to my learning	7	5	-	-	-	-	4.6	5.0	0.5	83	3.9	4.0	1.0	83	4.2	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, demonstrations, guest lectures, iLearn, web pages, etc) were informative	6	5	-	-	-	-	4.5	5.0	0.5	73	4.0	4.0	1.0	79	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	5	5	-	-	-	-	4.5	4.5	0.5	77	3.8	4.0	1.1	82	4.2	4.0	1.0
20 Q1	2	1	-	-	-	-	4.7	5.0	0.6	88	4.0	4.0	0.9	87	4.1	4.0	0.9
21 Q2	2	1	-	-	-	-	4.7	5.0	0.6	88	4.0	4.0	0.9	92	4.1	4.0	0.9
22 Q3	2	1	-	-	-	-	4.7	5.0	0.6	100	4.0	4.0	0.9	91	4.1	4.0	0.9
23 Q4	2	1	-	-	-	-	4.7	5.0	0.6	100	4.1	4.0	0.9	91	4.1	4.0	0.9
24 Q5	2	1	-	-	-	-	4.7	5.0	0.6	100	4.1	4.0	0.9	91	4.1	4.0	0.9



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2011

Course: BPSC 200B Section: 001 - PLANT BIOLOGY CORE Instructor: Mikeal L. Roose

**Question #25**: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous.

- The instructor was good and helpful. I just can say one comment not for instructor, but about course; feedback of the assignments was not at time. I wish to get them one week after assignment which I submitted. I believe that in that case, the feedbacks would be more efficient for me but as a general the aim of the class was good
- Overall class was really helpful and general idea of this course is excellent for new coming students. Just I can criticize that feedback for the assignments came at the end of the course. I think, if it comes just after the assignment submitted, it could be more beneficial to improve our knowledge on that topic. Moreover after each assignment discussion about assignments also can be helpful to student.
- Very useful information is taught.
- This quarter of Core seemed much more organized, thought out, and useful than the previous quarter. My main criticism is lack of feedback on assignments. Also, it may be helpful to provide successful examples of grant proposals for that specific assignment next time.
- This course was much better organized than 200A. I think this class has potential to be a great tool for the students, but they need feedback on the assignments.
- There were times that I felt that Dr.Roose could have taken more care with the time. During presentations we had people running over schedule due to the high number of questions being asked and I felt he should have taken more care to make sure that we stuck to schedule as we were very limited with time on those days. Also, the number of days where we just had no class was frustrating. Also there were not necessarily clear instructions on how to approach certain assignments until we specifically asked what was expected.
- It seemed that he didn't really want to be there. Most classes were cancelled, seemed like they didn't want to put effort into putting together class sessions. Most classes that we did have were effective. Feedback was not given on any assignments until the last day of class, and even that was just the first assignment.
- Congratulations professors for such great improvements to this class from 200A. The assignments were excellent. The lectures and panel discussions were informative and more could be included in future along similar lines. My only criticism is that it would have been nice to get feedback/assignments returned earlier in the quarter. Thank you.



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Fall 2010

Enrollment: 15

Enrollment: 996

Enrollment: 66311

Course: BPSC 200A Section: 001 - PLANT BIOLOGY CORE
Instructor: Mikeal L. Roose
Home Dept.: Botany and Plant Sciences

Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					Re		spond nse Ra	ents	: 14	Re	sponde onse R	ents:	747		ondent onse R	ts: 50	0943
					Со	urse				Γ	Departi	ment			Camp	ous	
Questions	<u>5</u> High	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u> Low		Mean	Med	d SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	2	5	5	1	1	-	3.4	3.5	1.1	22	4.0	4.0	1.0	41	3.9	4.0	1.1
2 I attended class regularly	11	3	-	-	-	-	4.8	5.0	0.4	86	4.4	5.0	0.8	89	4.5	5.0	0.8
3 I put considerable effort into this course	7	5	2	-	-	-	4.4	4.5	0.7	64	4.1	4.0	0.9	70	4.3	4.0	0.8
4 I gained a good understanding of the course content	4	6	4	-	-	-	4.0	4.0	0.8	45	4.2	4.0	0.8	63	4.1	4.0	0.9
5 I normally spent at least two hours preparing for each hour of class	4	9	-	-	-	-	4.3	4.0	0.5	100	3.5	3.5	1.1	77	3.7	4.0	1.1
6 Instructor was prepared and organized	6	4	4	-	-	-	4.1	4.0	0.9	13	4.5	5.0	0.7	65	4.3	5.0	0.9
7 Instructor used class time effectively	4	9	-	1	-	-	4.1	4.0	0.8	22	4.4	5.0	0.8	68	4.3	5.0	0.9
8 Instructor was clear and understandable	5	8	-	1	-	-	4.2	4.0	0.8	58	4.3	5.0	1.0	73	4.2	4.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	6	4	3	1	-	-	4.1	4.0	1.0	11	4.5	5.0	0.7	61	4.4	5.0	0.9
10 Instructor respected students; sensitive to and concerned with their progress	5	7	2	-	-	-	4.2	4.0	0.7	40	4.5	5.0	0.8	68	4.3	5.0	0.9
11 Instructor was available and helpful	8	5	1	-	-	-	4.5	5.0	0.7	78	4.4	5.0	0.8	81	4.2	4.0	0.9
12 Instructor was fair in evaluating students	4	7	1	-	-	-	4.3	4.0	0.6	56	4.4	5.0	0.8	72	4.2	4.0	0.9
13 Instructor was effective as a teacher overall	4	8	1	1	-	-	4.1	4.0	0.8	45	4.4	5.0	0.8	69	4.2	4.0	0.9
14 The syllabus clearly explained the structure of the courses	2	6	5	1	-	-	3.6	4.0	0.8	18	4.5	5.0	0.8	48	4.4	5.0	0.8
15 The examinations reflected the materials covered during the course	2	5	5	-	-	-	3.8	4.0	0.8	36	4.3	5.0	0.9	57	4.2	4.0	0.9
16 The required readings contributed to my learning	2	8	2	-	-	-	4.0	4.0	0.6	57	4.1	4.0	1.0	62	4.2	4.0	0.9
17 The assignments Contributed to my learning	3	7	3	1	-	-	3.9	4.0	0.9	30	4.3	4.0	0.9	54	4.2	4.0	0.9
18 Supplementary materials (e.g. films, slides, videos, guest lectures, iLearn, web pages, etc) were informative	2	10	1	-	-	-	4.1	4.0	0.5	38	4.3	4.0	0.8	69	4.2	4.0	0.9
19 The course overall as a learning experience was excellent	2	5	3	4	-	-	3.4	3.5	1.1	18	4.2	4.0	0.9	47	4.1	4.0	1.0



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Fall 2010

Course: BPSC 200A Section: 001 - PLANT BIOLOGY CORE Instructor: Mikeal L. Roose

**Question #25**: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

- Dr.Roose has been helpful with the presentations and explaining concepts when needed, but he seems more hands off. There were times when projects were not really explained till fairly late and only then because we came to the professors confused about what we needed to do. He was helpful in explaining things at that point, but didn't really go into much detail before then, nor was there much of anything else elsewhere explaining what we were to do. I realize that we are graduate students, but we are still only first years and do need some instructions when it comes to certain things, such as giving presentations and how long they are expected to be.
- As I have mentioned in the evaluation of the other instructors, I believe more of the course should be focused on professional development and less on the biofuels aspect. In addition, i also think that student should be able to choose the topic of their proposal and have it be related to what they are going to study in their coming years.
- This course had too many instructors in charge, which sometimes led to miscommunication between the instructors and students. I think they sometimes assumed someone else had explained an assignment to us when it turned out no one had. For only 2 units, this course had an amazingly large workload. I think the course should be worth at least 4 units, or the work load should be cut in half. This class had the least credits, but honestly took up most of my time (which could have been spent on classes that I was actually learning about my general research interests). Group projects were frustrating because not everyone would effectively contribute. Also, cell/molecular students (who were usually international) would take environmental topics because they believed they were 'easier,' leaving ecology students stuck pouring through technical molecular papers. This was both frustrating and time consuming. The structure of assigning the final seminar presentation was not thought out. They need to think of a better way to get all students more equally involved in actually presenting. Also, two and a half weeks in not enough time to research and put together a proposal presentation, especially when it's going to be presented in front of the entire department. As first years, we don't want to embarrass in front of everyone. Bio-fuels was a completing uninteresting topic. I think it would be better to explore alternative energy solutions as a whole. It would lead to more interesting discussion and I think students could choose topic they were more interested in. The one-hour period (where we learned about qualifying exams and grant writing, etc) was especially helpful. They should stick with that.
- -The amount of work that was expected for this course was not consistent with a 2 unit course. The course should either be 4 units or have fewer assignments. -We were not given enough time to adequately prepare; 1 week to prepare a debate presentation as a group was not enough and 2 weeks to prepare seminar was extremely challenging and does not allow students to provide the best presentation possible Tuesday sessions were good overall and provided useful information -For Wednesday session I think that it would be better if there was a journal club type presentation were each student chose several papers that are relevant to their research and easily understandable and lead a discussion about that topic. This would introduce us to the wide range of research and give us a chance to get to know our peers and their work
- Dr Roose always offered to be available for questions and to make facilities available to us. This class was co-taught by several professors, and despite some excellent instruction I found this class to be lacking in several areas. It was not clear to me what the goals of this class really were. I anticipated an exercise in graduate school standards and getting to know your colleagues, but instead I found myself doing a LOT of research on biofuels. They say that you are only growing when you are outside your comfort zone, so I take comfort in the knowledge that I was growing a lot this semester. I did think it was a lot of work for a two-unit class, but beyond that I felt that it was disorganized at times; groups should have been assigned much earlier on in the quarter, and in particular I would have appreciated more freedom in my time-management and less last-minute assignments. I can see that instructors are trying hard to make this class successful, but I think it remains a pretty miserable experience for those of us interested in ecology. That said, I did learn a lot about the current issues surrounding biofuels, for which I am grateful in retrospect. This class could be improved by more focus on what you want the students to achieve, less emphasis on the subject matter, more structured interactions between students, more interactive classroom sessions and more open discussion. Personally I would have enjoyed more discussion on ethics of biofuels and alternative options.
- Overall I think the class had too many professors and because of that it wasn't always organized well. The lectures on ethics, proposal writing, the qualifying exams, CV and profiles, and presenting a seminar were very helpful. I think they were not always in the best order though. The talk on presenting a seminar would have been great to have had before the group summaries of Algae, corn, wood, and miscanthus. I think this class is a lot more work than a typical 2 credit course. I would suggest making it worth more credits or eliminating some of the group projects. I understand the idea behind having us present at seminar, I just think that giving us our groups earlier and allowing for more time to prepare a seminar would be beneficial. Also with such a large group not everyone is able to speak and I think then it is hard to evaluate how the work was done as those that didn't get the chance to speak may have done a lot of the preparation or maybe wanted to speak. And so I think the in class presentation are a better way of practicing putting together a seminar and presenting it.



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Winter 2010

Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences					R		nrollm bonde ise Ra	nts:	160	Re	Enrolln sponde onse R	ents:	538		rollmer ondent onse R	s: 48	3076
					Со	ourse				[	Departi	ment			Camp	us	
Questions	<u>5</u> High		<u>3</u>		<u>1</u> Lov	<u>N/A</u>	Mean	Med	I SD	% tile	Mean	Med	SD	% tile	Mean	Med	SD
1 I had a strong desire to take this course	51	56	6 34	10	8	1	3.8	4.0	1.1	27	4.1	4.0	1.0	56	4.0	4.0	1.1
2 I attended class regularly	112	30	09	4	2	3	4.6	5.0	0.8	40	4.6	5.0	0.7	78	4.4	5.0	0.9
3 I put considerable effort into this course	69	6	3 20	) 5	-	3	4.2	4.0	0.8	25	4.4	5.0	0.7	60	4.3	5.0	0.9
4 I gained a good understanding of the course content	47	62	2 37	' 10	1	3	3.9	4.0	0.9	20	4.2	4.0	0.9	54	4.2	4.0	1.0
5 I normally spent at least two hours preparing for each hour of class	39	5	5 43	3 13	7	3	3.7	4.0	1.1	33	3.8	4.0	1.1	55	3.8	4.0	1.2
6 Instructor was prepared and organized	82	54	4 19	) 5	-	-	4.3	5.0	0.8	17	4.6	5.0	0.7	73	4.4	5.0	0.9
7 Instructor used class time effectively	83	49	9 20	6 (	-	2	4.3	5.0	0.8	14	4.6	5.0	0.7	72	4.4	5.0	1.0
8 Instructor was clear and understandable	56	44	4 48	8 8	1	3	3.9	4.0	1.0	25	4.4	5.0	0.8	61	4.3	5.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching	43	48	8 45	5 19	3	2	3.7	4.0	1.1	17	4.4	5.0	0.9	48	4.4	5.0	0.9
10 Instructor respected students; sensitive to and concerned with their progress	60	4	7 37	' 11	3	2	3.9	4.0	1.0	17	4.5	5.0	0.8	58	4.4	5.0	1.0
11 Instructor was available and helpful	65	5	1 33	5	3	3	4.1	4.0	1.0	29	4.5	5.0	0.8	63	4.3	5.0	1.0
12 Instructor was fair in evaluating students	60	54	4 35	5 5	2	4	4.1	4.0	0.9	14	4.4	5.0	0.8	67	4.3	5.0	1.0
13 Instructor was effective as a teacher overall	49	52	2 39	13	4	3	3.8	4.0	1.0	29	4.4	5.0	0.9	54	4.3	5.0	1.0
14 The syllabus clearly explained the structure of the courses	101	40	69	3	1	-	4.5	5.0	0.7	33	4.6	5.0	0.7	81	4.5	5.0	0.9
15 The examinations reflected the materials covered during the course	64	58	8 27	6	3	2	4.1	4.0	0.9	29	4.4	5.0	0.8	64	4.4	5.0	0.9
16 The required readings contributed to my learning	58	5	5 34	7	4	2	4.0	4.0	1.0	13	4.4	5.0	0.9	52	4.3	5.0	1.0
17 The assignments Contributed to my learning	58	54	4 35	58	2	3	4.0	4.0	1.0	14	4.4	5.0	0.9	62	4.3	5.0	1.0
18 Supplementary materials (e.g. films, slides, videos, guest lectures, iLearn, web pages, etc) were informative	58	6	1 30	) 7	2	2	4.1	4.0	0.9	22	4.3	5.0	0.9	67	4.3	5.0	1.0
19 The course overall as a learning experience was excellent	45	5	1 46	5 12	3	3	3.8	4.0	1.0	22	4.3	5.0	0.9	56	4.2	5.0	1.0
20 Q1	7	3	5	1	-	144	4.0	4.0	1.0	33	4.2	5.0	0.9	67	4.2	5.0	1.1
21 Q2	7	3	5	1	-	144	4.0	4.0	1.0	60	4.1	5.0	1.0	67	4.2	5.0	1.1
22 Q3	6	3	34	1	-	146	4.0	4.0	1.0	40	4.2	4.5	0.9	68	4.2	5.0	1.1
23 Q4	5	3	5	1	-	146	3.9	4.0	1.0	33	4.2	4.0	0.9	62	4.2	5.0	1.1
24 Q5	5	5	54	1	-	145	3.9	4.0	1.0	33	4.2	5.0	0.9	61	4.2	5.0	1.1



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Winter 2010

Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose

**Question #25**: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

- Sometimes hard to follow due to slight mumbling. But the slides were extremely helpful in keeping up with the material and going along with him in class. Slides available in class contributed greatly to learning experience.
- Doing review sessions before the tests somewhat helpful. Lectures notes were very well organized so that was really great. But lecture notes were hard to understand and to study for. In discussion, there are too many quizzes. Midterms were hard. Should curve the class little bit since the material itself is really hard. It's very nice for professor to care his students a lot about their grade.
- · Good teacher, kind of monotonous. Clicker questions and practice problems helpful For test.
- he is cool
- It would be helpful if the final grade in the class was curved to reflect how the majority of the students performed in the class. If the class average is low, this means the information was not getting through to the students and does not necessarily mean the students were not studying hard and trying to succeed in this class.
- Dr Roose was a good professor but can sometimes be a little slow and boring.
- Was difficult to understand and slides were dense, class wasn't to fun and was hard to keep attention. Tests wordings were so confusing and not straight to the point
- · mediocre. needs to change things up to build interest.
- Needs to stop reading from the slide and use other examples to get his main point through to the students so his teaching could be more efficient
- overall the class was good. I do suggest that the midterms be a combination of multiple choice and short answer, this will help the students more.
- Dr. Roose was okay as a professor. His exams were fair; they reflected material discussed in lecture. However, he could make lecture a little more interesting and be more energetic.
- Good course, helpful teacher. More emphasis on homework type problems, especially ones that may appear on the tests would be helpful. Class seemed fair and learned a lot.
- I enjoyed taking genetics this quarter and I think Dr. Roose did a good job tesching the course.
- Testing was very fair, but I had trouble staying awake during class. I know its difficult for teachers to get away from powerpoint once they've started to use it, but it really does make a class un-engaging if the teacher uses it alone.
- Professor Roose knows his material and answers students questions. What would be good if he wouldn't read right off the slides.
- A bit monotonous in his lecturing but overall an effective instructor.

- He reads straight off of the slides during class, when he could have been explaining in detail some of the tougher ideas that were presented.
   Class time was not helpful, except when the short videos about the topic being covered were played. Those were helpful. The extra reading assigned did not help, and the problems assigned were sometimes off the wall from what he was lecturing about.
- Dr. Roose is so dull and boring. He should just eliminate clicker questions because there's no point in going to his lectures. Here's his lecturing style: Read from the slide, ask clicker questions at the end of lecture, and give an exam. He has no enthusiasm for the subject, as evident of his monotone slide reading. His clicker questions are tricky as he'll quiz you on stuff that sometimes aren't on the slides or are in the slides ahead; sometimes he doesn't even understand his own clicker questions! His practice exams have no relevancy to the actual exams, and although they're fair, they are relatively hard.
- Mikeal L. Roose is a good professor. I think some of the materials are hard to understand and more time needed to be spent on it. The format of midterm 2 was very confusing.
- Dr. Roose was a very effective instructor. He showed a strong enthusiasm for the material, and offered quite a bit of help outside of class for those who needed it. His use of a "diagnostic test" to evaluate students at the start of the class was particularly interesting.
- The class was interesting, but the teacher seems to have a hard time explaining things in detail to students. The class covers too much information than can be absorbed during such a short period of time, so a lot of the lectures seemed rushed.
- professor Roose is a fair professor when it comes to grading. Exams are harder than what is shown in power point slide material. Bringing the printed power points slides is very usefull.
- Make lectures more interesting. Idea of make lecture slides fills in the blanks for student so that they attend and concentrate more in class, not just come for clickers.
- Professor Roose was very helpful during office hours or Monday clinics. I think a lot of people go to class just for the clicker questions as I look around and see a lot of people sleeping which is a shame. I liked it when professor showed us video clips or replication or meiosis, they were helpful.
- Professor Roose is one of the most effective teachers I have had so far at UCR. Its obvious that he's an expert in his field, but he also understands the students well enough to be able to explain a complex subject in a way that made it easy to understand...almost a little too easy at times. I've been disappointed to discover that most college professors lack the ability to meet the student at their level so I was very grateful for the chance to learn from him.
- Dr. Roose's teaching helped my learning of the material pretty well. But I would like to see if more enthusiasm can be added to the subject and the teaching. It would make the subject more interesting. Also, more videos and images should be used in the lecture notes. For me, the lectures seem to have a lot more words than images. A balance of both is good.
- It would have been even more helpful if the instructor wrote and gave examples on the chalk board. this kind of interaction would have helped me a little more. I understand that diagrams were given for reference, but sometimes actions depict a more clear picture then words. I am greatful that the slides were printed out for us....that was very thoughtful.
- I really liked how he had the genetics clinic every week. It was very helpful! Overall, this course was a great learning experience and the tests were fair.
- I wish that there was a little more of the professors input along with the lecture notes. I felt that sometimes I was just being read what was on the slides, and I can easily do that at home. The clicker questions were very helpful and so was the additional reading. We were warned at the beginning of the course that lecture notes alone wouldn't get us through the class, so that was a helpful hint. Overall, I felt the professor knew what he was talking about and cared about the progress of the class. I also appreciated that he took the time to answer questions when students asked in class.
- He is nice and the class is not to hard, however, test questions are a bit wordy and tricky so I find it a bit unfair.
- The midterms are not that clear.
- I thought he was an effective teacher. However, sometimes he moved through the material too fast. Sometimes it was hard keep up with understanding the material before new information was presented. He was approachable and was fair in evaluating students.
- I thought he did an okay job, except that he needs to make a few improvements in how he teaches the material. First, do not read off powerpoint slides all the time, and instead explain what it means in simple terms so that we can understand the material better. Lastly, I thought the exams

were a bit difficult and sometimes had technical errors (ie. how we should answer the question). Those should always be fixed before giving the students the midterms so that we get the fairest score possible. Sometimes, his lectures can be boring and I find myself tuning out while lecturing, so I think he needs to do better in presenting the material to the class effectively next time.

- Good teacher.
- Providing slide printouts for every lecture was very helpful and I really appreciated it. The clicker questions made the class feel very interactive and was a good method of ensuring regular attendance. He knew the material very well and taught it very clearly.
- He did a good job explaining concepts but he should give some examples to help understand more.
- Roose was well organized and had excellent notes. He expalins the material well and waits for students to understand the concept before moving on to the next subject, which is very helpful. The exams were a little tricky however since some questions asked for material that didn't seem so important but turned out to be very important. There is a lot of material to learn for this class, and it's quite difficult to know everything.
- The clas was not too bad. I was actually looking forward to taking genetics. He is not a bad professor, however I did not like the fact that he read directly off the slides. I did like that he supplied the notes for us.
- I honestly felt that I could have learned more by simply reading the slides and doing hw at home. Sometimes I felt that I went to class solely for the clicker points.
- The class should probably be held on MWF.
- Lecture was exactly like lecture slide just being read. Exams were pretty fair. A little more variation in the lecture would be good.
- Lectures weren't effective. I attended every lecture, but I didn't gain much.
- Dr. Roose is a good professor. The class is interesting as well. I just wish the class was out of more points so it would give more wiggle room if you didnt do well on a quiz or a midterm. I do like that if you get 50% of the clickers you get full points. It would also be nice if you could get the remaining 50% as bonus points perhaps.
- The professor had lecture slides printed out for students which was very generous. The problem is that the professor reads the slides word for word and some diagrams from the slides were not explained properly. The textbook is confusing, the only thing that is helpful from the book are the questions.
- Boring teacher because he just reads exactly off the slides. I can do that on my own at home.
- While teaching, can do more than just read off of slides. That causes the class to be just a reading sessions than an actual learning sessions.
- I thought the lecture powerpoints were very helpful but during lecture, all he did was read off of it. There were many times when people had questions and raised their hands, but since he reads off the powerpoint, he would move quickly onto the next slide/topic, failing to see the person's raised hand. Because of the quick shift, people would feel discouraged to go out of their way to ask the question or for me, I forget my question since I'm also trying to concentrate on comprehending the material. One last thing I thought would be helpful to students is if he did practice problems (such as the math ones or gene mapping or genetic crosses....etc.) on the board along with the class rather than just putting the explanation on a powerpoint and reading off of it. If the lecture was more interactive (like making diagrams and solving problems on the board), students would understand the material much better. Other than those two things, the instructor was very nice and tried to help whenever a student asked. I understand the material is dense and there isn't much time in class, but doing practice problems with students would be the most helpful thing he could do. THANK YOU VERY MUCH!
- Although the class was very informative and organized, the grading scale without any curve was unfair, especially since the mean for both midterms was failing.
- Lectures were full of detail making it easier to understand.
- Exams were a bit hard because some questions were unclear.
- great job on making lecture notes so helpful and accessible to students.

- The only criticism I would give Professor Roose is he should stop reading verbatim off the slides and paraphrase. We can read this later, explain
  it, show pictures. He has clickers so we could interact, but it was pretty boring. Overal, he is a fair teacher and grades very fairly.
- I felt that the professor should have taught more rather than read directly from the lecture notes.
- knows material very well. However reading from a powerpoint is not teaching
- Was formulaic with his approach to teaching making him reliable and the course easy to understand. He became pretty boring as the semester wore on.
- I really appreciated how the lectures closely corresponded to the reading assignments. Dr. Roose is an excellent, knowledgeable professor.
- Dr. Roose is really cool. I learned concepts of genetics through doing assigned homework problems and reading the power point. The only con of the class is that it gets a little boring since it's ~1.5 hours long.
- Professor Roose was a really good teacher. Genetics is a very hard class to teach. Possibly using the board would help for the first part of the class. But everything else, he was very clear, prepare and knowledgeable of his material. He really cared about his students learning, he even went out of his way to print slides for all his students for every lecture, and this is crucial for student; learning especially since the cutbacks from our print quota/
- · He was really boring -- I wish he was more into what he taught.
- nice to print out lectures but it seemed very boring you were just reading out of the lectures. spice up the class a bit
- Mostly read off the slides of the lecture that I wasn't able to learn since I was hoping he would explain verbally instead of always reading off of slide.
- Thanks for teaching this class, you're a fair professor who prepared us well for your tests. I appreciate that you handed out lecture slides and had review sessions for the midterms and made the boring subject material somewhat bareable.
- Dr. Roose was very approachable and cared about student's progress. He set up a weekly clinic with the TAs where we could ask questions (in
  addition to the discussion). He was always prepared and actually printed the class notes for every student. This was very nice of him!!! Although
  the material seemed overwhelming at times, Dr. Roose tried explaining it well in his lecture notes and did a good job.
- · let students have more time on clicker questions so they can an opportunity to think about it.
- The professor used class time to read off the lectures. He should of used class time to do problems on the board or work out examples for the class. Instead, he just read off the lecture notes and did clicker questions. Although the click questions were helpful, the lecture was overall boring because he did not interact with the class. The exams and quizzes were easy, however, even though I had to teach myself and ask TAs for help.
- Please have a curve.
- he is a very, very boring professor
- It would be better if the professor wouldn't read off the slides.
- The class was boring and some of the stuff was very confusing and was not cleared up when professor explained it.
- I liked the supplemental websites and summaries for some of the subjects we learned in class, they where really helpful. The clicker questions helped me get a better understanding of the material.
- Lectures were extremely boring ...
- Dr. Roose is a good lecturer and his exams are fair. He cares about his students.

- Good teacher but can get a little boring at times.
- Reads directly off his lecture slides so there's really no point in attending class, except for the clicker points. He should do more problems on the board, as opposed to on his slides, so that the class can see the problems being worked out step-by-step.
- To be honest the class was terribly boring, i felt like there was no enthusiasm put into the lectures, it felt more like i was in room full of people and tape recording was being played instead of a professor being present, and honestly who wants to be in class like that. And even though its a little to late for us, for future classes, don't just read from the slides, actually teach and explain things a little better, because the real professor was the lecture slides.
- He was good but the lectures were sort of boring. Also my main issue with the class was the fact that the discussion quizzes were different. I thought my quizes were much harder than the other sections.
- The class was really boring, but the material wasn't difficult to learn. The professor could benefit from making lectures more interesting and be more engaging.
- This class could've been better structured. I think the main aspect that was missing was genuine enthusiasm to teach the course. Dr. Roose was moderately monotone and was often found to be mumbling during his lectures. Overall, I would've hoped that this course was more engaging.
- Not a very entertaining class but professor used his time effectively and clicker question kept lecture attendance high.
- The tests were VERY HARD and CONFUSING. Wording was very tough to understand. A good professor; however, the test seemed out of the ordinary
- Dr. Roose seem to be a nice person and all but he is not a good teacher at all. He talks too much about "pointless" stuff and his slides are not compacted enough, you are better off just reading the entire book. Slides should have ONLY main points. I really had a strong strong desire to take genetics and I was excited to learn stuff but about 5th week into the quarter I lost all interest hugely because of Dr. Roose's teaching style and exams. I read all reading assignments and thought I had good understanding of the material but his exams were just too different. He asks questions on the exams totally different than that of examples given in class or examples given on practice exam. I think his thinking process is that "since I asked gave these examples in class and on practice exam, I'll just ask them totally differently." But again, I think Roose is a good person and it might be just me not liking his teaching style and his exams. Personally, I went from having extremly strong desire to learn genetics to giving up. Oh, and I have to add that it didn't seem like he communicated with TAs very often. Quizes were just as stupid as exams even though they were made by my TA and not Roose. Anyway, I hope Roose's son recovers from broken collar bone fast.
- Lectures of Dr Roose was sometimes difficult to follow because he would just read off the slides. alot of the terms he used was difficult to follow so often times i felt tuned out of lecture wondering what was going on.
- I put in a considerable amount of time and effort into this class, but am still struggling. I do not think that the professor explained the concepts of the class clearly. Instead, he just read from the lecture notes, which came straight out of the book.
- Dr. Roose is very knowledgable and readily available at any time to help with course material. Incredibly kind-hearted professor.
- He assumes things about students which are not correct. Also, not a fair grader him, or the TA. Positive side is that he is very approachable, kind and smart. Just when it comes to grading it is not fair, the reason I feel like that is because I had a bad experience.



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Fall 2009

#### Course: NASC 093 Section: 032 - FRESHMN ADVIS SEM:NAT & AGR SCI Instructor: Mikeal L. Roose

Course Department Campus	672 899 2%
Questions $5 4 3 2 1 Low$ Mean Med SD % tile Mean Med	SD
1 I had a strong desire to take this course 1 3 5 6 4 - 2.5 2.0 1.2 6 3.9 4.0 1.2 19 3.9 4.0	1.1
2 I attended class regularly       12       5       1       1       -       -       4.5       5.0       0.8       75       4.5       5.0	0.9
3 I put considerable effort into this course       5       10       2       -       -       3.9       4.0       0.9       25       4.2       4.0       0.9       52       4.3       5.0	0.9
4 I gained a good understanding of the course content 5 9 4 1 3.9 4.0 0.8 36 4.2 4.0 0.9 59 4.2 4.0	
5 I normally spent at least two hours preparing for each 1 3 4 4 7 - 2.3 2.0 1.3 19 3.4 4.0 1.3 23 3.8 4.0 hour of class	1.2
6 Instructor was prepared and organized       13       2       4       -       -       4.5       5.0       0.8       60       4.5       5.0       0.8       82       4.5       5.0	0.9
7 Instructor used class time effectively       9       2       7       1       -       -       4.0       1.1       27       4.4       5.0       1.0       68       4.4       5.0	0.9
8 Instructor was clear and understandable 10 3 5 1 4.3 5.0 0.9 60 4.3 5.0 1.0 77 4.3 5.0	1.0
9 Instructor exhibited enthusiasm for subject and teaching       5       4       5       3       2       -       3.4       3.0       1.3       8       4.5       5.0       0.9       43       4.5       5.0	0.9
10 Instructor respected students; sensitive to and concerned 13 3 3 4.5 5.0 0.8 50 4.5 5.0 0.9 81 4.4 5.0 with their progress	1.0
11 Instructor was available and helpful       9       4       6       -       -       4.2       4.0       0.9       38       4.4       5.0       0.9       70       4.4       5.0	0.9
12 Instructor was fair in evaluating students       10       4       4       -       1       4.3       5.0       0.8       40       4.4       5.0       0.9       76       4.4       5.0	0.9
13 Instructor was effective as a teacher overall       6       8       4       1       -       -       4.0       0.9       27       4.4       5.0       0.9       67       4.3       5.0	1.0
14 The syllabus clearly explained the structure of the courses 13 4 2 4.6 5.0 0.7 80 4.4 5.0 0.9 87 4.5 5.0	0.8
15 The examinations reflected the materials covered during 8 2 7 - 1 1 3.9 4.0 1.2 33 4.3 5.0 1.0 56 4.4 5.0 the course	0.9
16 The required readings contributed to my learning       7       5       7       -       -       4.0       0.9       46       4.2       5.0       1.1       67       4.3       5.0	1.0
17 The assignments Contributed to my learning       9       3       5       1       1       -       3.9       4.0       1.2       33       4.2       5.0       1.1       62       4.3       5.0	1.0
18 Supplementary materials (e.g. films, slides, videos, guest 10 5 2 2 4.2 5.0 1.0 55 4.3 5.0 1.0 72 4.3 5.0 lectures, iLearn, web pages, etc) were informative	1.0
19 The course overall as a learning experience was excellent       5       1       10       3       -       -       3.4       3.0       1.1       9       4.2       5.0       1.0       50       4.2       5.0	1.0
20 Q1 1 - 2 16 3.7 3.0 1.2 27 4.3 5.0 1.0 55 4.2 5.0	1.1
21 Q2 1 - 2 16 3.7 3.0 1.2 31 4.4 5.0 0.9 57 4.2 5.0	1.0
22 Q3 1 - 2 16 3.7 3.0 1.2 31 4.3 5.0 0.9 57 4.2 5.0	1.0
23 Q4 1 - 2 16 3.7 3.0 1.2 31 4.3 5.0 0.9 57 4.2 5.0	1.0
24 Q5 1 - 2 16 3.7 3.0 1.2 36 4.3 5.0 1.0 55 4.2 5.0	1.1



## UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Fall 2009

Course: NASC 093 Section: 032 - FRESHMN ADVIS SEM:NAT & AGR SCI Instructor: Mikeal L. Roose

Question # 25: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

- Professor Mikeal Roose was a great Freshman Advising Seminar Professor. He always had a bunch of useful information to give us. He was extremely helpful and I learned a lot.
- Professor Mikeal L. Roose was very organized and prepared for this class. The only issue I had with this class however was the amount of homework, most of which I learned very little from.
- This course was boring. Roose seems like a great professor but i feel that this class was unnecessary.
- I didn't feel like I really learned anything in this class. He was always there on time and helpful but he wasn't very approachable and I didn't feel comfortable asking him questions. I felt like it wasn't really a class and that I didn't actually gain anything out of it. While I did learn how to use the internet to find information on teachers or future jobs that's as far as I can honestly say how much "I learned". The class almost made me feel like it was a waste of time and his attitude during class mirrored how I felt. He made me feel like I was wasting my time. He never really seem excited about the material or even interested in what was going on. I got a lot more out of the other part of the class with the other teacher Reina.
- Dr. Roose was very understanding when it came to assignments and he always tried to involve us during out discussions.
- At the beginning of the quarter, I felt this class would not really help me with my college experience. However, after attending class every friday, I feel it has helped me. I learned more about research opportunities (how to find them) and also about career options. The assingments that were assigned also helped and gave me gain more knowledge of UC Riverside.
- This class was a bit boring because it taught me things that I already knew such as majors, careers, and student conduct. His voice was very monotone which made most of the students don't want to pay attention.
- good Professor but sometimes his tone of voice was very monotone and boring.
- Mr.Roose was a good teacher. The assignments he assigned were helpful towards knowing about our majors.
- mr. roose was a somewhat teacher. it felt like he did not want to teach this course but all in all, he did his job.
- I felt the class was a waste of my time



# UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2009

	Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences			A.			R	espon	nent: 1 dents: ate: 4	61		nrolln spond onse R	ents:	266	Resp	ollme onden onse R	ts: 16	5229
				· · · · · ·		Cour	rse			• • •	I	Depart	ment			Cam	ous	
	Questions	<u>5</u> High	<u>4</u>	3	. 2	1 Low		Mear	n Med	SD	% tile	Mear	n Mec	I SD	% tile	e Mear	n Mec	I SD
	1 I had a strong desire to take this course	25	21	9	5	1		4.0	4.0	1.0	38	4.0	4.0	1.0	60	4.0	4.0	1.1
	2 I attended class regularly	41	17	2	÷	-	1	4.7	5.0	0.5	50	4.5	5.0	0.8	85	4.5	5.0	0.9
	3 I put considerable effort into this course	24	26	8	2	-	1	4.2	4.0	0.8	25	4.3	4.0	0.8	60	4.4	5.0	0.9
	4 I gained a good understanding of the course content	26	22	10	2	·	1	4.2	4.0	0.8	22	4.4	5.0	0.8	.70	4.2	4.0	1.0
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	5 I normally spent at least two hours preparing for each hour of class	15	21	17	5	2	1	3.7	4.0		44	3.7	4.0	1.2	57	3.8	4.0	1.2
	6 Instructor was prepared and organized	43	15	2	1	-	_	4.6	5.0	).6	40	4.8	5.0	0.6	86	4.5	5.0	0.9
	7 Instructor used class time effectively	32	21	6	1	1	2	4.3	5.0	).9	14	4.7	5.0	0.6	75	4.4	5.0	0.9
i, s	8 Instructor was clear and understandable	34	19	6	2	-	-	4.4	5.0	0.8	43	4.5	5.0	0.8	80	4.3	5.0	1.0
in - au	9 Instructor exhibited enthusiasm for subject and teaching	31	13	10	5	2	4	4.1	5.0	1.1	13	4.6	5.0	0.8	63	4.5	5.0	0.9
	10 Instructor respected students; sensitive to and concerned with their progress	30	18	9	3	<sup>1</sup> 1		4.2	4.0	1.0	14	4.6	5.0	0.8	68	4.4	5.0	1.0
1	11 Instructor was available and helpful	36	13	11	1	-	· · ·	4.4	5.0 (	).8	17	4.6	5.0	0.7	77	4.4	5.0	1.0
	12 Instructor was fair in evaluating students	34	16	9	2	-	1	4.3	5.0 (		17	4.6	5.0	0.7	71	4.4		1.0
84. 3 4	13 Instructor was effective as a teacher overall	31	18	9	3		21	4.3	5.0 (	).9	20	4.6	5.0	0.7	75	4.4	5.0	1.0
	14 The syllabus clearly explained the structure of the courses	47	11	3	(. <u>.</u> .	· · · -		4.7	5.0 (	).6	63	4.7	5.0	0.7	89	4.5	5.0	0.8
	15 The examinations reflected the materials covered during the course	38	20	2		1		4.5	5.0 (	0,7	43	4.6	5.0		81	4.4	5.0	0.9
	16 The required readings contributed to my learning	29	16	12	2	2	-	4.1	4.0	ľ.1	14	4.3	5.0	1.0	65	4.3	5.0	1.0
•	17 The assignments Contributed to my learning	32	20	6	3	÷	-	4.3	5.0 (	).9	20	4.5	5.0	0.8	72	4.4	5.0	1.0
	18 Supplementary materials (e.g. films, slides, videos, guest lectures, iLearn, web pages, etc) were informative	32	17	. 1 C 4	2	-		4.3	5.0 (	).9	14	4.6	5.0	0.7	75	4.3	5.0	1.0
	19 The course overall as a learning experience was excellent	29	21	6	3	2	 	4.2	4.0	0.1	17	4.5	5.0	0.8	73	4.3	5.0	1.0
	20 Q1	3	2	· _		-	56	4.6	5.0 (	).5	50	4.9	5.0		85	4.4	. <u>1</u> . •••	1.0
	21 Q2	2	2		· -	÷.	57	4.5	4.5 (	- C	60	4.8	5.0		81	4.4		1.0
	22 Q3	1	2	<del>.</del> .	-	-	58	4.3	4.0 (	).6	60	4.8	5.0	0.4	71	4.4	25 C.C.	1.0
	23 Q4	1	2	·		_	58	4.3	4.0 (	).6	67	4.9	5.0	0.3	72	4.4	5.0	1.0
-	24 Q5	1	1	<b>-</b> . '	_	-	59	4.5	4.5 (		50	4.9	5.0		80	4.4	5.0	
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## UC RIVERSIDE - Faculty Instruction Evaluation (iEval) Spring 2009

Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose

Question # 25: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybé used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

- Good professor. Taught important parts of material, and focused on important terms. Tests were somewhat fair, but difficult to grade due to it not being
  multiple choice (except final). Overall, a great teacher, but hard material
- I liked the incorporation of the clickers because it allowed me to apply the material at that moment. I also felt that his teaching is good because I was able to understand many of the topics very easily based on the information that he gave us.

• Professor Roose makes very clear and straightforward lectures on his Powerspoint slides. The slides are very thorough and touch on most important concepts we should gain from each lecture. His clicker quizes are thought-provoking and his exams are pretty straightforward with no trick questions. Although the material is presented very nicely, he could work on bringing some enthusiasm toward teaching genetics. The students would greatly benefit from genetics problems worked out on the chalkboard by the professor too. The students will understand the strategies to tackle the problems instead of just reading off the lecture slides. I think the slides needs some hands-on explanation. Overall, he is very organized and very helpful during office hours.

• You are doing just fine in my opinion. So I would like to say thank you for taking time to help me with my clicker and other questions in office hours,

• Great Professor. I loved attending his lectures. He did an excellent job with the class. He clarified all the details within the course. He was also very nice and it was great that he held review sessions before exams. Overall, I was very satisfied with having Dr. Roose as my genetics professor.

Dr. Roose's course was excellent. His Genetics Clinic was really helpful for students. Dr. Roose should keep it in future. He was very generous and kind to help students. And his clicker questions were very good device to keep us awake and participate our brain, not only our ears. I have nothing to add more. If I grade his course and TAs, the grade will be A+. Also Dr. Roose was kind enough to have a conversation with students about other questions. Those conversations encouraged me to learn and explore more about this Genetics. I just hope that he will keep his performance forever. Thank you for all your help

• Dr. Roose is very helpful during the genetics clinic that is offered to students. He cares about how his students perform in his class and is willing to help.

• He was a little boring...if he would just put a little more enthusiasm in his lectures i might not have been put to sleep a quarter of the time.

- The course itself was a great learning experience and the subject matter was well organized the way the instructor had put it together. Not much else to add. Nothing I would change the way the course was organized.
- Dr. Roose was a highly effective teacher. His powerpoints were excellent and easy to understand. He is willing to do all he can for students in making sure that they understand the course material as well as are succeeding in the class. I would highly recommend him as a professor, not only for this course, but for any course he may be teaching.
- The slides were really helpful. I would like less words on the slides so I can write things down more, making it more memorable. When I misunderstand somethings the clickers help me see what I did wrong and keeps me on track. The animation shows were also helpful.
- It is obvious that Professor Roose knows his material. I was just put off a bit from the lack of working out problems during lecture, especially since the midterms consist of short answers and work out problems.
- Dr. Roose is an amazing professor that always came to class prepared and with a smile on his face. He truly cared about us and this love was reflected in his attitudes about class. He prepared notes for us and printed them out for us everyday so he can better actively learn, which is an amazing thing. I would love to take another course with Dr. Roose in the future!

• It would be more helpful if the notes were posted online ahead of time, so students could download them and bring them to class if they wanted to. It

#### would also save paper.

- Good professor. I think that the lecture slides, or the lecture schedule should be changed so he can finish the lectures.
- 1 felt a bit rushed when taking the two midterm exams and thought we needed a little more time. Exams were pretty fair and straightforward, but the time constraints were a problem for me.
- The quizzes were helpful. It motivated me to study every week, which makes studying for the midterms a lot easier. Having 2 lowest quizzes dropped is nice since students are more relaxed in taking the quizzes. Also, assignments were good because they help prepare for the quizzes and exams. They give us an idea on how the concepts relate to each other and how they can actually be applied. Lectures were a bit boring though, since the professor just reads off the slides. Lecture notes, however, were very useful!.. They focus on just the important stuff. Professor is very accommodating. He gives review sessions before the exams, and practice exams that he posts are really useful. I enjoyed the class overall.
- The only complaint is the monotone voice that really doesn't help with the lecture because it makes it seem you do not want to be there. Also, I think there should be a more equal point distribution with the tests.
- Really great and caring teacher. Tests were the right amount of difficulty. They required studying, but were not impossible. Lectures were informative. Clicker questions were a little difficult. I didn't feel that the class was well enough prepared for the clicker questions when they were given.
- Overall a good teacher of the subject. The presentation of the material was effective, though a little bland at times. Class time was used to its fullest and overall I am happy with the course.
- Professor Ruse was an awesome professor. I really don't have much to say, the class was very straightforward, he clearly explained everything in the notes during lecture, and was just a great guy in general! And he looks like the actor Chris Elliot, how much more awesome can you get?!
- Had good powerpoint presentations and always made sure students were prepared for the exams. When asked about certain slides on his powerpoint presentations, he sometimes would not know how to explain them.
- Always very helpful in clarifying the material.
- Great person and professor, however the tests are very simple, not much room to really prove the details that are important that we know. During lecture needs to not read directly off slides... that doesn't help anyone- we can read, so just teach! overall A-.
- Professor was very helpful and provided a lot of extra help to those who wanted it. Office hours were extremely helpful and he was straight forward with what he wanted us to really know when it came exam time. Overall pretty good professor.
- Mono-tone, making it very difficult to enjoy the class. The only reason students showed up to lecture was for the clicker questions.
- I enjoyed this class more than I thought I would. Mike Roose is a great teacher and VERY knowledgeable about the subject matter. He explained difficult to understand subject matter lucidly and step by step. The well formed power point presentations explained most of the subject material, with only a small percentage of book reading. I definitely enjoyed the lectures more than the books.

ok teacher. not approchable at all. laughed at me when i asked a question. tests are fair but too long



Course: BPSC 150 Section: 001 - PRINCIPLES OF PLANT

# UC RIVERSIDE - Student Evaluation of Instructor, Instructional Development Courses - Winter 2008

Questions         Course         Department         Camp           1         1 had a strong desire to take this course         4         2         -         -         -         4.7         5.0         0.5         89         4.1         4.0         1.0         88         3.9           2         1 attended class regularly         4         2         -         -         -         4.7         5.0         0.5         89         4.1         4.0         1.0         88         3.9           1         1 but considerable effort into this course         1         2         3         -         -         3.7         3.5         0.8         14         4.2         4.0         0.7         24         4.2           1 pained a good understanding of the course content         -         4         1         -         -         3.5         4.0         0.8         22         4.1         4.0         0.8         32         4.4         2.0         0.7         79         4.5           6         Instructor was prepared and organized         1         4         1         -         -         4.0         4.0         0.6         33         4.4         5.0         0.7         62	t: 26901 s: 19299 ste: 72%
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5I normally spent at least two hours preparing for each hour of class-1-32-2.02.01.1113.43.01.173.56Instructor was prepared and organized1414.04.00.6334.45.00.7604.47Instructor used class time effectively1414.04.00.6304.45.00.7604.48Instructor was clear and understandable23-14.04.01.1504.14.01.0664.39Instructor exhibited enthusiasm for subject and teaching22113.53.51.0104.55.00.7424.410Instructor respected students; sensitive to and concerned with their progress-423.53.51.0104.55.00.7424.411Instructor was available and helpful-423.33.00.5114.34.00.8484.312Instructor was effective as a teacher overall13113.74.00.8134.34.00.8524.414The syllabus clearly explained the structure of the course1 <td>4.0 0.8</td>	4.0 0.8
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20 Q1 6 n/a n/a n/a 3.0 3.0 0.0 n/a 4.5	5.0 0.9
21 Q2 6 n/a n/a n/a 3.0 3.0 0.0 n/a 4.4	5.0 1.0
22 Q3 6 n/a n/a n/a 3.0 3.0 0.0 n/a 4.4	5.0 1.0
23 Q4 6 n/a n/a n/a 3.0 3.0 0.0 n/a 4.5	5.0 0.9
24 Q5 6 n/a n/a n/a 3.0 3.0 0.0 n/a 4.5	5.0 0.9

#### UCR STUDENT EVALUATION OF TEACHING FORM OFFICE OF INSTRUCTIONAL DEVELOPMENT WINTER QUARTER 2008

Instructor: Roose, Mikeal L. Enrollment: 9 (Excluding auditors and concurrently enrolled students) Course: Botany/Plant Science 150 PRINCIPLES OF PLANT BREEDING

Home Dept.: Botany and Plant Sciences

Number of Forms Returned: 6

Tracking Number: 154

Below are the comments submitted by the students enrolled in the above listed course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

The comments have been ordered on the basis of student responses ( 5-Strongly Agree , followed by 4-Agree, etc...) to the following questions: Section 2 - 1A: I had a strong desire to take this course. Section 2 - 8B: Instructor was effective as a teacher overall Section 2 - 6C: The course overall as a learning experience was excellent The comments of students who did not respond to the questions were typed last. It is hoped this ordering system will provide a useful but unbiased grouping of comments.

1. This course could be presented better. A bit dry, sometimes hard to visualize the concepts.

2. THE LECTURES ON MOLECULAR TECHNIQUES WERE CONCEPTUALLY VERY CHALLENGING AND COULD HAVE USED MORE TIME IN ORDER TO UNDERSTAND THE CONCEPTS EFFECTIVELY.

3. The course material is very dry and difficult to understand without examples.

4. Need to explain how to do the problems in more detail.



Ouestions

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hour of class

## UC RIVERSIDE - Student Evaluation of Instructor, Faculty Evaluation Courses - Spring 2007

Course: GEN 240B Section: 001 -**ADVNCES-BIOINFORMATCS & GENOMICS** Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences

Enrollment: 647 Enrollment: 19216 Enrollment: 6 Respondents: 323 Respondents: 8813 Respondents: 6 Response Rate: 46% Response Rate: 100% Response Rate: 50% Campus Department Course % tile Mean Med SD % tile Mean Med SD N/A Mean Med SD 3 2 1 High Low 4.0 1.1 92 4.0 4.0 1.1 100 3.8 I had a strong desire to take this course 5 4.8 5.0 0.4 100 5.0 0.9 I attended class regularly 6 5.0 5.0 0.0 100 4.3 5.0 1.0 4.4 3 4.5 4.5 0.5 71 4.2 4.0 0.9 72 4.3 4.0 0.9 I put considerable effort into this course 3 5 5.0 0.8 86 4.2 4.0 0.9 86 4.1 4.0 1.0 4.7 I gained a good understanding of the course content 52 3.6 4.0 1.2 4.0 1.5 83 3.5 4.0 1.2 2 3.8 I normally spent at least two hours preparing for each 100 5.0 0.7 100 4.4 5.0 0.9 5.0 5.0 0.0 4.5 Instructor was prepared and organized 6 5.0 0.7 92 4.3 5.0 1.0 5 4.8 5.0 0.4 86 4.5 Instructor used class time effectively 1 5.0 0.9 89 5.0 1.1 5.0 0.5 67 4.3 4.3 4 2 4.7 Instructor was clear and understandable 5.0 0.9 100 4.4 5.0 1.0 5.0 5.0 0.0 100 4.4 Instructor exhibited enthusiasm for subject and teaching 6 5.0 1.0 10 Instructor respected students; sensitive to and concerned 5 4.8 5.0 0.4 80 4.5 5.0 0.8 91 4.3 with their progress 4 4.7 5.0 0.5 63 4.4 5.0 0.8 86 4.3 5.0 1.0 11 Instructor was available and helpful 5.0 0.8 5.0 0.4 86 91 4.3 5.0 1.0 12 Instructor was fair in evaluating students 4 1 4.8 44 92 5.0 1.0 13 Instructor was effective as a teacher overall 5 4.8 5.0 0.4 83 4.4 5.0 0.9 4.3

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# UC RIVERSIDE - Student Comments of Instructor, Faculty Evaluation Courses - Spring 2007

Course: GEN 240B Section: 001 - ADVNCES-BIOINFORMATCS & GENOMICS Instructor: Mikeal L. Roose

No Comments found



# UC RIVERSIDE - Student Evaluation of Instructor, Faculty Evaluation Courses - Spring 2007

Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences		۰.	-		R	espon	nent: 229 dents: 85 ate: 37%	Re	sponde	nent: 647 ents: 323 ate: 50%	Resp	onder	nt: 192 nts: 88 ate: 46	13
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Questions	<u>5</u> High	<u>4</u> <u>3</u>	2	1 Low		Mean	Med SD	% tile	Mean	Med SD	% tile	Mean	n Med S	SD
1 I had a strong desire to take this course	35	25 16	57	2	-	4.0	4.0 1.1	67	3.8	4.0 1.1	58	4.0	4.0 1	.1
2 I attended class regularly	63	16 4	1	1	-	4.6	5.0 0.7	67	4.3	5.0 1.0	75	4.4	5.0 0	).9
3 I put considerable effort into this course	38	38 6	2	1	-	4.3	4.0 0.8	57	4.2	4.0 0.9	61	4.3	4.0 0	).9
4 I gained a good understanding of the course content	35	40 7	1	2	-	4.2	4.0 0.8	57	4.2	4.0 0.9	64	4.1	4.0 1	.0
5 I normally spent at least two hours preparing for each hour of class	25	30 20	) 7	3	-	3.8	4.0 1.1	83	3.5	4.0 1.2	52	3.6	4.0 1	.2
6 Instructor was prepared and organized	53	22 7	2	1	· <del>-</del>	4.5	5.0 0.8	40	4.5	5.0 0.7	77	4.4	5.0 0	).9
7 Instructor used class time effectively	53	20 9	2	1	-	4.4	5.0 0.9	43	4.5	5.0 0.7	76	4.3	5.0 1	.0
8 Instructor was clear and understandable	44	24 11	4	2	-	4.2	5.0 1.0	33	4.3	5.0 0.9	70	4.3	5.0 1	.1
9 Instructor exhibited enthusiasm for subject and teaching	32	26 15	10	2	-	3.9	4.0 1.1	17	4.4	5.0 0.9	. 52	4.4	5.0 1	.0
10 Instructor respected students; sensitive to and concerned with their progress	43	26 12	2	2	-	4.2	5.0 1.0	20	4.5	5.0 0.8	65	4.3	5.0 1	.0
11 Instructor was available and helpful	45	25 12	2	1	-	4.3	5.0 0.9	38	4.4	5.0 0.8	68	4.3	5.0 1	.0
12 Instructor was fair in evaluating students	44	26 7	4	2	2	4.3	5.0 1.0	43	4.4	5.0 0.8	70	4.3	5.0 1	.0
13 Instructor was effective as a teacher overall	35	35 8	4	-3	-	4.1	4.0 1.0	33	4.4	5.0 0.9	64	4.3	5.0 1	.0
14 The syllabus clearly explained the structure of the courses	58	23 3	-	1	-	4.6	5.0 0.7	33	4.5	5.0 0.7	82	4.4	5.0 0	).9
15 The examinations reflected the materials covered during the course	54	21 6	· 2,	2	-	4.4	5.0 0.9	29	4.5	5.0 0.8	73	4.3	5.0 1	.0
16 The required readings contributed to my learning	38	22 18	2	4	1	4.0	4.0 1.1	33	4.1	4.0 1.0	57	4.2	5.0 1	1.0
17 The assignments Contributed to my learning	37	30 13	1	4		4.1	4.0 1.0	25	4.2	4.0 1.0	57	4.3	5.0 1	0.1
18 Supplementary materials (e.g. films, slides, videos, guest lectures, iLearn, web pages, etc) were informative	41	30 10	) 1	3	-	4.2	4.0 1.0	33	4.3	5.0 0.9	67	4.2	5.0 1	.0
19 The course overall as a learning experience was excellent	31	39 11	1	3	-	4.1	4.0 0.9	29	4.2	4.0 0.9	67	4.1	5.0 1	11
20 Q1	7	12	-	1	74	4.2	5.0 1.3	50	4.3	5.0 0.9	67	4.3	5.0 1	.1
21 Q2	6	12	-	1	75	4.1	5.0 1.4	43	4.3	5.0 1.0	64	4.2	5.0 1	.1
22 Q3	6	12	-	-1	75	4.1	5.0 1.4	60	4.2	4.5 1.0	63	4.2	5.0 1	.1
23 Q4	6	1 2	-	1	75	4.1	5.0 1.4	57	4.3	5.0 1.0	65	4.3	5.0 1	.1
24 Q5	6	1 1	-	1	76	4.2	5.0 1.4	67	4.2	4.5 1.0	71	4.2	5.0 1	.1
										14 A.				



## UC RIVERSIDE - Student Comments of Instructor, Faculty Evaluation Courses - Spring 2007

Course: BIOL 102 Section: 001 - INTRO:GENETICS Instructor: Mikeal L. Roose

Question # 25: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

- Why was the first midterm written my the teaching assistants??? Why do I pay lots of money to be tested on the material that the grad students and not the professor feels is important? Why do the teaching assistants "clearly" control how the class is ran?? I will "NOT" recommend this professor to my fellow students.
- i think the group activities in discussion are a waste of time and it would be better if the TA's just went over the material of the previous week. i like the clickers in there cuz it brings students to class.
- One of the best teachers I have had, very approachable especially when teaching such hard material!
- Professor Roose is a good teacher but he does not care how students do in his class. Many students work really hard in his class and still do not get the grade they deserve.
- He's really really nice, but he has a very boring voice. However, he is an excellent professor and very straightforward with his expectations. His practice tests included concepts that he will test on, so as long you know the concepts well, the test is not bad.
- i really enjoyed this class and this teacher!! he was very entertaining and made class enjoyable!
- Clickers are great. Should have more than 2 each lecture. Discussion sections (problem solving in groups) are not that helpful. Personally I think the TA reviewing concepts from previous lectures is better than doing problems in groups. Listening to other people presenting the answer to a question that I haven't had the chance to solve is pointless. On the exams, there tend to be a few questions that are quite unexpected. Also the last part of the course, I feel the instructor went through too much material in too little time. He's an effective instructor overall. I would take another course with him.
- This was a good class over all. The lectures were too long and it was difficult to pay attention for the entire time. The professor was very knoweldgeable about the subject material. The clicker questions were great, however it would be nice if he gave a time warning of when thee next one would be asked because there were several times I needed to use the restroom but did not for fear of missing a question.
- Overall, I think he is an effective Professor, however, he should learn how to control the class, since it is always noisy, which is a distraction to other students that are willing to listen and learn. In constrast, the method used during discussion was very helpful, as students in the same group could help each other out in areas they are having difficulties. Clicker quizzes was also helpful, as I used it as a measuring tool to see were I needed more studying. In general, I enjoyed the class and learnt a lot.
- Great Teacher
- Review section is very helpful.
- The lecture notes for this class were very dense. I find it helps to have less notes on the slides and more writing. This helps me remember the material better. Also, the clickers were very helpful because they reviewed the information just learned. Sometimes, though, I felt like the questions would take too long to answer or were worded confusing. The discussion section format was also helpful because discussing it with the class is an effective way to learn. The quizzes given were also fair.
- Roose definitely understands what he is teaching and is always prepared to give a thorough and efficient lecture. My main problem is that he is really boring. He does not exhibit a whole lot of enthusiasm for what he is teaching. Every lecture it is a struggle not to zone out or doze off, I even catch some of the TA's doing it! But his lectures, which he posts on ilearn are incredible thorough, so I feel I can do just as well not going to lecture and just going on ilearn to learn the material, since he pretty much reads right off his slides anyways. The only reason to go to lecture is for the clicker questions, otherwise, I could do just as well not going.

• He is a good professor, but he has a monotone voice- sometimes it's hard to pay attention in lecture.

- Dr. Roose knows what he is talking about. He's probably an excellent researcher, but I think there's a little more work needed to be an even more effective teacher. There's nothing wrong with his material, but the way he lectures. I get sleepy from the monotonous voice (what can he do about that right?) and just want out. Other than that, good teacher overall!
- The quizzes in discussion sections helped prepare for midterms a lot. I found clinic useless b/c I was unable to attend any sessions due to conflicts with other classes. Dr. Roose's lectures are straightforward, but he reads straight off of his notes, which makes his class a tad dull. Without the clicker quizzes, I don't think anyone would attend class. He should try to spice up his lectures a bit more
- the clicker questions were okay just if the professor knew more of how to work with the clicker program.
- His notes are very organized, simple, and helpful. His clickers make us pay attention and attend class (although a 6:40-8PM class was tempting to ditch). His voice was fairly monotone, and the timing of the class made people counting down the minutes until they can leave. Roose is a nice guy who teaches fairly complicated material quite simply, but I have trouble hearing him sometimes in a monotone voice.
- Dr. Roose has told us we were the first class to implement the clicker use, and I find it very helpful. The use of clickers are a great way for students to understand where they are weak in. I don't see any downside with the use of clickers, except probably the need to punish students who click in for their friends. These are points that they don't deserve. As for discussion, I would very much prefer if the TA clarified certain main points of the lecture. I know this is hard to do since a lot of people have different discussion days and I don't really have an idea on how to implement my idea. I just feel the usage of our current discussion to be inefficient.
- As requested, I will first attend to clickers and problem-solving in discussion. I liked the clickers in that they helped my focus stay on the material being
  presented and added interaction to the course. More profiency in their use by the professor would greatly increase their benefit. The problem-solving
  discussion sections were pretty cool while they lasted. After the second or third week my TA switched to a lecture format and discussion became more
  boring and less helpful. The genetics clinic every Monday were quite helpful. Dr. Roose is an obviously brilliant man, but very introverted. I think he
  would be a much more effective professor in a smaller class. I saw glimpses of who he was and his vast knowledge, but usually had to struggle to pay
  attention because his nerves at lecturing a class of about 200 made his voice monotone and his explanations strained and often unclear.
- I thought the professor was very good, but lectures could get a bit boring. I think a bit more enthusiasm could help but I enjoyed the class and learned from it. He has review sessions and clinics, but the clinic times were kinda early.. but at least they were there, so he was available for questions and that is good. He knows his material, and that's good. I like his clicker system distribution of points too, because sometimes I would forget my clicker on accident.
- His TA's are very helpful and his lecture is very straightforward.
- Dr. Roose's notes are detail. Sometimes the homework problems assign are more complex than the ones in the midterms. For the first midterm, I did all the homework problems and it didn't help me with the midterm much. I didn't do that well on the first midterm. The second midterm I did better because I emphasize my studies on his notes only. I ask the TA for help if I needed clarification from his notes. Thus, understanding the concepts and problems presented in the notes were the most important part while the assigned problems were supplementary.
- Great class, but you need to explain the clicker questions more in depth. Sometimes we really don't know why the correct answer is correct.
- the class is great but the instructor needs to explain some lectures in more detail.
- Dr. Roose comes to lecture prepare and organized. There are at times when students ask questions in class, he seems that sometimes he cannot really answer them. Another thing is the lectures a little bit dull and boring. Just feels like sometimes professor just reads off the lecture notes he has. I like the clicker questions because it helps access the things we just learned. Overall, ok professor, just needs to work on how to present the materials in a more fun way.
- The professor used clicker questions throughout the lecture well, and he may want to include more of them to keep people awake.
- Should have more enthusiasm during lecture to keep everyone motivated and active in learning.

good professor

- I guess he's a good professor but he should work on keeping the class awake. His voice seems monotone and boring and makes it difficult to stay awake and be able to listen in class. The clickers are the only thing that makes me stay awake and try to listen.
- Having slides of the material really helped underscore the important details and made studying easier.

• The clickers were very helpful in making sure I paid attention. The instructor was fair and presented the material in a clear way. He also was very approachable and seemed genuinly concerned with students progress.

• Great professor. Lectures are way to long and too much information. I did not like the fact that TAs help you write th midterms and final.

- Dr. Roose is a very organized teacher... I only wish that the first midterm would have been shorter in length, due to the fact that hardly anyone was able to finish all the questions in the time available.
- Thank you Dr. Roose for giving the opportunity to students to do well. The second exam was much more fair than the first and that is why students did better. It was not because the exam was easier. It trully tested the concepts you taught us in class.
- I really did not want to take this class why because it was at 6:40 to 8. What I bad time. A note, you made your lecture notes too wordy. And tell some jokes do a little dance or something. Because I was board out of my mind. And no, this is not from a person with a bad grade in the class. Class was not fun. The clicker questions sucked because they were too hard for something we just heard about a few minutes before. I wish you would just give us the big picture so we can relate things to future careers.

• okay teacher way too monotone

• Clicker questions are alright. Dr. Roose would be more effective professor if he didn't read verbatim off the lecture slides. Using the board and re=explaining concepts in a different way would help a lot. Other than that, fair instructor.



UC RIVERSIDE - Student Evaluation of Instructor, Faculty Evaluation Courses - Winter 2007

	Course: BPSC 240 Section: 003 - SPECIAL TOPICS IN PLANT BIOLOGY Instructor: Mikeal L. Roose Home Dept.: Botany and Plant Sciences							Enro Respoi onse R		s: 4		nrollm sponde nse Ra	ents:	139	Res	ollmer ponder onse R	nts: 7	286	
						Cours	e				Ē	Departr	nent		· · ·	Camp	ous		
			4	2	~	1		Mean	Mad	- CD	% tile	Mean	Med	SD	% tile	Mean	Mec	SD	
	Questions	<u>5</u> High	<u>4</u>	<u>3</u>	<u>2</u>	1 Low	<u>IN/A</u>	Ivical	INICU	SD	70 the	wicali	IVICU	30		Ivican	WICU	.00	
		8						-			<b></b>				,				
	1 I had a strong desire to take this course	-	3	1	-	s _	-	3.8	4.0	0.5	50	3.8	4.0	1.1	48	3.9	4.0	1.2	
	2 I attended class regularly	3	1	-	-	-	-	4.8	5.0	0.5	75	4.4	5.0	0.9	88	4.5	5.0	0.9	
	3 I put considerable effort into this course	3	1.		-		-	4.8	5.0	0.5	100	4.2	4.0	0.9	88	4.3	4.0	0.9	
	4 I gained a good understanding of the course content	<sup></sup> 4		-	-	-	-	5.0	5.0	0.0	100	4.0	4.0	1.0	100	4.1	4.0	1.0	
	5 I normally spent at least two hours preparing for each hour of class	3	-	-	•	1	- <b>-</b> - 2	4.0	5.0	2.0	80	3.6	4,0	1.2	66	3.6	4.0	1.2	
	6 Instructor was prepared and organized	3	-	1	-,	- '	-	4.5	5.0	1.0	50	4.2	4.0	1.0	77	4.4	5.0	0.9	
	7 Instructor used class time effectively	3	1	-	-	-		4.8	5.0	0.5	80	4.2	4.0	1.0	92	4.4	5.0	1.0	j.
2	8 Instructor was clear and understandable	3	1		,	-	• •	4.8	5.0	0.5	100	4.1	4.0	1.1	93		5.0		14. 19
	9 Instructor exhibited enthusiasm for subject and teaching	3	1	-	<b>-</b>	-	-	4.8	5.0	0.5	80	4.3		1.0	91		5.0		
	10 Instructor respected students; sensitive to and concerned with their progress	3	1	-	-	-	- 1 1 1	4.8	5.0	0.5	75	4.1	4.0	1.0	91	4.3	5.0	1.0	
	11 Instructor was available and helpful	3	-	1	-	-		4.5	5.0	1.0	75	4.1	4.0	1.0	78	4.3	5.0	1.0	
	12 Instructor was fair in evaluating students	3	1	· -	•	•	- <sup>1</sup> ;	4.8	5.0	0.5	80	4.1	4.0	1.0	91	4.3	5.0	1.0	
	13 Instructor was effective as a teach overall	3	1	-	-	- '	- 1	4.8	5.0	0.5	80	4.0	4.0	1.1	<u>9</u> 3	4.2	5.0	1.1	
	14 The syllabus clearly explained the structure of the courses.	2	2	-	-	-	-	4.5	4.5	0.6	60	4.3	5.0	1.0	74	4.4	5.0	0.9	
4	15 The examinations reflected the materials covered during the course	2	÷	` <b>1</b> '	. <del>-</del> 		ľ	4.3	5.0	1.2	50	4.1	4.0	1.0	68	4.3	5.0	1.0	
÷	16 The required readings contributed to my learning	4	-	+	-	-	÷	5.0	5.0	0.0	100	4.1	4.0	1.0	100	4.2		1.0	
•	17 The assignments Contributed to my learning	3	-	1	-	-	-	4.5	5.0	1.0	100	4.0	4.0	1.0	80	4.2		1.0	
	18 Supplementary materials (e.g. films, slides, videos, guest lectures, iLearn, web pages, etc) were informative	<b>3</b> 5	-	-	-	·	. 1	5.0	5.0	0.0	100	4.1		1.1	100	4.2	5.0	1.1	
۲. 	19 The course overall as a learning experience was excellent	4	-	-	-	-		5.0	5.0	0.0	100	4.0	4.0	1.0	100	4.1	4.0	1.1	
	20 Q1	-	-	-	-		4	n/a	n/a	n/a	n/a	3.5	3.0	1.4	n/a	4.2	5.0	1,1	
	21 Q2	-	-	-	-	e e e e e e e e e e e e e e e e e e e	4	n/a	n/a	n/a	n/a	3.6	3.0	1.2	n/a	4.2	5.0	1.0	
	22 Q3	· -	* ( <u>*</u>		-		4	n/a	n/a	n/a	n/a	3.5	3.0	1.3	n/a	4.2	5.0	1.0	
	23 Q4	-	-	-	-	-	4	n/a	n/a	n/a	n/a	3.7	4.0	1.3	n/a	4.2	5.0	1.0	
1	24 Q5	-	•	• -	-	-	4	n/a	n/a	n/a	n/a	3.7	4.0	1.3	n/a	4.2	5.0	1.0	



### UC RIVERSIDE - Student Comments of Instructor, Faculty Evaluation Courses - Winter 2007

Course: BPSC 240 Section: 003 - SPECIAL TOPICS IN PLANT BIOLOGY Instructor: Mikeal L. Roose

Question # 25: Please comment on how the instructor's teaching helped your learning of the material in this course. Please give serious thought to your comments. Your comments will be studied by the professor after the grade and performance evaluation of your work have been submitted and may be used in changing future offerings of the course. In addition, these comments are placed in the instructor's file and maybe used for purposes of evaluating the instructor's teaching. The information collected will remain anonymous

• I enjoyed the relaxed but demanding class structure. I think debate is a highly unused teaching tool and an idea to experiment with might be to assign 'sides' of a debate to different individuals during a couple of topics to engage people.

• It is a good chance for me to learn something about the real application of biotech, rather than just study the princeple of biology.

#### UCR STUDENT EVALUATION OF TEACHING FORM OFFICE OF INSTRUCTIONAL DEVELOPMENT WINTER 2003

BIOLOGY DEPARTMENTAL SUMMARY

ENROLLME	NT:3609	FORM	S COMPLETE	D:2466	PERCENT C	OMPLETED	: 68.3	
	BOOD		RATING OF				EXCELLENT	NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	32	52	112	256	543	831	(7) 6 <b>3</b> 0	10
	MEAN: 5	.54	MEDIAN:	6.00	STAN	IDARD ERR	DR: 0.02	
2. WHAT	IS YOUR	OVERALL	RATING OF	THE CO	URSE?		ENCELLENT	ΝA
	POOR	$\langle \mathbf{n} \rangle$	$\langle \mathbf{n} \rangle$	(A)	(5)	(6)	EACELLERT	(0)
	(1)	(2)	(3)	(4)	(3)	(0) 603	EXCELLENT (7) 522	12
NUMBER	46	64	130	334	629	073	344	12
	MEAN: 5	.30	MEDIAN:	5.00	STA	IDARD ERR	OR: 0.02	
NUMBER							ALWAYS (7) 826 OR: 0.02	
UNDE	RSTANDIN	G THE CO	CONCERNED A	NIAL?				
	NOT CON	CERNED	SOME	WHAT CON	CERNED	V	ERY CONCERN	IED NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	63	68	115	276	479	694	ERY CONCERN (7) 749	22
							OR: 0.03	
5. HAVE	YOU LEA DEFINIT		ETHING YO	U CONSIE SOME EX		LE?	DEFINITELY Y	ES NA
				(4)	(5)	(6)	(7)	(0)
NUMBER			116		448		794	11
MOLDERV	51	57	410	~~··				

MEAN: 5.50 MEDIAN: 6.00 STANDARD ERROR: 0.03

#### UCR STUDENT EVALUATION OF TEACHING FORM OFFICE OF INSTRUCTIONAL DEVELOPMENT WINTER 2003

M. ROOSE			BIOLOGY	102				
GENETICS								
ENROLLMEN	IT: 130	FORMS	S COMPLETE	D: 80	PERCENT CO	MPLETED:	61.5	
1. WHAT	IS YOUR POOR	OVERALL	RATING OF	THE INS	TRUCTOR?		EXCELLENT	NA
		(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	1	2	6	16	19	26	10	0
	MEAN: 5	.10	MEDIAN:	5.00	STANI	DARD ERRO	R: 0.14	
2. WHAT	IS YOUR	OVERALL	RATING OF	THE COU	RSE?			
	POOR	$\langle \mathbf{n} \rangle$	(3)	(h)	(5)		EXCELLENT (7)	NA (0)
NUMBER	(1) 1	(Z) 0	(3)	(4)	30	25	11	1
KONDER		.34	MEDIAN:				PR: 0.12	ı
		LE MANNE	00	CASIONAL	LY		ALWAYS	
	(1)		(3)	(4)	(5)	(6)	(7)	(0) 0
NUMBER	0	2	2	10	14	20	20	U
	MEAN: 5	.72	MEDIAN:	6.00	STAN	DARD ERRC	DR: 0.14	
	RSTANDIN	G THE CO	ONCERNED A URSE MATER	IAL?				
	NOT CON	CERNED	SOMEW	HAT CON	CERNED	VE	CONCERN	IED NA
	(1) 4	(2) 2	(3) 3	(4) 1 <b>2</b>	(S) 20	(6) 28	(7) 10	(0) 1
NOLIDEIK			MEDIAN:				DR: 0.16	
		·						
5. HAVE			ETHING YOU			E?	EFINITELY Y	VES NA
	$\frac{\text{DEFINIT}}{(1)}$	ELY NOT (2)	(3)	SOME EX	(5)		(7)	(0)
NUMBER	1	1	3		22		23	0
	MEAN: 5	5.48	MEDIAN	: 6.00	STAN	DARD ERR	DR: 0.14	

#### UCR STUDENT EVALUATION OF TEACHING FORM OFFICE OF INSTRUCTIONAL DEVELOPMENT WINTER QUARTER 2003

Instructor: <u>M. Roose</u>

Course: <u>Biology 102</u> Genetics

Enrollment: <u>130</u> (Excluding auditors and concurrently enrolled students)

Number of Forms Returned: <u>80</u>

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

The comments have been ordered on the basis of student response to Question 1: "What is your overall rating of the instructor?" The first comments typed are those made by students who gave the instructor the highest rating (e.g. 7 or excellent), followed by the comments made by students who rated the instructor "6", etc. The comments of students who did not respond to the questions were typed last, after 4 spacing lines. It is hoped this ordering system will provide a useful but unbiased grouping of comments.

- 1. He goes over the lecture very quickly in class so it can get confusing. However, he does a great job in clarifying lecture in office hours and the genetics clinics.
- 2. The only suggestion I have is that he be a little more lively in class. He also needs to slow down and emphasize important pnts better.
- 3. Mike kicks (profanity)! He is so sweet he makes my heart thump up and down everytime he talks about genetics. If it were up to me I would make Mike the ruler of the universe. I am growing out my beard just so I can look like him. To some it all up I'll quote my favorite song dedicated to this omnipotent instructer "If I coul be like Mike"
- 4. Good professor
- 5. He definitely likes his work. He knows his stuff!
- 6. Dr. Roose is an understandable, informative, and concerned instructor. The course however, could be improved by more hand on experience. In biology and chemistry, labs help to emphasize the material. In a course like this, it would be helpful.
- 7. I like that the midterms are written because I perform better than on multiple choice. For future classes I would reccommend that the final be in written form also.
- 8. Dr. Roose made "Genetics class go smoothly. He was ver concise and helpful with explaining the topics about Genetics. He was also very instructive.

M. Roose	Μ.	Roose
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- 9. The lecture notes are nice to have, though I never even looked at the text book because I had the notes...
- 10. More than just reading off power point, please lecture in a way that students understand. Some points arn't clear and covered too fast.
- 11. Mikea Roose is very good instructor.
- 12. I felt that the lectures were a little slow, he needs to pick up the pace a little bit. But I thought everything else was good.
- 13. The lectures need to be more interesting, so the material we are learning becomes appealing, wich therefore will allow us to be motivated to learn the material better!
- 14. Reads off of his slides too often rather than explaining what it is.
- 15. Very organized, and helps given to students. Keep it up!
- 16. He was very patient with the many rude students he had to put up with: very commendable.
- 17. Wonderful but try not to read off the lec. notes
- 18. Presented material in a clear and understandable manner but was also very dry in presenting it.
- 19. This class would be more effective if we actually had a lab section to perform the various genetics analysis techniques. The Professor knows the material.
- 20. I have not attended enough classes to have any relevant criticism.
- 21. Course was very interesting but the teacher was very boring. He read of the slides all throughout lecture also when people asked questions, he doesn't take the time to answer them because he's afraid of falling behind in his lecture.
- 22. Dr. Roose is a good lecturer. I think demanding more respect from students would be good. People were constantly talking, cellphones were ringing and students would leave while you were trying to finish off the lecture. I found this very distracting. The times when you used computer animations to illustrate key concepts were great.
- 23. He read off the powerpoint slides too much. It made lecture a little boring because I could just read it off his notes. He should interact with students more. But even though, he was still okay
- 24. good teaching, but maybe do a little more than read off the slides

- 25. Mr. Roose presents material in an organized way, but should stop just reading the Power Point word-for-word. His exams were good, however, he didn't throw any aliens @ us. Thanks for that!
- 26. It's obvious Dr. Roose knows much about genetics, but it is hard for me to learn from a lecture that it just read from. Some variety would be nice. A monotone voice is a room with a constant humming noise doesn't make learning any easier.
- 27. Professor Roose was always organized and always lectured clearly. His use of powerpoint, however, could be supplemented by more black boad notes
- 28. Material is hard to understand when just read off of the powerpoint and not explained in detail other than what is put on the powerpoint.
- 29. I felt that the lecture could have been made more interesting than just the power point lectures made real like examples could be used. Lecture was very dull and uninspiring I've talked to Roose in his office hours and he was a very nice guy.
- 30. I thought lecture was very monotonous. I didnt like how he red through the notes in lecture. I didnt find much relationships to the real world applications.
- 31. was a little too monotone. I felt that he just read his slides. Maybe if he wrote on the board it would be a little more helpful.
- 32. Needs to be more creative when lecturing. Needs to liven up the students.
- 33. This class was so boring!
- 34. I had a hard time finding a reason to attend lectures because the professor would just read word for word off of his powerpoint presentations. I felt I could read the lectures on my own.
- 35. The lectures were too long.
- 36. The manner in which he presented the slides was too monotonous. Slides are awesome though.
- 37. The lecture was exactly like the note of the web. I could learn the material on the computer instead of having a teacher reading it over.
- 38. Lecture was dry and a bit slow.
- 39. I think the instructor should use more diagrams to explain the various biological mechanisms instead of explaining them just verbally.
- 40. He sounds like the Clear Eyes commercial guy; dull and monotone. If he is excited students are excited

-3-

M. Roose

41. He is so boring! I do not reccommend him to teach this course. He knows his material, he just presents so uninterestingly.

42. Instructor was boring, confusing, and has a problem w/ breaking down complicated material so a novice may learn it. Power Pt. slides should be used a visual aids and not be relied on to instruct the student. I had to go to the book to make material clear instead of the professor making sense of the reading.

- 43. Tends to be monotonous. Love the powerpoint notes. Can be boring sometimes and also tends to mummble. Overall, ok professor
- 44. The Professor was a poor instructor. He did not really organize his lectures well know for the students to understand. he basically read off his notes. I don't believe that is a good method in getting the material across. He was not really concerned about the students doing well b/c he has a standard grading scale.
- 45. He didn't seem too enthused about the class, but he was organized.
- 46. I'm sorry to say but Professor Roose is a very boring teacher. He is monotone the whole dreadful hour and a half. He stands in one spot and reads off his powerpoint. He does not explain the material, just reads off.
- 47. I don't like his lectures. He just reads, "literally", off the overhead notes. He does not give us enough time for the tests. Shows no concern for his students. When we had our midterm review session, he mocks me in front of the whole class. It was very insulting. He doesn't care about his students.
- 48. Please make genetic exciting and interesting.
- 49. Instructor could not present the material in an understandable way. More than ½ of the class would skip class everyday because they couldn't understand the professor. he wasn't concerned about making sure that students understood the material at all. His test questions were ambiguous and poorly structured.
- 50. This professor's lecture is very dry and dull. Whenever someone asks him to do a problem on the board, eh says no and gives us excuses. He definitely should be fired. Going to class is a joke. All he ever does is read his lecture notes during class. I can do that at home! He reads the notes word for word which defeats the purpose for even going to lecture!

-4-

#### UCR STUDENT EVALUATION OF TEACHING FORM OFFICE OF INSTRUCTIONAL DEVELOPMENT SPRING 2002

#### BOTANY & PLANT SCIENCE DEPARTMENTAL SUMMARY

ENROLLMI	ENT: 200	FORM	S COMPLET	ED: 158	PERCENT C	OMPLETED:	79.0		
1. WHAT	IS YOUR	OVERALL			STRUCTOR?	EX	CELLENT	NA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)	
NUMBER	0	0	0	5	18	63	72	0	
	MEAN: 6.27		MEDIAN: 6.00		STANDARD ERROR		0.06		
2. WHAJ	IS YOUR	OVERALL	RATING O	F THE COU	IRSE?				
	POOR		•				EXCELLENT NA		
	(1)	(2)		(4)	(5)	(6)	(7)	(0)	
NUMBER	0	0	2	10	40	59	46	1	
	MEAN: 5	.87	MEDIAN	: 6.00	STAN	DARD ERROR:	0.07		
-		RUCTOR P	R?	E MATERIA CCASIONAL	L IN AN O		ALWAYS	NA	
	(1)	(2)	(3)	(4)	(5)		(7)	(0)	
NUMBER	0	0	3	6	15		81	4	
	MEAN: 6	. 29	MEDIAN	7.00	STAN	DARD ERROR:	0.07		
			ONCERNED A		IDENTS LEA	RNING AND			
	NOT CON	CERNED	SOME	SOMEWHAT CONCERNED			VERY CONCERNED NA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)	
NUMBER	0	0	0	8	17	43	87	3	
	MEAN: 6.34		MEDIAN: 7.00		STANDARD ERROR:		0.06		
5. HAVE					R VALUABL	E? DEFI	₦ŦŦ <b>₽₽</b> Ŧ੶Ŭ੶੶੶₩	FC · Ma	
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NUMBER	L	U .	3	14	20	, JO	70	v	
	MEAN: 6.06		MEDIAN: 6.00		STANDARD ERROR: 0.09				

# UCR STUDENT EVALUATION OF TEACHING FORM

Instructor: M. Roose

Course: Botany & Plant Sci 221

Plant Breeding

Enrollment: \_3\_ (excluding auditors and concurrently enrolled students)

Number of Forms Returned: \_3\_\_\_

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

The comments have been ordered on the basis of student response to Question 1: "What is your overall rating of the instructor?" The first comments typed are those made by students who gave the instructor the highest rating (e.g. 7 or excellent), followed by the comments made by students who rated the instructor "6", etc. The comments of students who did not respond to the question were typed last, after 4 spacing lines. It is hoped this ordering system will provide a useful but unbiased grouping of comments.

1. I learned a lot from this class.

2.

Good discussion! Good information for lecture! Clear talking!

BIOLOGY DEPARTMENTAL SUMMARY

ENROLLMENT:2378	FORMS	COMPLETED: 1648	PERCENT	COMPLETED:	69.3

1. WHAT	IS YOUR	OVERALL R	ATING OF	THE INST	RUCTOR?			
	POOR (1)	(2)	(3)	(4)	(5)	(6)	EXCELLENT (7)	NA (0)
NUMBER		18	62	(4) 150	392	608	407	3
	MEAN: 5.	64	MEDIAN:	6.00	STAN.	DARD ERRO	DR: 0.02	
2. WHAT	IS YOUR	OVERALL R	ATING OF	THE COUR	SE?			
	POOR	(2)	(2)	$\langle i \rangle$	(5)	$\langle \alpha \rangle$	EXCELLENT	
NUMBED							(7) 357	(0) 2
NUMBER	10	20	07	10/	400	202	357	Z.
	MEAN: 5.	52.	MEDIAN:	6.00	STAN	DARD ERR	DR: 0.03	
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	THE INSTR RSTANDABL			MATERIAL	IN AN U	RGANIZED	,	
UNDE				CASIONALL	.Y		ALWAYS	NA
	(1)	(2)	(3)	(4)	(5)	(6)	ALWAYS (7)	(0)
NUMBER	7	30	67	177	337	532	493	5
				· • • • ·				
	MEAN: 5.	66	MEDIAN:	6.00	STAN	DARD ERR	DR: 0.03	
4. WAS	THE INSTR	UCTOR CON	ICERNED A	BOUT STUE	DENTS LEA	RNING ANI	D C	
UNDE	RSTANDING	THE COUR	SE MATER	IAL?				
	NOT CONC	EDNED	CONEL	ULT CONCE			PRV CONCERN	
	(1)	(2)	(3)	HAI CONCE	(5)	(6)	ERY CONCERN (7)	
NUMBER	12	43	61	171	333	488	529	11
	MEAN: 5.	65	MEDIAN:	6.00	STAN	DARD ERRO	DR: 0.03	
5 11411		NED COME?	UINC YOU	CONSTREE		FĴ		
J. NAVL	DEFINITE	LY NOT		SOME EXTR	NT	ц, П	EFINITELY Y	ES NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	23	29	57	215	276	470	EFINITELY Y (7) 570	8
	MEAN: 5.	67	MEDIAN:	6.00	STAN	DARD ERR	OR: 0.03	

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M. ROOSE		BIOLOGY	102				
INTRO: GE	ENETICS						
ENROLLMEN	VT: 120 FO	RMS COMPLETE	ED: 48	PERCENT CC	MPLETED:	40.0	
1. WHAT	IS YOUR OVERA POOR (1) (2)				E	XCELLENT	NA (0)
NUMBER	(1) $(2)0 0$	(3) 1	(4) 5	14	(6) 21	7	0
	MEAN: 5.58	MEDIAN	: 6.00	STANI	DARD ERROF	a: 0.13	
2. WHAT	IS YOUR OVERA	LL RATING O	F THE CO	URSE?	T	EXCELLENT	NA
	$(1) \qquad (2)$	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	IS YOUR OVERA POOR (1) (2) 0 0	2	8	16	16	6	0
	MEAN: 5.33						
UNDE	THE INSTRUCTOR RSTANDABLE MAN	INFR?					NT 4
	NEVER	(3)	CCASIONA	LLY (5)	(6)	ALWAYS	NA (0)
NUMBER	NEVER (1) (2) 0 0	0	5	4	15	24	0
	MEAN: 6.20	MEDIAN	: 6.50	STAN	DARD ERRO	R: 0.14	
	THE INSTRUCTOR RSTANDING THE	COURSE MATE	RTAL?				
	NOT CONCERNE	D SOME	WHAT CON	ICERNED	(6) (6)	RY CONCERF (7)	
NUMBER	$\begin{array}{ccc} (1) & (2) \\ 0 & 0 \end{array}$	0	5	9	17	17	0
	MEAN: 5.95	MEDIAN	1: 6.00	STAN	DARD ERRO	R: 0.14	
5. HAVE	YOU LEARNED DEFINITELY N		)U CONSII ) SOME E	DER VALUABL KTENT	DE	FINITELY	
	(1) (2)	(3)	(4)	(5)	(6) 17	(7) 12	(0) 0
NUMBER	0 0 MEAN: 5.62	*	-	·			
	MEAN: 0.04	neutar	. 0.00				

Instructor: <u>M. Roose</u> Course: <u>Biology 102</u> Intro: Genetics

Enrollment: <u>120</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: <u>48</u>

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

The comments have been ordered on the basis of student response to Question 1: "What is your overall rating of the instructor?" The first comments typed are those made by students who gave the instructor the highest rating (e.g. 7 or excellent), followed by the comments made by students who rated the instructor "6", etc. The comments of students who did not respond to the question were typed last, after 4 spacing lines. It is hoped this ordering system will provide a useful but unbiased grouping of comments.

- 1. Dr. Roose is a good professor. He explains the course materials clearly. His grading is fair.
- 2. Dr. Roose is an excellent professor and always was concerned about the class understood before going on to another topic.
- 3. This is not a Evaluation for Dr. Roose, but a little complain about the room. the class room has the fun bumble door thas always make noise by some machine, and that very dietern me to take the test.
- 4. The professor shows great competency and concern for students' understandings. The clinic is a great idea! But the only problem w/that is some students have classes for the same amt of time, the friday can be used for clinic at the same time as the class. Other than that the professor is doing a very good job! Keep up the good work!!
- 5. The material was easy to follow on the projector, I learned alot.
- 6. Excellent organization.
- 7. The lectures are very well-organized and informative.
- 8. Clinic was a good idea and helped. The midterms were very fair. Putting stuff on the web was good as well

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9.	A combination of things made this class something less than what it could have been. I like having all the notes, but admitingly- it turns me off during lecture.
10.	My only suggestion is that lectures progress more rapidly!
11.	I thing everything was very organized & taught very well. I just felt out of it since it was spring qtr. that probably explains a lot of low grades
12.	Very, very, organize. Love the notes. Always gets things done. Lecturing kind of bad because he just kind of breeze over the material most of the time.
13.	I would recommend that material for second midterm be reviewed through example problems that can help students get visual & not just verbal examples of what is going on. Verbal explanation alone is just not enough for math problems.
14.	Well organized lectures and presentation.
15.	Lectures are put together well
16.	Professor knows his stuff, always presents it in an organized manner for our benefit. Too early to have a class with a slow speaker took too many naps.
17.	Explained the material clearly and in a manner that made it very interesting
18.	I enjoyed the way material was presented. I only wish that the class wasn't so early in the morning.
19.	He was always organized & provides students with the lecture notes. He was a good professor but the class was too early in the morning.
20.	The class is extremly organized which is great
21.	I liked the power point, it allows you to learn in 2 important ways, reading and listening. Instructor is very fair w/exam questions and with grading.
22.	<ul> <li>Dr. Roose had a concern for the student on understanding the material. He should write on the board more often; after a while the lecture (w/slides) is boring.</li> <li>-&gt; Overall, I learned a lot with Dr. Roose.</li> </ul>
23.	Your roles went into more detail than the book which really helped.
24.	I think class can be livened up- or I would take more care to pay attn if (1) you didn't reach from the lect notes or (2) you gave them out after lecture. I appreciate your sincerity in wanting us to learn the material- I think you do a good job of explaining as quest are asked

- 25. Dr. Roose lectured very well my only problem was that class was at 8:00 am. Also many of the office hours and clinic conflicted with my other classes. This was a very interesting class and I learned a lot of useful information
- 26. Instructor showed great deal of knowledge of the subject matter. Materials very well organized.
- 27. Not more 1 1/2 hour classes!!
- 28. The Second Midterm was extremely difficult I think a big curve should be considered.
- 29. Overall, Dr Roose is very knowlegable and understandable. However, the materials were little boring.
- 30. Good professor. Liked the powerpoint and the notes given in class. Very organized and knowledgable about class.
- 31. Making the lectures assesible online is a very useful too. Thank you.
- 32. The clinic is a good idea.
- 33. The course could have been more fast paced or may try to present the material in a more interesting way.
- 34. He's a good prof. but he goes too fast (especially the last week of school).
- 35. Dr. Roose is a nice guy.
- 36. I like this course but the way it was taught hindered me from learning lecture was a little boring. We need more examples of problems.
- 37. The lectures were presented in an understandable way, but the lecturer just read the material straight from the over head, without explanation. It was very difficult to understand the value of the course, when there was no explanation given. Also, his office hrs were @ difficult times to meet and very unhelpful.
- 38. The material was always presented in an organized fashion, but that made it hard to pay attention because you don't really have to take notes.
- 39. Going to lecture became mundane and monotonous, since he just read off the lecture notes. I wish he would have gone into more detail, learning the reading for our own private time. A more engaging attitude would have helped also.
- 40. I think more people would come to class & stay awake if you would not read strictly from the outline. Try to put a little energy into you presentation & voice. Otherwise it was a pretty good class

- 41. Overall, this class was very interesting as Genomics are becoming a bin Part of Society today. Class time was a bit early. Instructor was lacking body language and movement to really make a class interesting- stayed behind the computer too much.
- 42. Without a doubt the worst science instructor I've ever had. He needs to tremedously improve the lectures. It is an impedament to learning when handouts are provided @ each lecture, and specially when all he does is simply read off of the lecture notes. the error prone text, furthermore, proved to be very futile in aiding in the preparation for exams. Studying and doing the homework problems would prepare the student for the exam, supposedly, but the exams were completely different than what was expected. I always caught up on sleep in class.
- 43. Less reading of Powerpoint slides + better prepared/phrased lectures would have made the experience much more pleasant. It would have also been nice if more of an overview was provided (Review sheets were helpful).
- 44. I've had worse
- 45. I found that it was pointless to come to class since you just read from powerpoint. I wish the lecture was more interactive, ie: notes could be left blank in spaces so I can write during the lecture. I never really had to take notes.

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#### BOTANY & PLANT SCIENCE DEPARTMENTAL SUMMARY

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ENROLLME	NT: 102	FORMS	COMPLETE	D: 79	PERCENT CO	MPLETED:	77.4	
1. WHAT NUMBER	IS YOUR POOR (1) 0	OVERALL (2) 0	RATING OF (3) 2	THE INS (4) 2	TRUCTOR? (5) 4	(6) 36	EXCELLENT (7) 35	NA (0) 0
	MEAN: 6	.26	MEDIAN:	6.00	STANI	DARD ERRO	R: 0.10	
2. WHAT NUMBER	IS YOUR POOR (1) 0	OVERALL (2) 0	RATING OF (3) 2	THE COU (4) 5	RSE? (5) 11	(6) 30	EXCELLENT (7) 31	NA (0) 0
	MEAN: 6	.05	MEDIAN:	6.00	STAN	DARD ERRO	R: 0.11	
UNDE		RUCTOR PH LE MANNEM (2) 0	₹? 00	CASIONAL	L IN AN O LY (5) 10	RGANIZED, (6) 29	ALWAYS (7) 31	NA (0) 1
	MEAN: 6	.01	MEDIAN	6.00	STAN	DARD ERRO	R: 0.12	
			ONCERNED A		IDENTS LEAD	RNING AND	)	
NUMBER	NOT CON (1) 0	CERNED (2) 0	Somey (3) 1	WHAT CONC (4) 1	CERNED (5) 5		RY CONCERN (7) 53	ED NA (0) 0
	MEAN: 6	.54	MEDIAN	7.00	STAN	DARD ERRC	DR: 0.08	
5. HAVE	DEFINIT	ELY NOT	TO	SOME EXT	ER VALUABL TENT (5)	E? DE (6)	FINITELY Y	ES NA (0)
NUMBER	(1) 0	(2) 0	(3) 3	(4) 4	8	20	44	0

MEAN: 6.24 MEDIAN: 7.00 STANDARD ERROR: 0.12

M. ROOSE		BOTANY & PI	LANT SCIENCE	150	
PRINCIPLE	S OF PLANT BREED	ING			
ENROLLMEN	T: 9 FORMS	COMPLETED:	8 PERCENT	COMPLETED: 8	38.8
	IS YOUR OVERALL	RATING OF T	HE INSTRUCTOR	2?	CELLENT NA
	POOR	$\langle 2 \rangle$	(4) (5)		(7) (0)
NUMBER	$\begin{array}{ccc} (1) & (2) \\ 0 & 0 \end{array}$	(3) 0	0 1		4 0
	MEAN: 6.37	MEDIAN: 6	.50 S	TANDARD ERROR:	0.25
o	IS YOUR OVERALL		WE COURSE?		
-	POOR	KATING OF I		EX	CELLENT NA
	(1) (2)	(3)	(4) (5)	(6)	(7) (0)
NUMBER	0 0		1 1		3 0
	MEAN: 5.62	MEDIAN: 6	i.00 S	TANDARD ERROR:	0.50
	THE INSTRUCTOR P		ATERIAL IN A	N ORGANIZED,	
UNDER			SIONALLY		ALWAYS NA
	$(1) \qquad (2)$		(4) (5)	(6)	(7) (0)
NUMBER	0 0	0	1 1	2	4 0
	MEAN: 6.12	MEDIAN: 6	5.50 S	TANDARD ERROR:	0.37
4. WAS	THE INSTRUCTOR C	ONCERNED ABO	OUT STUDENTS	LEARNING AND	
	RSTANDING THE CO				
	NOT CONCERNED	SOMEWHA	AT CONCERNED		CONCERNED NA
	(1) (2)			(6)	(7) (0) 4 0
NUMBER	0 0	0	0 1	3	4 0
	MEAN: 6.37	MEDIAN: (	6.50 \$	STANDARD ERROR:	0.25
5 11.17	YOU LEARNED SOM	ETHING YOU	CONSIDER VALI	JABLE?	
J. HAYE	DEFINITELY NOT	TO S	OME EXTENT	DEFI	INITELY YES NA
	$(1) \qquad (2)$	(3)		) (6)	(7) (0)
NUMBER	0 0	1	1 0	2	4 0
	MEAN: 5.87	MEDIAN:	6.50	STANDARD ERROR	0.51

Instructor: <u>M. Roose</u>

Course: <u>Botany and Plant Science 150</u> Principles of Plant Breeding

## Enrollment: <u>9</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: <u>8</u>

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

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- 1. Dr. Roose is very knowledgeable in Plant Breeding and did an excellent job of creating lecture notes which helped me focus on the points he considered important.
- 2. Dr. Roose is an excellent professor. He understands what it takes to learn a new concept. He explains the materials clearly, easy to understand and learn. I would take another course from Dr. Roose.
- 3. The handouts are very useful. You should also provide some more feedbacks on the homework.
- 4. The material was presented in an organized manner correlated well with the course readings. The homework assigned helped in interpreting and understanding the material better.
- 5. Very interesting course, handouts really helped me while I was studying.
- 6. Dr. Roose clarified things and his lectures went along with the homework. He was always willing to help and was always concerned with how well we understood. He was very organized.

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BOTANY & PLANT SCIENCE DEPARTMENTAL SUMMARY

ENROLLME	NT: 125	FORMS	COMPLETEI	<b>):</b> 104	4 PERCENT CO	OMPLETED	: 83.2	
1. WHAT	IS YOUR POOR	OVERALL			INSTRUCTOR?		EXCELLENT	NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	0	2	1	0	6	42	53	0
	MEAN: 6	5.34	MEDIAN:	7.00	STAN	DARD ERR	OR: 0.09	
2. WHAT	POOR		RATING OF				EXCELLENT	
	(1)	(2)	(3)	(4)	(5)	(6)		
NUMBER	0	3	0	2	11	40	48	0
	MEAN: (	5.20	MEDIAN:	6.00	STAN	DARD ERF	OR: 0.10	
		TRUCTOR PI BLE MANNE		MATE	RIAL IN AN O	RGANIZEI		
	NEVER		OC	CASIO	NALLY		ALWAYS	NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	0	1	0	2	16	27	58	0
				7.00	STAN		ROR: 0.09	

4. WAS THE INSTRUCTOR CONCERNED ABOUT STUDENTS LEARNING AND UNDERSTANDING THE COURSE MATERIAL?

	NOT CO	NCERNED	SOME	WHAT CONC	ERNED	VERY CONCERNED NA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	0	0	1	1	11	25	66	0
	MEAN:	6.48	MEDIAN	: 7.00	STAN	IDARD ERRO	R: 0.07	

5. HAV		EARNED SOME		OU CONSIDE O SOME EXT			DEFINITELY	YES NA
NUMBEF	(1) t 0	(2) 0	(3) 1	(4) 4	(5) 13	(6) 25	(7) 61	(0) 0
	MEAN:	6.35	MEDIA	N: 7.00	STAN	IDARD ER	ROR: 0.09	)

#### BIOLOGY DEPARTMENTAL SUMMARY

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ENROLLME	NT:2587	FORMS	COMPLETE	D:1740 P	ERCENT CO	MPLETED:	67.2	
1. WHAT	IS YOUR POOR						EXCELLENT	
NUMBER	(1) 14	(2) 14	(3) 33	(4) 10 <b>9</b>	(5) 351	(6) 602	(7) 615	(0) 2
	MEAN: 5.	89	MEDIAN:	6.00	STAND	ARD ERROF	R: 0.02	
2. WHAT	IS YOUR ( POOR	OVERALL R	ATING OF	THE COUR	SE?	F	EXCELLENT	NA
	(1)	(2)	(3)	(4)	(5)		(7)	
NUMBER				139				٥́
	MEAN: 5.	70	MEDIAN:	6.00	STAND	ARD ERROF	a: 0.02	
	THE INSTR RSTANDABL	E MANNER?						<b>N7</b> 4
	NEVER		00	CASIONALL	Y			NA (O)
	(1) 16						(7)	(0) 12
NUMBER	10	20	57	140	299	407	095	± <b>2</b>
	MEAN: 5.3	84	MEDIAN:	6.00	STAND	ARD ERROP	R: 0.03	
	THE INSTRURS TANDING				ENTS LEAR	NING AND		
	NOT CONC	ERNED	SOMEW	HAT CONCE	RNED	VEI	Y CONCERNE	D NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	18	14	46	128	269	520	732	13
	MEAN: 5.	95	MEDIAN:	6.00	STAND	ARD ERRON	R: 0.03	
5. HAVE	YOU LEAR DEFINITE			CONSIDER SOME EXTE			FINITELY YE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	27	23	42	144	279	473	746	6

MEAN: 5.89 MEDIAN: 6.00 STANDARD ERROR: 0.03

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M. ROOSE		BIOLOGY	10 <b>2</b>				
INTRO. GI	ENETICS						
ENROLLMEN	NT: 176	FORMS COMPLET	ED: 95	PERCENT CO	MPLETED:	53.9	
1. WHAT	IS YOUR OV POOR	VERALL RATING O			E	XCELLENT	NA
	(1) (	(2) (3)	(4)	(5) 13	(6)	(7)	(0)
NUMBER	0	0 1	4	13	33	44	0
	MEAN: 6.21	L MEDIAN	: 6.00	STAND	ARD ERROR	.: 0.09	
2. WHAT		VERALL RATING O			_		N A
	POOR (1)	(2) (3)	(h)	(5)	(6) E	XCELLENT (7)	(0)
NUMBER	0	1 1	6	14	40	33	0
i chi bili		) MEDIAN					
	THE INSTRUC						
	NEVER	0	CCASIONA	LLY	1.12	ALWAYS	NA (0)
NUMBED	(1) (	(2) (3) 0 1	(4)	(5)	(6)	(7)	(0)
NUMBER	U	0 1	2	o	23	00	1
	MEAN: 6.47	7 MEDIAN	: 7.00	STAND	ARD ERROR	0.08	
		CTOR CONCERNED THE COURSE MATE RNED SOME	RIAL?	CERNED	VER	Y CONCERNI	ED NA
	(1)		(4)	(5)	(6)	(7)	(0)
NUMBER	0		5		27		1
	MEAN: 6.11	1 MEDIAN	: 6.00	STAN	DARD ERROF	a: 0.10	
5. HAVE	DEFINITELY	ED SOMETHING YO Y NOT TO	SOME EX	TENT	DEF	FINITELY YI	ES NA
	(1)	(2) (3)	(4)	(5)	(6)	(7) 45	(0)
NUMBER	0	0 0	8	13	28	45	ĩ
	MEAN: 6.17	7 MEDIAN	6.00	STAN	DARD ERROF	a: 0.10	

Instructor: <u>M. Roose</u>

Course: <u>Biology 102</u> Intro Genetics

Enrollment: <u>176</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: \_95\_

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

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- 1. Dr. Roose always presented the material in a very organized and understandable manner. Overall, he is one of the best instructor I have had.
- 2. He was well organized and I like the way the notes were handed out so we could concentrate on what he was saying. He was an excellent teacher.
- 3. I love the overheads!! Always gave detailed enough explanations! Very available! Interesting lectures...maybe next time you could include more human genetics examples
- 4. Very well organized, pre-printouts were very helpful and supplied helping to simplify course both in understanding and the Review. I enjoyed the course as well as the instructors understanding of the material.
- 5. Tries really hard for his students to understand the material. He knows the material rather well and is very well organized. Overall good instructor
- 6. Knowledgeable professor above his field!
- 7. I thought the method of presentation was very good, and it was done in an understandable manner
- 8. The computer presentations and notes are very helpful.

- 9. As far as organization & explanation of material one of the finest professors I've had the pleasure of listening to.
- 10. Dr. Roose was very organized and coherent. It was a pleasure to take his class.
- 11. It's good that we can't ask him during lecture because that helps us to understand the material better. Also, he provides the notes which give us time to concentrate.
- 12. I enjoyed the class. I liked how the notes where printed out for us so we could pay attention. Maybe you could make the class more exciting though, with more slides or examples
- 13. Very effective instructor. Dr. Roose provided <u>good</u> lecture notes and helpful practice exams. I appreciate the study/review sessions before each exam.
- 14. Thorough and concerned, Dr. Roose is one of bests in UCR!
- 15. His outlines are very useful and thorough
- 16. Prof. Roose is a very organized teacher. His lecture notes are very understandable and explain the relevancy of the text.
- 17. The lectures were very clear and precise. His knowledge is outstanding and is very helpful to the students.
- 18. Dr. Roose was a very helpful & wonderful proffesor. I enjoyed having him as my teacher.
- 19. He makes the course interesting...makes me want to cross-breed my hamsters! The handouts make the class much easier to understand, as well as a helpful study guide. You can tell he's a prof. that cares about the students!
- 20. Dr. Roose was always willing to help. Many times I came to his office hours and sometimes <u>not</u> during his office hours and he was always willing to help and explain problems.
- 21. Very knowledgeable
- 22. Dr. Roose presented the material in a very clear an organized way. it was greatly appreciated.
- 23. Well organized lectures & notes. Very helpful in genetics clinic office hours.
- 24. Dr. Roose was very fair. His lectures where clear and understandable. They correlated with the material in the book which made it clear.

Biology 102

- 25. The notes the proffesor used were very helpful in preparing for the exam. I wish more example from the book could be used. Overall, the proffesor was very good.
- 26. Proffessor Roose was a great teacher presented the material in a good way. I really appriciated his handouts, but wish that he would go over and show more problems in class. Explain a little more.
- 27. The course, the presentation and material covered were excellent.
- 28. I liked the fact that lecture notes were available in class. I also thought the use of computer simulations of DNA synthesis and PCR were very helpful.
- 29. Dr. Roose was very organized and conserned that we understand the information presented.
- 30. His lecture notes are very helpful and the power point slides are good. I appreciate him providing the notes for us in class. His lecturing is good.
- 31. Overall teaching was good.
- 32. Professor gives good lecture and handout. Handouts need more room to write.
- 33. We need a <u>lab</u> in this course! Dr. Roose is an excellent professor. I don't know what else to say.
- 34. I thought he was good. Funny, interesting. Gave us notes, explained them. Fair testing. I'm sad (illegible) forgive this lame review.
- 35. Very well organized. I liked how he made handouts for the class. (very helpful) Always available at office hours.
- 36. I really like Professor Roose his handouts were <u>very</u> helpful and assisted in exam preparation The average is pretty high and everyone has the lecture in the notes no problems
- 37. Get better TA's they reflection you. These TAs repeatedly make mistakes. Lectures pretty well done. Maybe more emphasis on human disease would make lecture less dry & more interesting
- 38. Method of teaching is effective. Pre-prepared notes are very helpful
- 39. Very organized. Ready for question & concerned about his students. Held study sessions & clinic which was very helpful.
- 40. He's great! Very helpful w/the print out of the lecture notes. Gets straight to the point and doesn't trick us. Wonderful!

Biology 102

- 41. Very easy to understand & is very good at explaining
- 42. Dr. Roose perform very clear lecture materials. However, on the exam he does not clear. The question kind of confuse & hard to understand the question.
- 43. Dr. Roose taught the course very well. I liked how he presented the material in slide form, that was very useful.
- 44. Notes provided a useful way to take in info. during exams
- 45. Prof. Roose presented the material in an organized manner. He also provided us with his notes. Overall, he did a good job!
- 46. The course was clearly organized and showed every major topic in a orderly fashion. At times some of the information presented was a bit confusing but after reiteration of the points, they became quite clear.
- 47. He's a cool teacher!
- 48. Hes very fair & very nice. Tries to help students as much as possible.
- 49. I enjoyed his teaching style. He was very organized and made everything (material) quite understandable.
- 50. Dr. Roose is really organized. Please try to tell some more jokes during lecture to make the class more fun.
- 51. Prof. Roose is a great lecture but he gives very monotone lectures.
- 52. Professor Roose always had very complete lectures and is very concerned w/ his students learning the material because he held clinics & OH.
- 53. Probably one of the best Bio courses that I have taken at this school. Tests were fair, and I learned a lot.
- 54. Professor is organized in lectures, but certain topics are not emphasized & tested on exams which seemed difficult.
- 55. His lecture notes were very well organized and helpful. The test were fair and he was very concerned about student understanding of material
- 56. Professor Roose is a good teacher. He understands the material and explains it in a manner I can understand. His lecture notes and sample exams are helpful in studying for the course.

Biology 102

- 57. I appreciate that the instructor hand-out note for this course making understanding the subject taught easier and a lot better to follow.
- 58. Dr. Roose was very organized and he provided us w/ a lot of information. Since we had his notes, the class seems a little boring. Despite that he was very good @ explaining the subject and he was very fair on grading and his tests! Thanks!
- 59. I loved him!
- 60. Lecture notes seem well prepared, but the amount of "ums" makes it appear that the professor was not prepared. Good use of "real-life" examples
- 61. Dr. Roose was very clear in explaining the material. I like the fact that he supplied notes to his lecture, this made studying at home much easier when used in conjunction with the book.
- 62. Prof. Roose is very well organized. I like how he has the lectures print out to the students before class. Although, his lectures are boring sometimes. Overall, he's a good prof.
- 63. Dr. Roose is well organized & on top of his teaching materials. He's a bit boring though.
- 64. Need to speak up
- 65. Organization made many things more clear, especially when it came to exams.
- 66. I like the way the lecture notes are handed out at the lecture because it makes it easier to follow the lecture when everything is already written out.
- 67. Withhold examples from lecture notes and do them in class, to improve student-teacher interaction, make sure students stay for lecture.
- 68. The beginning of the course was we organized. The latter part has much detail which we just skim and I feel we miss many important concepts.
- 69. Dr. Roose cares a lot about whether we are learning the material. it was very helpful to have a copy of the lecture notes. Sometimes, however, the lectures felt rather long.
- 70. Dr. Roose was always very organized! I <u>loved</u> how he passed out his lecture notes! It made it so much easier to actually pay attention to what he was really saying! Sometimes he could get a little monotone and boring, but he was really nice & wanted the students to learn! I think he should have Noel back as a TA! She helped alot too! He definately needs to keep selling the past exams!
- 71. Be more lively please. Lectures should include more details

- 72. Dr. Roose is a very, very kindhearted person. He is extremely nice and is a genuine person. His tests are fair and he covers an adequate amount of material at a moderate pace. However, his lectures are very boring. You need to do more than just reading off the notes that you pass out. Please try to attempt to grab the attention of the students. It become very hard to pay attention to you just reading the notes. But overall, I think you are an effective teacher who truly cares.
- 73. Good lectures, sometimes boring. Could use moving cartoons...more...
- 74. Needs to present material in a different manner, very monotonous which I think discourages students from coming to class. He is very organized and knowledgeable but not a good lecturer.
- 75. The material well organized always but I felt there was never proper explanation. He read the lecture notes to the class. He did not work out examples on board.

	BOTANY & PLANT	WI	NTER 1999				
	ENROLLMENT: 190	FORMS	COMPLETE	D: 155	PERCENT CO	MPLETED:	81.5
	1. WHAT IS YO POOR (1) (2)					EXCELLENT	NA
NUMBER	0 0	(3) 5	(4) 6	(5) 39	(6) 41	(7) 64	(0) 0
	MEAN: 5.98	MEDIAN	: 6.17	STA	NDARD ERRO	R: 0.08	

	2. WHAT POOR	IS YOUR	OVERALL	RATING OF	F THE COUL	RSE?		
NUMBER	(1) 0	(2) 3	(3) 4	(4) 4	(5) 36	(6) 58	EXCELLENT (7) 50	NA (0) 0
	MEAN: 5.8	8	MEDIAN:	6.02	STANI	DARD ERI	ROR: 0.08	

	•	DID THE INS UNDERSTANDA	TRUCTOR P BLE MANNE	RESENT TH	E MATERIA	L IN AN	ORGANIZED,	
NUMBER	NEVE (1) 0	(2) 2	(3) 5	CCASIONAL (4) 8	LY (5) 25	(6) 48	ALWAYS (7) 66	NA (0) 1
	MEAN	: 6.01	MEDIAN	: 6.27	STAN	IDARD ERR	OR: 0.09	

4. WAS THE INSTRUCTOR CONCERNED ABOUT STUDENTS LEARNING AND UNDERSTANDING THE COURSE MATERIAL?

	NOT CONCERNED		SOMEWHAT CONCERNED				RY CONCERN	ED NA
NUMBER	(1) 0	(2) 3	(3) 3	(4) 8	(5) 25	(6) 43	(7)	(0)
•	MEAN:	6.07	MEDIAN:	6.39		DARD ERROF	73 R: 0.09	0

NUMBER	5. HAV DEFINIT (1) 3	YE YOU LEA NELY NOT (2) 2	RNED SOM TO (3) 4	ETHING YO SOME EXT (4) 8	U CONSIDER ENT (5) 24		BLE? DEFINITELY (7) 72	YES NA (0) 0
	MEAN: 5	i.98	MEDIAN	: 6.36	STAND	ARD ERF	ROR: 0.10	)

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ť	M. ROOSE	BOTANY &	PLT.SCI/BIOL. 130	WINTER 1999					
	ENROLLMENT: 58	FORMS COMPLETED	: 44 PERCENT COM	IPLETED: 75.8					
	1. WHAT IS YOUR	OVERALL RATING OF	THE INSTRUCTOR?						
	POOR	STERIES KATING OF		XCELLENT NA					
	(1) (2)	(3) (4)	(5) (6)	$(7) \qquad (0)$					
NUMBER		0 1	27 9	7 0					
	MEAN: 5.50	MEDIAN: 5.27	STANDARD ERROR	: 0.12					
	2. WHAT IS YOUR	OVERALL RATING OF	THE COURSE?						
	POOR		E	XCELLENT NA					
	(1) (2)	(3) (4)	(5) (6)	(7) (0)					
NUMBER	0 1	0 0	13 20	10 0					
	MEAN: 5.84	MEDIAN: 5.90	STANDARD ERROR	: 0.14					
	3. DID THE INSTRUCTOR PRESENT THE MATERIAL IN AN ORGANIZED, UNDERSTANDABLE MANNER?								
	NEVER	OCCASIONALL	Y	ALWAYS NA					
	(1) (2)	(3) (4)							
NUMBER	0 0	1 3	11 15	14 0					
	MEAN: 5.86	MEDIAN: 5.96	STANDARD ERROR	: 0.15					
	4. WAS THE INSTR UNDERSTANDING	RUCTOR CONCERNED AN G THE COURSE MATER	BOUT STUDENTS LEAR IAL?	NING AND					
	NOT CONCERNED	SOMEWHAT CONCEI	NED VER	Y CONCERNED NA					
		(3) (4)							
NUMBER	0 1	1 4	10 18	10 0					
	MEAN: 5.65	MEDIAN: 5.83	STANDARD ERROR	: 0.17					
	5. HAVE YOU LEAR DEFINITELY NOT	NED SOMETHING YOU TO SOME EXTEN							
	$(1) \qquad (2)$	$(3) \qquad (4)$	$(5) \qquad (6)$	INITELY YES NA					
NUMBER	0 0	$1 \cdot 3$	6 15	(7) (0) 19 0					

MEDIAN: 6.30 STANDARD ERROR: MEAN: 6.09 0.15

Instructor: <u>M. Roose</u>

Course: <u>Botany & Plant Sci./Biol 130</u> General Botany

Enrollment: <u>58</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: 44

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

The comments have been ordered on the basis of student response to Question 1: "What is your overall rating of the instructor?" The first comments typed are those made by students who gave the instructor the highest rating (e.g. 7 or excellent), followed by the comments made by students who rated the instructor "6", etc. The comments of students who did not respond to the question were typed last, after 4 spacing lines. It is hoped this ordering system will provide a useful but unbiased grouping of comments.

- 1. Dr. Roose is an excellent instructor! He lectures and tests are very clear and understandable. He always provides a casual and comfortable class environment and is very willing to help his students.
- 2. The class was very interesting.
- 3. Dr. Roose is a great Prof. to teach w/ Dr. Holt. The 2 make a great teaching team. It's refreshing to see a Professor so genuinely concerned. It means a lot when U guys visit lab. There lots more I can say about Dr. Roose I hope he just keeps doing what he's doing. I look forward to learning more from him.
- 4. Dr. Roose is very knowledgeable when it comes to this subject. The only thing I want to mention is that he goes into a lot of detail.
- 5. Excellent!
- 6. Too much material are being covered.
- 7. Lab info need to coincide better with lab (this is <u>not</u> specific to teacher) The instructor is a little drier in his presentation. I understand everyone's style of teaching is different, but unfortunately it seems to affect the productivity of the teaching. He does cover the information needed, but personally for me it's not as beneficial.
- 8. Lectures were too long and often boring. Too much material being covered in one single lecture, this causes students to get exhausted and loose interest.

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- 9. Handouts provided for each lecture were helpful in studying.
- 10. Went a little fast in the beginning of the course.
- 11. Dr. Roose is a good Professor.
- 12. He is clear and effective and well organized.
- 13. Roose was organized and provided detailed lecture notes. At times it became boring because it was almost verbatim from the notes.
- 14. Dr. Roose just need to make his lecture more interesting, and also needs to cut out most of the material that most of the student already had.
- 15. Knowledge of course materials is excellent. Need to slow down a bit. Too much materials may be presented.
- 16. I don't like the way Dr. Roose lecture because he's only reading of directly from the transparencies, which we could do it ourself. Please present it w/ more info. & more interesting.
- 17. He is boring. He is nice and know what he is talking about but he put the class to sleep.
- 18. The notes given out in class were very thorough and helpful. The notes/lecture was similar to the book material so it was helpful when studying. The course itself was good but I feel<sup>\*</sup> the (genes, etc) genetics lecture was very dry. Do we really need it if we're going/suppose to take genetics.
- 19. The materials covered in a lecture are too much sometimes. It would be nice if you write important concepts on the board rather than verbally.
- 20. Perhaps you should provide less information of the handouts. If the students have to take notes, they'll pay closer attention.
- 21. Too much detail materials covered.
- 22. His handouts are very helpful and make things clear.
- 23. Too much material was presented in the lectures in particular too much detail I thought. Handouts were very helpful.
- 24. Very interesting class, however the instructor were misleading on what was on midterm, they said know the general scheme of things but then we got marked down for being too general.

- 25. Dr. Roose had a lot information. I believe too much in one lecture. Overall, he presented himself very organize and knew his stuff.
- 26. I would recommend making your lectures more interactive because I found it difficult to stay focused when I had all the notes.
- 27. Great lectures. Easy way to learn the material. Lecture outlines are <u>wonderful</u> in a course with so much material.
- 28. Nice concised notes.
- 29. I felt he did a good job teaching the class, however, I feel that he started off with a teaching process that didn't work. (Overheads we had to coy everything down that wasn't in the notes. He went too fast.) He got much better though.
- 30. Dr. Roose is very organized and did a good job presenting the material.
- 31. I didn't enjoy the handouts for the lecture. But was well covered.
- 32. Too much material to cover in one lecture, there should be a review before the first midterm. Just reading all of the over head material was not very helpful. I didn't understand most of material.

BOTANY & PLANT SCIENCE DEPARTMENTAL SUMMARY SPRING 1998 ENROLLMENT: 107 FORMS COMPLETED: 84 PERCENT COMPLETED: 78.5

NUMBER	POOR	(2) 0	(3) 0	RATING OF (4) 1 6.67	THE INSTR (5) 5 STANDA		CELLENT (7) 51 0.07	NA (0) 0
NUMBER	POOR	IS YOUR ( (2) 0	OVERALL ( (3) 1		THE COURS (5) 9	E?	CELLENT (7) 38	NA (0) 0
NUMBER	UNDER: NEVER	STANDABLI (2) 0	E MANNER OC (3) 0		(5) 4		ALWAYS (7) 51	NA (0) 4

4. WAS THE INSTRUCTOR CONCERNED ABOUT STUDENTS LEARNING AND UNDERSTANDING THE COURSE MATERIAL?

	NOT CO	NCERNED	SOMEWHAT CONCERNED			٧E	VERY CONCERNE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	0	0	0	2	8	20	54	0
	MEAN:	6.50	MEDIAN:	6.72	STAN	DARD ERRO	R: 0.08	

	5. HAV	E YOU LEA	ARNED SOM	ETHING YO	OU CONSIDER	VALUA	BLE?	
	DEFINIT	CELY NOT	TC	SOME EXT	FENT		DEFINITELY	YES NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	0	0	2	· 2	9	24	47	0
	MEAN: 6	5.33	MEDIAN	1: 6.60	STAND	ARD ER	ROR: 0.10	)

M. ROOSEBOTANY & PLANT SCIENCE221SPRING 1998ENROLLMENT:5FORMS COMPLETED:5PERCENT COMPLETED:100.0

NUMBER	1. WHAT IS YOUR POOR (1) (2) 0 0 MEAN: 6.60	OVERALL RATING OF (3) (4) 0 0 MEDIAN: 6.66	THE INSTRUCTOR? EXCELLENT (5) (6) (7) 0 2 3 STANDARD ERROR: 0.24	NA (0) 0
NUMBER	2. WHAT IS YOUR POOR (1) (2) 0 0 MEAN: 6.00	OVERALL RATING OF (3) (4) 0 0 MEDIAN: 6.00	THE COURSE? EXCELLENT (5) $(6)$ $(7)1$ $3$ $1STANDARD ERROR: 0.28$	NA (0) 0
NUMBER	<ul> <li>3. DID THE INSTRUNDERSTANDABL</li> <li>NEVER <ul> <li>(1)</li> <li>(2)</li> <li>0</li> <li>0</li> </ul> </li> <li>MEAN: 6.20</li> </ul>		E MATERIAL IN AN ORGANIZED, (5) (6) (7) (5) (6) (7) (6) (7) (7) (7) (6) (7) (7)	NA (0) 0
NUMBER		RUCTOR CONCERNED A 5 THE COURSE MATER SOMEWHAT CONCE (3) (4) 0 0 MEDIAN: 6.87		D NA (0) 0
NUMBER	5. HAVE YOU LEAF DEFINITELY NOT (1) (2) 0 0 MEAN: 5.60	NED SOMETHING YOU TO SOME EXTE (3) (4) 0 0 MEDIAN: 5.33	U CONSIDER VALUABLE? ENT DEFINITELY YE (5) (6) (7) 3 1 1 STANDARD ERROR: 0.37	S NA (0) 0

Instructor: <u>M. ROOSE</u>

### Course: <u>BOTANY & PLANT SCI. 221</u> Advanced Plant Breeding

Enrollment: <u>5</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: <u>5</u>

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

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- 1. I did not have the preriquisites for this course. This fact made this class difficult & confusing at times. I would not reomend for a graduate student to take this class without the prerequistes unless they had a strong background in plant breeding. Since the other students did have the prerequisties for the class, I often felt left behind in understanding the material. I think the best suggestion for the following years is to have graduate students at least take the undergraduate class in plant breeding. If both classes are not offered then, I feel that the best idea is to have graduate students take the undergraduate class with extra assignments. Dr. Rose did make a really good effort at giving references/sources to supplement the information taught in class. This really helped me to get to the level of the other students.
- 2. I have learnt many things. But, almost each class was about different subject. So, we could not get detailed information on them.
- 3. Dr. Roose was clear and organized in presenting the course material. The assignments were challenging and developed analytical and critical skills. Dr. Roose was very accessible in terms of answering questions, and encouraged us to think deeply about questions/issues related to the material. In terms of preparation for the course, quantitative genetics should be a <u>firm prerequiste</u>. I highly recommend the course and would not like to see it replaced with just an undergraduate level class. Ideally, both courses could continue to be offered, but students must have taken BPSC 148 or equivalent to take BPSC 221.

4. I believe that this course was extremely challenging & that <u>all</u> grad. students from BPSC should be required to take this class. AS to requirements for this course, Stats, Quantitative Genetics, & Introductory Plant Breeding <u>should</u> be a prerequisite - otherwise it is very difficult to gain full understanding of concepts & make proper analyses for breeding data. The alternative of having the introductory plant breeding course where grad. students are asked to do extra work is a good idea. But making sure that the students have the properbackground is extremely important. Also, more interaction ( in class ) such as asking questions to the students periodically would be helpful. Although it was difficult writing papers weekly w/out discussion until the day they were due, I felt this was extremely effective in forcing students to think critically & be prepared before going to discussion. However, perhaps instead providing discussion - type questions & discussing those beforehand would be helpful too.

5. Dr. Roose is very patient in answering the students' questions, and he also teaches well. He should pay attention to the time, and arrange the class more effeciently and scientifically.

- 2 -

BOTANY & PLANT SCIENCE DEPARTMENTAL SUMMARY WINTER 1998 ENROLLMENT: 175 FORMS COMPLETED: 161 PERCENT COMPLETED: 92.0

NUMBER	1. WHAT IS YOU POOR (1) (2) 0 2 MEAN: 6.09	UR OVERALL RATING O (3) (4) 4 3 MEDIAN: 6.24	F THE INSTRUCTOR? (5) (6) 23 65 STANDARD ERR	EXCELLENT NA (7) (0) 64 0
NUMBER	2. WHAT IS YOU POOR (1) (2) 0 1 MEAN: 6.04	UR OVERALL RATING O (3) (4) 4 6 MEDIAN: 6.16	F THE COURSE? (5) (6) 22 71 STANDARD ERR	EXCELLENT NA (7) (0) 57 0 OR: 0.07
NUMBER		STRUCTOR PRESENT TH ABLE MANNER? OCCASIONAL (3) (4) 2 11 MEDIAN: 6.37		ALWAYS NA (7) (0) 74 1
NUMBER	· · · · · · · · · · · · · · · · · · ·	STRUCTOR CONCERNED ING THE COURSE MATE SOMEWHAT CONC (3) (4) 4 3 MEDIAN: 6.49	RIAL?	VERY CONCERNED NA (7) (0) 78 4
NUMBER	5. HAVE YOU L DEFINITELY NOT (1) (2) 0 1 MEAN: 6.18	EARNED SOMETHING YO TO SOME EXT (3) (4) 1 7 MEDIAN: 6.46		DEFINITELY YES NA (7) (0) 77 4

DEPARTMENTAL SUMMARY

WINTER 1998

BIOLOGY

	ENROLLMEN	IT:2955	FORMS	COMPLETE	D:2074	PERCENT C	OMPLETED:	70.1
	1 LIESA 1	Te your	OUPPALL			. ^		
	BOOB					STRUCTOR?		
	(1)	(2)	(3)	(4)	(5)	(6)	EXCELLENT	' NA (0)
NUMBER	12	13	36	131	417	814	651	0
	MEAN: 5.	88	MEDIAN	6.02	STAN	IDARD ERR	OR: 0.02	
		IS YOUR	OVERALL	RATING O	F THE COU			
	POOR	( = )	( • )		<i>i</i>		EXCELLENT	NA
MUMBER	(1)	(2)	(3)	(4)	(5)	(6)	(7) 560	(0)
NUMBER	10	19	39	1/2	469	79 <b>9</b>	560	1
	MEAN: 5.	74	MEDIAN:	5.90	STAN	IDARD ERR	DR: 0.02	
	3. DID UNDE	THE INSTE RSTANDABI	UCTOR PR	ESENT THI	E MATERIA	L IN AN (	DRGANIZED,	
	NEVER		00	CASIONAL	LY		ALWAYS	NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	13	23	40	142	399	67 <del>9</del>	ALWAYS (7) 775	3
	MEAN: 5.	91	MEDIAN:	6.11	STAN	DARD ERRO	DR: 0.02	,
	4. WAS UNDE	THE INSTR RSTANDING	UCTOR CO THE COU	NCERNED A RSE MATEF	ABOUT STU RIAL?	DENTS LEA	RNING AND	
	NOT CONCI	ERNED	SOMEW	HAT CONCE	RNED	17 6	RY CONCERN	NED NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
	20	24		1				

	5. HAVI	E YOU LEA	RNED SOM	ETHING YO	U CONSIDER	VALUAB	LE?	
	DEFINIT	ELY NOT	TC	) SOME EXT	CENT	D	EFINITELY	YES NA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)
NUMBER	24	24	42	180	366	620	814	4
	MEAN: 5	. 87	MEDIAN	1: 6.14	STAND	ARD ERR	OR: 0.02	2

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	M. ROOSE		BIOLOGY 102		WI	WINTER 1998	
	ENROLLMENT: 136	FORMS CO	MPLETED:	75 PERCENT	COMPLETED:	55.1	
					*		
	1. WHAT IS YOU POOR	R OVERALL RA	TING OF	THE INSTRUCTO			
	(1) (2)	(3)	(h)	(5) (7)	EXCELLENT	NA	
NUMBER	0 4	6	4	(5) (6)	• •	(0)	
	0 7	0	4	26 23	12	0	
	MEAN: 5.25	MEDIAN: 5	.40	STANDARD E	RROR: 0.15		
	2. WHAT IS YOUR OVERALL RATING OF THE COURSE?						
	POOR				EXCELLENT	NA	
	(1) (2)	(3)	(4)	(5) (6)	(7)	(0)	
NUMBER	1 2	4	11	20 22	14	1	
	MEAN: 5.28	MEDIAN: 5	. 45	STANDARD E	RROR: 0.15		
	3. DID THE INSTRUCTOR PRESENT THE MATERIAL IN AN ORGANIZED, UNDERSTANDABLE MANNER?						
	NEVER	OCCA	SIONALLY		ALWAYS	NA	
	(1) (2)	(3)	(4)	(5) (6)		(0)	
NUMBER	1 5			15 22		0	
	MEAN: 5.48	MEDIAN: 5	.84	STANDARD EI			
	4. WAS THE INSTRUCTOR CONCERNED ABOUT STUDENTS LEARNING AND UNDERSTANDING THE COURSE MATERIAL?						
	NOT CONCERNED SOMEWHAT CONCERNED VERY CONCERNED NA						
	$(1) \qquad (2)$				VERY CONCERNE		
NUMBER			(4)	(5) (6)	(7)	(0)	
MOLIDIA	0 3		.3	21 17	18	0	
	MEAN: 5.33	MEDIAN: 5.	38	STANDARD EF	ROR: 0.15		
	5. HAVE YOU LEARNED SOMETHING YOU CONSIDER VALUABLE?DEFINITELY NOTTO SOME EXTENT(1)(2)(3)(4)(5)(6)(7)(0)124912						
	$(1) \qquad (2)$	(3) (3)	G BAIENT	(=) (-)	DEFINITELY YES		
NUMBER		(3) (	,47 0 ·		(7)	(0)	
NOTIDEN	± 2	4	9	18 21	20	0	
	MEAN: 5.45	MEDIAN: 5.	<b>66</b>	STANDARD ER	ROR: 0.16		

Instructor: <u>M. Roose</u>

Course: <u>Biology 102</u> Genetics

Enrollment: <u>136</u> (excluding auditors and concurrently enrolled students)

Number of Forms Returned: \_75\_

Below are the comments submitted by the students in the above course. All comments have been typed exactly as they were written, including any misspelling, grammatical errors, or punctuation errors. All comments submitted by a given student are grouped in a single paragraph, with a space separating the comments of different students. The number of students writing comments may be less than the number of forms returned because some of the students choose not to make comments.

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- 1. Instructor was good & so was his teaching in this course.
- 2. He is so well organized that we students are able to this difficult material step by step using his excellent lecture notes.
- 3. Very organized lectures and reviews. I was sometimes confused by the exam questions. Not from the material but the way the question was asked.
- 4. Notes are very very useful & to those who claim the notes are soporific, tell them not to get a copy & take notes down by hand.
- 5. I like how the notes are printed up for us, but this also makes for a boring lecture and so it's hard to stay awake in class.
- 6. Dr. Roose is, in one word, awesome! His lectures are very, very clearly organized and all the material is presented in an appropriate manner and with appropriate vocabulary. His demeanor & teaching style encourage student interaction and he makes sure that each student feels comfortable with the course material. Dr. Roose is definitely one of the best Professor this school has. If students fail this class its obviously because they didn't go to lecture.
- 7. Prof. Roose has a very precise manner of teaching which allows full understanding of the course, even without having read the required reading material. I can honestly say he is the best Professor that I've had @ UCR.

- 8. Fantastic instructor!
- 9. Dr. Roose is very well organized and is very easy to understand, especially with the help of his lecture handouts.
- 10. I think the instructor is a very good teacher. He is very clear in his lectures. He is always available when needed & he answers the questions asked. The instructor always seem concerned about the students, he always does his best to explain the answer.
- 11. The instructor did a good job. I enjoyed listening to him.
- 12. Clearly knows the material, but the way the lecture is given, makes it dull. Maybe a better method, and better seats to keep the class attention focused.
- 13. Thanks for organizing your lectures the way you did & handing out notes. It made it easier to learn in class because I wasn't in such a hurry to write everything down & so I was able to comprehend the material better.
- 14. Professor Roose knew what he was doing, and did an excellent job while presenting the material. However, I found myself falling asleep in his class more often than not. The printed out notes were helpful, but had he written more on the boards I think the material would have been easier to grasp. The computer examples from the CD were helpful. Wish we could have seen & experienced more.
- 15. I thought he was very good. He was well organized and has a thorough understanding of the material. I thought it was very helpful to have a copy of the lecture notes as well.
- 16. I thought Dr. Roose was knowledgeable and concerned about his students.
- 17. Nothing lack of that to be told.
- 18. I believe the instructor's teaching style was very beneficial to my understanding of the course material. The lectures were very thorough and descriptive, therefore I read the course very highly due to the instructor's abilities.
- 19. The materials of the course are rich for 1 quarter. The lecture notes sometimes it's hard to follow because the working is too broad.
- 20. Lectures are well presented, and organized.
- 21. Dr. Roose is an excellent teacher. I think his lectures help and his notes do help students understand the difficult topic of genetics. Overall, his teachings are good and effective.
- 22. This is a very hard class, in my opinion. He is very organized with the notes. The only problem for me is that the class is in the afternoon, and I can't keep myself awake for the class.

- 23. Very organized lectures.
- 24. Dr. Roose is a very organized instructor. He seems to be concerned with our learning which is good.
- 25. Good lectures. Interesting material.

26. Bio 102 is an excellent and very interesting course. Dr. Roose is a good instructor as well.

- 27. Instruction was great thanx to the notes!
- 28. Really good. I like the printed notes he gives us.
- 29. He is a very good Professor. He is very organized, grades fair.
- 30. Lectures are too long sometimes students fall asleep lecturing while writing on the board will be more effective.
- 31. Prof. Roose lecture follow precisely the format given on the overview. Helps to know what the lecture will be on.
- 32. Dr. Roose should make his lectures a bit more interesting. His lectures are quite informative and in depth but the lectures should keep more students awake.
- 33. The notes help in understanding the material. However it's hard trying to listening to the lecture when we already have the notes. Try to give the notes at the end of the week (the handouts). This way we can take notes, rather than just sleeping.
- 34. I enjoy the study of genetics but w/ the handouts, it is hard to learn. This makes students just pick up a sheet & leave. It would be much better if some of the main points are left out and have students fill them in as the lecture evolves.
- 35. Good. Maybe a bit more enthusiastic, it would make the material more interesting and not so boring. Lectures can consist more material other than the lecture sheets. Make it more in depth than just reading off the lecture sheets.
- 36. Notes helpful but Professor seems intimating to approach for questions. Does go thru material thoroughly.
- 37. Some of your examples are not very clear. But when you used the videos it helped alot to explain. If you left blanks or places to fill in on the notes, it would be better to help focus on the lectures.
- 38. He should use a pointer stick instead of laser pointer because it hards to locate the red dot. Writing on the board instead of handout. Anyway he is trying to get the class more interesting.

- 39. Dr. Roose makes this class understandable for all students; however, he speaks in a very monotone voice.
- 40. The instructor is somewhat effective in lecturing and sometimes tends to be confusing.
- 41. Instructors use of the media screen lowers the student to teacher interaction, notes are helpful, and lectures need to be more focused.
- 42. The notes provided are exceptional. However just reading off of them makes it quite hard to grasp.
- 43. Prof. Roose sometimes is unclear in the way he presents the material. I like the lecture notes.
- 44. He is a good instructor & presents material in a very organized manner. However, a lot of people fall asleep in the class. Maybe it would be better instead of just listening and reading off the notes, it would be better if students actually wrote the notes & copied them in class.
- 45. Use of computer was cool but a little boring.
- 46. I believe this course should've been taught better w/o the computer (illegible). It makes it impersonal and intimidating to ask questions. Also, genetic problems should've done on the board, although, the lecture notes are helpful for review.
- 47. It was very helping for him to give out the notes, and put old test on the web. We greatly appreciate him for giving out scantrons for the final.
- 48. I think the teacher should have an alternate way of presenting the lecture material. Handing out notes in the beginning of class does not seem to teach us much during the lecture due to the fact that people do not pay attention. Students should take notes instead!
- 49. Presented the material in an organized manner.
- 50. Well organized.
- 51. The notes on computers were wonderful! Easy to follow and could light other info.
- 52. Dr. Roose is a good instructor, but sometimes to vague in his teaching. However, this is an extremely valuable course.
- 53. Notes were helpful. Need more in depth explanation of notes.
- 54. The course is quite interesting. However, I feel the course should be taught with more enthusiasm to attract students to learn more.

- 55. Instructor laid out material in an organized fashion, but there could have been more lecture based on everyday handouts.
- 56. I don't think that Dr. Roose's methods of instruction was effective for many of the students. I learned more in my discussion class than I did in lecture. He uses words that many students don't relate to. I felt like he basically read the lecture notes to us in class. However, I did appreciate the fact that he made copies of the lecture notes for us. The notes were well organized.
- 57. The manner in which the material was presented was not efficient at all. The Professor made the course very very boring! He had a copy of the notes & he had the exact something on the overhead and basically just read it to us. I don't recommend that this method of teaching be used again!
- 58. I did not like the way the lecture material was presented in this class. I (as well as many other people) learn best by writing. There is little occasion to write on the pre-printed lecture handouts. Also, many of the diagrams were quite useless when reduced and reprinted in black & white.
- 59. Monotone instructor, but teaching abilities are good.
- 60. The materials provided are very helpful but the lecture somehow hard to understand. We rather take notes in class.
- 61. I feel the instructor could leave room for students to take notes, meaning not writing out every aspect of the lecture.
- 62. You claimed that people learn through hearing the material, but I think that it hurt people more.
- 63. The course material was interesting, but it was presented by the instructor in a inarticulate manner. The instructors use of computer overheads was horribly and very difficult to follow. The notes were noting more than exact duplicates of the overheads, which did not help at all.

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## **CANDIDATE'S SELF STATEMENT**

Mikeal L. Roose

Sept. 2019

**Research.** The principal emphasis of my research program is on the genetics of citrus and its application to the development of improved citrus rootstock and scion (fruit) varieties. This requires understanding of the horticultural and genetic characteristics of a species in which genetic analysis is slow because of a long generation time, and difficult because many varieties reproduce mainly by asexual (apomictic) processes. A secondary focus is genetics and breeding of asparagus, another perennial crop plant in which unusual breeding methods are used.

Basic research has generally focused on developing a better understanding of the phylogeny and recent ancestry of citrus varieties as an example of a group in which hybridization between species has played a prominent role. This research theme has been pursued primarily by studying citrus varieties and wild-derived germplasm with molecular markers that, over time, have increased greatly in number and sophistication, and have been applied to larger portions of our collection. Earlier studies (TJA 32, 33, 43) used relatively small numbers of markers because cost and effort per marker was high. We developed simple sequence repeat (SSR or microsatellite) markers for citrus and applied these to a large portion of the UCR germplasm collection (TJA 45, 52) and characterized diversity in specific poorly understood groups such as lemons and citrons (TJA 38, 39, 66), but these markers covered still only a small fraction of the citrus genome. They were nevertheless useful in developing linkage maps of known DNA sequences that supported chromosome level assembly of citrus DNA sequence (TJA 57, 62, 64). Sequencing of specific genes and sophisticated analysis of resulting sequence data gives insight into both recent and ancient hybridization in citrus (TJA 61) but this approach still examines a tiny fraction of the genome. Tens of thousands of markers can be studied simultaneously using DNA array technologies and we developed an array with probes for both gene expression analysis and SNP genotyping that was used to develop a map of sweet orange that supported sequence assembly by others (TJA 58). A 2013 USDA-NIFA grant funded us to sequence diverse citrus species, develop high-density SNP arrays and use these to characterize citrus germplasm and construct high-density maps. The first paper describing this SNP array is nearly ready to submit and we have presented several applications of this technology in talks and posters at meetings as detailed in my file. Particularly innovative applications are genotyping DNA amplified from single pollen grains (which contain only 2 copies of each sequence) to infer the phase (physical linkage of specific variants on each chromosome) and the discovery that fairly large (up to several Mb) deletions are found in many citrus varieties that originate by selection of mutations. Sequence data we generated contributed to a large consortium effort to better understand evolution of citrus and the role of hybridization in its diversification (TJA 64 and 68).

Another important theme in my research has been development of linkage maps which show the order of sequences in the genome and reflect how frequently recombination events occur in specific intervals between markers. Such maps are used to assist genetic analysis of specific traits and markers near causal genes can be used for marker-assisted selection when evaluation of the marker is easier or quicker than direct evaluation of the trait. This approach is particularly valuable for fruit traits that cannot be evaluated for several years because new hybrids express juvenility meaning that they do not flower and fruit for 5-8 years. Specific examples include mapping genes for resistance to citrus tristeza virus (TJA 34, 37), a significant disease problem in many areas, and nucellar embryony (TJA 50), an unusual character of many citrus in which embryos develop which are genetically identical to the maternal plant. Another trait on which we have focused is levels of citric acid and correspondingly high hydrogen ions that accumulate in juice vesicles of citrus fruit and contribute to its tart taste. In 1997 we confirmed previous evidence that high vs low acidity is inherited as a single gene trait from pummelo 2240 and identified molecular markers linked to this gene (TJA 30). However, the gene remained unknown. Study of differences in gene expression between high- and low-acid lemon varieties identified a proton pump gene as possibly involved in determining acidity levels (TJA56) and stimulated a collaborative project to characterize gene expression in similar P-ATPase genes in high and low-acid citrus types (TJA 70) which showed a strong association between expression of these genes and acidity level.

We provided collaborators in Florida with marker data to analyze the genetic control of tolerance to Huanglongbing (HLB) (TJA69), a serious disease problem caused by an uncultured bacterium (Candidatus Liberibacter asiaticus, CLas) that has greatly reduced citrus production in Florida and now threatens California. Research on this disease in California is difficult because it is a quarantine pathogen on which research can only be conducted inside a highly controlled (BSL3) facility at UC Davis. Therefore much research on this disease is conducted with collaborators in Florida. Dr. Ramadugu is an Associate Project Scientist in my lab with much experience in plant pathology and she has led several studies on this disease. Long-term testing of seedling populations from each of 100 accessions from the UCR Citrus Variety Collection identified several Australian relatives of citrus (classified as members of the general Microcitrus and Eremocitrus older taxonomies, but currently being reassigned as Citrus species) as the most promising sources of resistance for breeding (TJA67). We are now working toward characterizing the basis of resistance and transferring resistance into varieties with better tasting fruit. Another project led by Dr. Ramadugu is focused on developing improved tools for growers to detect the presence of CLas in the insect vector (ACP) and in trees (TJA 65). We also collaborated with Dr. Jin's lab in a study of small RNA profiling of HLB infected citrus which implicated phosphorous deficiency as a major cause of disease symptoms (IA59).

My program also has a strongly applied focus in development of new cultivars of citrus and asparagus. The citrus component has a primary focus on breeding and release of new rootstocks and scions (fruit-bearing part of the tree). Producing and testing new varieties is a long-term and expensive project. This portion of my research has been supported primarily by grants from the California Citrus Research Board, an organization of citrus producers that collects a levy on production and allocates the funding to research projects of interest to them. For many years, the level of funding to my breeding programs (and others) was relatively low (~\$105-\$150K per year from 1998 to 2002, \$80-\$220K from 2003-2007, and \$190-\$310K from 2008-11) with further increases to over \$500K per year as documented in the file. From 1998 to 2011 there were separately funded programs for rootstock and scion breeding. Since November 2011 the program has been funded as part of an integrated core project which includes variety evaluation by Tracy Kahn (UCR), evaluation of lemons by Glenn Wright (U Arizona), testing new cultural practices by Peggy Mauk (UCR), and the recent addition of Danelle Seymour (UCR, high throughput fruit phenotyping and sequencing). Since 2014 the breeding program was affected by two tragic deaths. In January 2013 we hired Dr. Soon Park as an Associate Project Scientist to lead the scion breeding program but he died suddenly from a stroke after working about 5 months. In December 2014 we hired Dr. Marc Moragues as an Associate Project Scientist to lead scion breeding and bring additional expertise in bioinformatics to the program. In April 2017 Dr. Moragues died from a brain tumor. Other staff members have worked hard to cover these losses but they have clearly affected productivity.

Since promotion to Full title in 1998 the program has released 8 mandarin and three rootstock cultivars. Seven of the mandarins are patented in the US and all eight are protected in some foreign countries. The most successful of these is Tango mandarin, developed by mutation breeding and selection for low seed content, which has total sales of more than 5 million trees in California and a roughly equivalent number in other countries. Gold Nugget mandarin, developed by hybridization-selection is also quite successful but is more of a niche market variety. Based on tree sales, Tango is the most successful variety ever released by UCR. Two Ph.D. students, Jennifer Crowley and Yi Zhu analyzed meiotic behavior and developed DNA markers that distinguish Tango from its ancestor (W. Murcott mandarin). We have much promising material in the breeding pipeline and expect to release additional cultivars in the future.

The asparagus breeding program was originally funded by the California Asparagus Commission, a grower group similar to the Citrus Research Board. High labor costs in California led to declines in production and budget, and they first reduced and then (2014) terminated support for the breeding program. The company that distributes seeds of our varieties internationally, Eurosemillas, S.A. provided first partial and later full support of the breeding program from 2008 to 2018. The main accomplishments of the program have been (1) release of two new cultivars, DePaoli (2006), and Espada (2016) with patents or other protection on the variety and/or its parent clones, (2) development of "male x male" crosses as a technique to produce supermales, which produce only male hybrids when crossed to a normal female, and (3) the recent development of an improved marker to genotype the sex locus (TJC 33). We continue to work on developing "all-male" asparagus cultivars adapted to Mediterranean climates because such cultivars are generally higher yielding than the mixed-sex cultivars we have produced in the past, and the new techniques we have developed make it much easier to produce and identify parents with suitable genetics.

Total research funding to my lab since 2002 is over \$9.7 million, with totals over the last 5 years at \$4.25 million. Funding agencies are mainly the California Citrus Research Board, USDA, and Eurosemillas S.A.

**Teaching.** During this period my teaching has varied in response to college and department needs. I taught Biology 102 (Introductory Genetics) 10 times from W98 to S11. In subsequent quarters the reduction in TA resources reduced the number of offerings of this course so I withdrew from the rotation. I taught BPSC 104 (Fundamentals of Plant Biology) in S13 (50%), S14 (33%), and S15 (50%) and then 100% in 2018 and 2019. I taught a graduate course (BPSC 221, Advanced Plant Breeding nine times from S98 to S18) with participation from Dr. Close in S14 but enrollments have been low for this specialized course, sometimes resulting in no student evaluations. Each year from 2013 to 2016 I taught 50% of a new course, BPSC 193, Senior Seminar. This is the capstone course for Plant Biology majors and includes lectures by the instructors and paper presentations by students (it is not a typical seminar course). I have also taught portions of BPSC 200A or 200B (Plant Biology Core, our core course for new graduate students) three times over the last 10 years. While this is a 2 unit course with several faculty instructors, it is highly interactive and most faculty attend all of the lecture and discussion sessions so the contact hours are greater than suggested by the unit hours and % taught statistics. Since 1998 I have supervised or co-supervised 9 Ph.D. and two M.S. students, and 8 students completed Ph.D. programs. My graduate students have generally been supported by research grants and gift funds (not TAships or Departmental research assistantships), but exact totals are very difficult to obtain and so are not listed in the file.

I have directed several UCR undergraduates in research projects and supervised several more as volunteers, and hosted many visiting scientists and students. I am fairly heavily involved in outreach teaching to the citrus and asparagus industries, presenting one to several talks each year to grower audiences. My web site has also developed into a significant outreach tool that includes descriptions of new cultivars and field trial results. This material has not yet been migrated to the new Drupal platform.

**Service.** During this evaluation period my major service responsibilities were serving BPSC as Vice Chair for Teaching (2009-10), and as Department Chair (2010-2016), and typically as Chair or a member of one or more Departmental Committees. In retrospect my greatest accomplishment as Chair was being directly involved in hiring 15 new faculty. During this review period I served on Academic Senate committees (Research, Academic Freedom, Faculty Welfare, and Planning and Budget) and the systemwide Academic Council Special Committee on Agriculture and Natural Resources and the UC Planning and Budget Task Force on ANR. In addition, I serve as reviewer for a diverse set of journals (average about 9 per year) and funding agencies, although I decline about 50% of review requests for lack of time. I have also declined requests to serve on editorial boards because of other heavy service responsibilities. I recently began service as Secretary-Treasurer of the International Society of Citriculture. This is the only "permanent" position in the ISC and handles most routine inquiries, budget, tax filings, and assists in planning the International Citrus Congress every 4 years. I have considerable activity as a speaker at both scientific and grower venues, averaging about 5 talks per year while I was not serving as Department Chair.



Mikeal Roose <roose@ucr.edu>

# Keynote Speaker Invitation for IOCV Conference

1 message

Georgios Vidalakis <vidalg@ucr.edu>

Thu, Jan 17, 2019 at 2:25 PM Roose <roose@ucr.edu>, James

To: Tracy Kahn <tracy.kahn@ucr.edu>, Norman Ellstrand <ellstrand@ucr.edu>, Mikeal Roose <roose@ucr.edu>, James Borneman <borneman@ucr.edu>

Cc: Robert Krueger <robert.krueger@ucr.edu>, maryloup16@yahoo.com, Marylou Polek <Marylou.Polek@ars.usda.gov>, Deborah Pagliaccia <deborahp@ucr.edu>

Hello Everyone,

Just wanted to follow up in our verbal communications, I think I did not have a chance to talk with Mike, about you giving keynote talks to the IOCV conference.

We are thinking:

- 1. Norm, genetics, sustainability, CAFÉ, etc.
- 2. James, phytobiome, modeling, etc.
- 3. Mike & Tracy, share a slot for UCR citrus genetic resources, core programs, etc.

We have 3 outside speakers, U Florida, U Maryland, & UC Davis, but I wanted to keep a balance with the "local" expertise so we can "advertise" UCR.

The IOCV conference will run from March 10 to March 12 and the keynote addresses will be aprx. 40 min at gathering events, breakfasts, lunches and dinners.

Let us know if this is something you would like to do.

All the best, GV



Mikeal Roose <roose@ucr.edu>

# **Citrus Congress Plenary Session**

1 message

Luis Navarro <lnavarro@ivia.es> To: Mikeal L Roose <mikeal.roose@ucr.edu> Tue, Jan 31, 2012 at 8:11 AM

#### Dear Mike,

How are you doing these days?. We are suffering from the deep economical crisis and trying to survive with our research projects. I hope that you are planning to attend the International Citrus Congress. As you may know we have parallel regular sessions, workshops and plenary session. The last type are intended to be addressed to all delegates in the main auditorium of the Conference Center, that has a capacity of 1,500 people. We are planning to have 6-7 plenary sessions, one in the morning and other in the afternoon each day. I would like to invite you to give one of these plenary lectures in the topic "New genetic and genomic tools for citrus breeding" or a similar title. Please let me know if you would accept to give the talk. In this case I will send you a formal invitation. We an cover the expenses that you need to come to the congress.

Warm regards



#### Luis Navarro

Instituto Valenciano de Investigaciones Agrarias Centro de Protección Vegetal y Biotecnología

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Email: Inavarro@ivia.es www.citruscongress2012.org X-EYOU-SPAMVALUE: 0 X-EYOUMAIL-SMTPAUTH: guoww@mail.hzau.edu.cn From: "Wenwu Guo" <guoww@mail.hzau.edu.cn> To: "Mikeal Roose" <mikeal.roose@ucr.edu> Cc: "Deng Xiuxin" <xxdeng@mail.hzau.edu.cn> Subject: Invitation of plenary session speaker Date: Wed, 30 Apr 2008 17:30:55 +0800 X-Mailer: Microsoft Outlook Express 6.00.2900.3138 X-Junkmail-Status: score=10/50, host=sentoku.ucr.edu X-Junkmail-SD-Raw: score=unknown, refid=str=0001.0A090205.48183C51.012F,ss=1,fgs=0, ip=211.69.143.3, so=2007-07-31 18:51:00, dmn=5.4.3/2008-02-01

Dear Mikeal,

This is Wenwu from Wuhan greeting you. Thanks again for your kindness during out visit to UCR early this year.

On behalf of the ICC2008 organizing committee and prof Xiuxin Deng, this is to invite you to present a talk on "citrus genomics and breeding (tentative topic)" for 30-40 min at the plenary session on Oct 26, 2008. As a plenary session speaker, your intl air ticket and registration fee will be covered.

According to our schedule, there have only two plenary session speakers, the other one will focus on "citrus huanglongbing".

We do hope you accept this invitation, please kindly let us know your decision.

With all best wishes, Wenwu

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