## PAMELA (PAM) GAIL MARRONE

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**Skills and Experience:** Ag biologicals expert and thought leader. Starting and building companies to high growth stage; successfully scaled two startups from scratch to tens of millions in annual revenues. Raising money from venture capital, angels, public markets and debt. IPOs. M&A. Turnarounds. Technology licensing and acquisition. Building intellectual property portfolios. Non-profit and for-profit boards. Mentoring and advising entrepreneurs. Organizational culture, corporate ethics. ESG investing and metrics. Public speaking: Entrepreneurship; sustainable, regenerative and organic ag; soil microbiome and plant health; agtech and ag biologicals.

## **EDUCATION:**

Ph.D. 1983, North Carolina State University

Major: Entomology Other specialization: Plant Pathology, Soil Science, Weed Science

B.S. with honors and distinction, 1978, Cornell University

Major: Entomology

#### **INDUSTRY WORK EXPERIENCE:**

Co-Founder, Executive Chair, Invasive Species Corporation and Invasive Species Research Institute

Aug 2023-present

https://www.invasivespeciescorporation.com

Formed a public benefit corporation and a not-for-profit foundation with the former Marrone Bio CFO to discover, develop and commercialize new technologies to control invasive species. First products: Zequanox® for invasive mussels is commercial and lower cost Gen 2 is being finalized, and Piscamycin™ for invasive carp and other invasive fish, licensed from the U.S. Geological Survey (USGS). Al-guided herbicide natural product discovery platform is 30X more productive at finding herbicidal candidates than previous company.

Awards:

National Inventors Hall of Fame (2025), National Academy of Engineering (2024) Biotechnology Innovation Organiztion (BIO) Rosalind Franklin Award (2023)

CEO/Founder, Chestnut Bio Advisors

August 2020-present

Advise several agbio, agtech, life science, food/wine startups (six women-founded and led) on all aspects of their businesses, such as business strategy, go to market, customer discovery, IP, R&D, hiring, ESG, M&A, licensing, fundraising.

Arizona State University Swette Center for Sustainable Food Systems Senior Fellow Jul 2021-present

https://sustainability-innovation.asu.edu/food/

The Swette Center for Sustainable Food Systems develops innovative ideas and solutions to the many challenges of current food systems. Taking a holistic and transdisciplinary approach, the Center's work encompasses water and energy use, carbon footprint and nutrition, innovations in agtech, and the well-being and livelihood of farmers and others working in food systems.

Marrone Bio Innovations, Inc. (NASDAQ: MBII) Director and Advisor (Aug 3-July 12, 2022). Founder and CEO, Director (April 1, 2006-Aug 2, 2020) Apr. 2006-July 2022

www.marronebio.com

Established, built and successfully scaled a company, from start-up to public listing and high growth stage, in Davis, CA and manufacturing in Bangor, MI with over 120 employees focused on discovering, developing, and marketing effective biologically based products for pest management and plant health. Sold to Bioceres Crop Solutions (BIOX: NASDAQ) for \$260 million enterprise value in an all-stock deal on July 12, 2022 creating a top tier biologicals company.

- Led the company to high growth stage (~30% CAGR 2015-20) with steadily increasing gross margins (from 2015 to 2020: 5% to >60.6%) and path to profitability in view.
- Commercialized ten award winning products from six active ingredients: Regalia® and Stargus Biofungicides, Grandevo® and Venerate® Bioinsecticides, Majestene® Bionematicide, Haven® Plant Health, and Zequanox® for invasive zebra and quagga mussels. Three more EPA-approved and several more in development.
- Raised \$70 million in angel, venture capital and pre-IPO mezzanine funding.
- Listed on NASDAQ August 2, 2013, raising \$60 million and \$40 million in follow-on in 2014. In 2017-18, raised \$50 million in follow-on and PIPE offerings and converted \$35 million in debt to equity.
- Led a successful turnaround and restructuring amid an investigation and restatement due to a rogue senior employee, who has since pled guilty to fraud.
- Patents: Foreign issued: 396; US issued: 53; Foreign pending: 105; US pending: 23
- Built two R&D, greenhouse and HQ facilities in Davis.
- Built a fermentation plant in Bangor, MI in an economically distressed rural community, on a defunct biodiesel plant property. \$10 million USDA guaranteed loan for financing.

- Led company efforts in evaluating new technologies for in-licensing and acquisition.
- Acquired Pro Farm Technologies, a Finnish bionutrient and seed treatment company for \$32 million in a combination of cash and stock. Acquired two biosanitizer products from Jet Harvest Solutions.

## Key Awards:

- Kathryn C. Hach Award for Entrepreneurial Success <u>Kathryn C. Hach Award for Entrepreneurial Success</u>, Citation: "For leading the way for the transformation of the biopesticide industry with innovative natural products for pest management and plant health." The first woman award recipient. (2022) <a href="https://cen.acs.org/people/awards/2022-ACS-National-Award-winners-Part-IV/100/i3">https://cen.acs.org/people/awards/2022-ACS-National-Award-winners-Part-IV/100/i3</a>
- "Most Admired CEO Distinguished Career Award," Sacramento Business Journal, (2020)
- American Chemical Society (ACS) <u>Award for Innovation in Chemistry of Agriculture</u>, (2019),
- Ecological Farming Association Sustie Award for decades-long leadership in sustainable agriculture (2019).
- IBMA's (International Biocontrol Manufacturers Association) Bernard Blum novel biocontrol solution 1<sup>st</sup> place award (2018),
- Agrow's "Best Manager with Strategic Vision (2014).
- Sacramento (Business Journal) Businessperson of the Year (2013)
- California Department of Pesticide Regulation IPM Innovator Award (2010)
- Governor's Environmental and Economic Leadership Award (2008)

## AgraQuest, Inc.

Founder and President May 2005-Mar 2006 Founder and Chairman May 2004-May 2005 Founder, Chairman (95-03), President & CEO Jan 1995-May 2004

Started and ran a company of 100+ employees that developed innovative natural product solutions for pest management and got it to a high growth revenue stage.

- Raised \$60 million in financing from venture capital, angels and agribusinesses.
- Filed with the SEC for a NASDAQ IPO with Merrill Lynch on Aug. 3, 2001, which was foiled by the events of 9-11.
- Developed eight products from three active ingredients (two microbials and one adjuvant). Serenade® Biofungicide for vine, fruit, nut and vegetable crops became the biofungicide industry standard. Serenade Garden was sold in 2400 Wal-Mart stores (the first ever organic listed product in the retail chain). Other products: Rhapsody® Biofungicide for turf and ornamentals, Biotune™ Adjuvant, Sonata® Biofungicide, Ballad® for soybean growers.
- Purchased a small bioinsecticide company in Canada, Codena in Jan. 2006 product launched by AgraQuest 2008.

- Built a 13,000 sq. ft. lab and pilot plant in Davis, CA and purchased a 208,000 sq. ft. (17.5 acres) fermentation manufacturing plant in Tlaxcala, Mexico that had no failed runs in five years.
- >29 US patents issued during my tenure.
- Started the Biopesticide Industry Alliance (now called the Bioproducts Industry Alliance), now a non-profit trade group with over 100 dues-paying members, which was instrumental in the passage of the Pesticide Registration Improvement Act (to bring predictability to the EPA regulatory process).

## Key Awards:

- Presidential Green Chemistry Award for the development of Serenade (2003).
- Red Herring top 100 private company
- World Technology Award for the Environment (2004).

## Novo Nordisk Entotech, Inc.

## President, Business Unit Head

Feb 1990-Jan.1995

Started and ran a subsidiary of Novo Nordisk A/S (Denmark), Plant Protection Division.

- Was a key member of an international management team that in three years grew Novo's biopesticide business to a significant worldwide supplier of Bt biopesticides (near \$20 million).
- Grew Entotech to 50 people; built a 17,500 sq. ft. facility. Filed ~20 patents, commercialized three microbial biopesticide products, led licensing and acquisition teams, developed a new way to market agricultural biopesticide products, did strategic market research.
- Screened tens of thousands of microorganisms for their pesticidal properties. Left the company when Novo decided to divest all non-core businesses and the division was sold to Abbott Labs (now Valent Biosciences, owned by Sumitomo).

# Monsanto Agricultural Company

Sr. Group Leader, Insect Control 1988-90
Group Leader, Insect Biology 1984-88
Sr. Research Biologist and Project Leader, Insect Biology 1983-84

Key member of a team of managers who helped build the foundation for Monsanto's current ag biotechnology products.

- Started and implemented a cutting-edge insect biology program on biotechnology approaches to insect control, which led to multibillion dollars in sales of crops that resist insect attack.
- Staffed program, built two facilities, supervised 15 employees. (~\$2 million budget).
- Screened over 20,000 microorganisms for their pesticidal properties.
- Wrote several market research reports.
- Key member of acquisition and business development teams.

- Developed the industry consortium, the BT Management Working Group, which mobilized the industry to address resistance of insects to transgenic Bt crops.
- Recruited by Novo Nordisk to start a biopesticide subsidiary.

#### **FOR-PROFIT COMPANY BOARDS:**

- Better Meat Company. <a href="https://www.bettermeat.co">https://www.bettermeat.co</a> Board of Directors.
   Commercializing Rhiza® mycoprotein, an all-natural, complete protein and clean-label ingredient from fungi. August 2025-present.
- **Elicit-Plant.** <a href="https://www.elicit-plant.com/en/">https://www.elicit-plant.com/en/</a>. Chair of the Board. A French agribiotechnology company developing a groundbreaking innovation that increases the physiological resilience of crops to drought stress while preserving natural resources. Sept. 2022-present.
- StemExpress. <a href="https://stemexpress.com">https://stemexpress.com</a>. Fast growing biospecimen provider of human bone marrow, cord blood, peripheral blood, Leukopaks®, Mobilized Leukopaks®, maternal blood, disease state products, and primary cells. COVID-19 testing. Board of Directors. 2019-present
- Pheronym. <a href="https://www.pheronym.com">https://www.pheronym.com</a>. Novel soil-applied pheromones from nematodes as biocontrol for soil pests. Advisory Board (2018-2021) and Board of Directors (2021-present). NSF SBIR I-Corps mentor.
- 180 Life Sciences. NASDAQ: ATNF. <a href="https://180lifesciences.com">https://180lifesciences.com</a> Board of Directors.
   180 Life Sciences is developing new treatments for one of the world's biggest drivers of disease: inflammation. July 2021-February 2024.
- Marrone Bio Innovations. NASDAQ: MBII. <a href="https://marronebio.com">https://marronebio.com</a>. Board of Directors. Aug 2, 2020 July 12, 2022.
- Marrone Bio Innovations. NASDAQ: MBII. Management representative on the Board. April 2006 Aug 2, 2020.
- **Springstar.** Retail bioinsecticide company. Board member and investor, Aug 2007-2012.
- Earth Renew, Inc. (waste to energy/organic fertilizer start up) Board member and seed investor, March 2005-2007.

#### **FOR-PROFIT ADVISORY:**

- Root Applied Sciences. <a href="https://rootappliedsciences.com">https://rootappliedsciences.com</a>. Advisor and seed investor. Root is developing a revolutionary system for real-time detection of plant disease-causing spores to reduce chemical pesticide sprays for grape and leafy green growers. May 2022-present.
- Innatrix. <a href="https://www.innatrix.com">https://www.innatrix.com</a> Advisor. Innatrix is an agricultural biotechnology company developing sustainable biological products to control untreatable crop

- diseases, pests and weed based on our patented key protein evolution technology June 2021-present.
- Teneral Cellars. <a href="https://teneralcellars.com">https://teneralcellars.com</a> Advisor and founding 50 investor. Allwomen owned California winery, woman winemaker and vineyard manager. Wine for a cause. October 2020-present.
- Arber. <a href="https://growarber.com">https://growarber.com</a>. Arber is a first of its kind Organic Biologicals Plant Wellness company for consumers. Chief Product Advisor and seed investor, including bringing Marrone Bio products to the consumer lawn & garden category. 2019-present.
- Spectral Analytics. <a href="https://www.spectralanalytix.com">https://www.spectralanalytix.com</a>. Chair of the Board of Advisors. Startup spun out of UC Davis. Hyperspectral imaging to improve the efficiency of seed quality testing and detection of insect vectors. June 2020-present.
- Chonex. <a href="https://chonex.ag">https://chonex.ag</a>. Advisor and seed investor. Chonex converts a manure waste stream into StrongSoil™ to strengthens and restore health and vitality by bringing back the biodiversity to soil. June 2021-present.
- TrueAlgae. <a href="https://truealgae.com/about/">https://truealgae.com/about/</a>. Advisor and seed investor. Harnessing the sun's power and capturing CO<sub>2</sub>, the algae multiplies rapidly and provides a reliable, economical and sustainable resource for a multitude of uses, including as a biostimulant for soil and crop health. Sept 2022-Jan 2025.
- Bioceres Crop Solutions (NASDAQ:BIOX)
   https://investors.biocerescrops.com/home/default.aspx. Advisor. Advise the CEO and senior teams on all aspects, including new technology, R&D projects, startup investments, licensing, spin outs and acquisitions. July 2022- August 2, 2023.
- Ospraie Ag Science. <a href="https://ospraieagscience.com">https://ospraieagscience.com</a>. Senior Scientific Advisor.
  Venture capital fund: By increasing profitability, improving quality-adjusted yield, and reducing environmental impact, OAS's companies not only benefit producers, but generate smarter, healthier, and more efficient food for consumers globally. Utilizing its extensive network and 25 years of experience investing in agriculture, OAS is positioned to help farmers achieve a sustainable future. August 3, 2020 October 2022.
- The Redmelon Company. <a href="http://theredmeloncompany.com">http://theredmeloncompany.com</a>. Nutraceuticals from redmelon. Founding investor (2016) Board Chair, Interim CEO and Advisor, 2018-2022.
- AgShift. <a href="https://www.agshift.com">https://www.agshift.com</a>. Artificial Intelligence for grading nuts and fruits. Advisory Board member and seed investor. 2017-2021.

#### PROFESSIONAL NOT-FOR-PROFIT BOARDS:

- Foundation for Food and Agriculture Research. Board member of this entity that has nearly \$400 million via the Farm Bill to invest in cutting edge food and ag science. 2017-Ocotber 2025. Development and Budget & Finance Committees. <a href="https://foundationfar.org">https://foundationfar.org</a>
- AWIS (Association for Women in Science), Board member, 2014-2022. Executive Committee member and Treasurer (2014-Dec 2021). Chair, Development Committee, 2022-2023. <a href="https://awis.org">https://awis.org</a>
- Cornell University Board of Trustees. Alumni elected for term of 2016-2020.
  Rotated through Building and Properties Committee and served on Audit, Risk &
  Compliance Committee and Cybersecurity subcommittee, Academic Affairs and the
  Research & Innovation Committees. \$4.5 billion enterprise with major operations in
  Ithaca, NY and New York City (Roosevelt Island Technology Campus and Weill Cornell
  Medical).
- AAIE (Association of Applied IPM Ecologists) [Independent Crop Consultants], Board member, Jan. 2006-2011, president 2008-9. Board member AIEF (scholarship foundation), 2011-2017.
- Biopesticide Industry Alliance (now Bioproducts Industry Alliance). (a trade group of 140 companies), Founding Chair, Board, 2000-2014. Chair of the Government Relations Committee (2012-2018).
- Organic Farming Research Foundation. Board member, March 2007-2016. Treasurer 2011-2014
- Sutter Health Sac Sierra Region. (\$2+ billion division of Sutter Health), Board member, Member Medical Policy, Finance and Physician Strategy Committees, March 1999-Dec 2007
- Sutter Davis Hospital. Board of Directors (Chair, 1998-2000; Vice Chair 2000-2001), Member of Community Benefit Committee (Chair 2001-3) and Medical Affairs Committee (Chair 1994-2004), 1994-Dec 2007
- National Foundation for IPM Education. Board member, 1998-2006, Chair 2003-2005
- **UC Davis CONNECT.** Co-founder and Board member (2000-2005) (an entrepreneurial resource connector)
- Davis Area Technology Association (D.A.T.A.). Co-founder (1998) and Executive Board (1998-2005)
- Sacramento Entrepreneurship Academy, Board member (1998-2005) and guest speaker (1998-2018)
- Davis Chamber of Commerce, Board of Directors and member of Government Relations Committee, 1993-1995

• Explorit Science Center, Board of Directors and Chair of Fund Development Committee, 1991-1994

## SELECTED PROFESSIONAL ADVISORY COUNCILS

- Sustainable Pest Management Work Group. Appointed by the Director of the CA Dept of Pesticide Regulation to drive California ag to a higher level of sustainability. March 2021-May 2023.
- Chlorpyrifos Alternatives Task Force. Appointed by the Director of the CA Dept of Pesticide Regulation to help find alternatives to this toxic chemical. Oct 2019-June 2020.
- UC Davis, Ag & Natural Resources, Dean's Advisory Council Apr 2008-present. 1991-1995.
- Cornell University College of Ag & Life Sciences Dean's Advisory Council, 2004-2010; 2014-2018
- CAL-EPA/CDFA Pest Management Advisory Committee, 1992-2000; Feb 2005-2019.
- Non-fumigant Alternatives Strawberry Task Force, Aug 2012.
- UC Davis Graduate School of Management Dean's Advisory Council, 2004-2010
- UC President's Industry Council on Science and Innovation, 1998-2016
- UC President's Advisory Commission on Agriculture & Natural Resources, Co-chair, 1998-Apr. 2006
- Cornell President's Council, 2002-2005; 2008-2012; 2016-present
- National Academy of Sciences, National Research Council, Board on Agriculture's "Future Role of Pesticides" Committee, 1999-2000.
- CA Governor's Council on Biotechnology, 1994-1999
- UC Systemwide Biotechnology Program, Advisory Committee, 1993-1997
- USDA Agricultural Biotechnology Research Advisory Committee (ABRAC), 1992-96
- California Biotechnology Industry Organization, Chair, Board of Directors, 1992-94;
   Vice Chair, 1994-1996
- Bacillus thuringiensis (Bt) Management Working Group, Founder and Chairman, 1988-91

#### **INVITED PRESENTATIONS:**

From 1983-present, presented hundreds of keynote speeches, seminars, podcasts, and webinars worldwide on ag biologicals, natural products for pest management and plant health, agricultural biotechnology, entrepreneurship and raising money including UC Davis Tedx talk **Controlling Pests Sustainably, A Lifelong Dream** (Feb 2015) in the "Roots of Inspiration" Series.

#### **SELECTED PROFESSIONAL PUBLICATIONS:**

Marrone PG (2025) Increasing the use of biological pesticides in integrated pest management programs. Front. Insect Sci. 5:1552361. https://doi.org/10.3389/finsc.2025.1552361

Marrone PG, Vasavada A (2025)

The potential for management of aquatic invasive species with microbial natural products. Management of Biological Invasions 16(3): 635–657, <a href="https://doi.org/">https://doi.org/</a>

Marrone, P.G. (2023), Status of the biopesticide market and prospects for new bioherbicides. Pest Management Science. <a href="https://doi.org/10.1002/ps.7403">https://doi.org/10.1002/ps.7403</a>

Marrone, Pamela G. (2023). Chapter 9 - Biopesticide commercialization in North America: state of the art and future opportunities, Editor(s): Opender Koul, Development and Commercialization of Biopesticides, Academic Press, Pages 173-202, <a href="https://doi.org/10.1016/B978-0-323-95290-3.00017-0">https://doi.org/10.1016/B978-0-323-95290-3.00017-0</a>

Marrone, Pam (2021). Prospects for Bioherbicides. Outlooks on Pest Management, Volume 32, Number 5, October 2021, pp. 214-217(4)

Marrone, Pamela G., Status and potential of bioprotection products for crop protection, In: Recent Highlights in the Discovery and Optimization of Crop Protection Products. ed by Peter Maienfisch and Ir. Sven Mangelinckx, Chapter 2, pp 25-38 (2021)

Marrone, Pamela G. (2019). Pesticidal natural products – status and future potential. Pest Management Science 2019; **75**: 2325–2340

Westwood J.H., Charudattan R., Duke S.O., Fennimore S.A., Marrone P., Slaughter D.C., Swanton C., Zollinger R. (2018) Weed Management in 2050: Perspectives on the Future of Weed Science. Weed Sci. 10.1017/wsc.2017.78

Marrone, Pamela G., 2014. The Market and Potential for Biopesticides. p. 246-250. In Biopesticides: State of the Art and Future Opportunities; Coats, et al.; ACS Symposium Series; American Chemical Society: Washington, DC, 2014.

Discovery and Development of Natural Products for Pest Management Ratnakar N. Asolkar, Ana Lucia Cordova-Kreylos, Phyllis Himmel, and Pamela G. Marrone. Chapter 3. In Pest Management with Natural Products; Beck, J., et al.; ACS Symposium Series; American Chemical Society: Washington, DC, 2013.

Isolation and Characterization of *Burkholderia rinojensis* sp. nov., a non-Bcc soil bacterium with insecticidal and miticidal activity. Ana Lucia Cordova-Kreylos, Lorena

Fernandez, Marja Koivunen, April Yang, Lina Flor-Weiler and Pamela G. Marrone. 2013. Applied and Environmental Microbiology, Oct 2013.

Have biopesticides come of age? 2012. Travis Glare, John Caradus, Wendy Gelernter, Trevor Jackson, Nemat Keyhani, Jurgen Kohl, Pamela Marrone, Louise Morin and Alison Stewart. Trends in Biotechnology 949: 1-9

Marrone, Pamela G. 2007. Barriers to adoption of biological control agents and biological pesticides. In: CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources 2, No. 051.

Marrone, Pamela G. 1999. Microbial pesticides and products as alternatives. Outlook on Agriculture 28(3): 149-154.

Marrone, Pamela G. 1998. Developing an Agricultural Biotechnology Business: Perspective from the Front Lines. Agricultural Biotechnology in International Development. C.L. Ives and B.M. Bedford, eds. 25: 335-342. CABI Publishing. Invited chapter.

Marrone, Pamela G. 1994. Present and future use of *Bacillus thuringiensis* in integrated pest management systems: an industrial perspective. Biocontrol Science and Technology 4: 517-526. Invited chapter.

Starnes, Robert L., Chi-Li Liu, and Pamela G. Marrone. 1993. History, use and future of microbial insecticides. American Entomologist, July: 83-91. Invited article.

Marrone, Pamela G. 1993. Engineered plants and microbes in integrated pest management systems. Chapter13, <u>In</u> Advanced Engineered Biopesticides. Kim, Leo (ed.), marcel dekker, inc., NY. Invited chapter.

Fuchs, Roy L., Susan C. MacIntosh, Duff A. Dean, John T. Greenplate, Frederick J. Perlak, Jay C. Pershing, Pamela G. Marrone, and David A. Fischhoff, 1990. Quantitation of <u>Bacillus thuringiensis</u> insect control protein as expressed in transgenic plants. ACS Symposium Series No. 432, Chapter 12.

Marrone PG, Ferri FD, Mosley TR, Meinke LJ. Improvements in laboratory rearing of the southern corn rootworm, *Diabrotica undecimpunctata howardi* Barber (Coleoptera: Chrysomelidae), on an artificial diet and corn. J Econ Entomol. 1985; 78: 290–293.

#### PATENTS:

More than 400 patents issued (82 US). Selected US patents:

<u>Use of formulations, compositions and compounds to modulate crop yield and/or corn rootworm infestation</u> Patent number 11,917,999

Compositions containing anthraquinone derivatives as growth promoters and antifungal agents Patent number: 8658567

Control of phytopathogenic microorganisms with sp. and substances and compositions derived therefrom Patent number: 9,918,479

<u>Use of formulations, compositions and compounds to modulate crop yield and/or corn rootworm infestation</u> Patent number: 9526251

Compositions and methods for modulating plant parasitic nematodes Patent number: 9526252

<u>Isolated bacterial strain of the genus and pesticidal metabolites therefrom</u> Patent number: 9,701,673

<u>Chromobacterium bioactive compositions and metabolites</u> Patent number: 9187531

formulations, compositions, metabolites and their uses Patent number: 9259007

<u>Uses of thaxtomin and thaxtomin compositions as herbicides</u> Patent number: 10010079

Use of sarmentine and its analogues with an herbicide, and compositions thereof Patent number: 9832996

<u>Chemical and biological agents for the control of molluscs</u> Patent number: 9414590

<u>Plant glutamine synthetase inhibitors and methods for their identification</u> Patent number: 9119401

Metabolite from streptomyces strain NRRL accession No. B-30145 and mutants thereof for controlling plant diseases Patent number: 6852317

Streptomyces strain with insecticidal activity and method of using as an insecticide Patent number: 6682925

Compositions and methods for controlling plant pests Patent

numbers: 6638910 and 6417163

Strain of bacillus for controlling plant diseases Patent numbers: 6635245 and 6586231

Strain of bacillus for controlling plant diseases and corn rootworm Patent

number: 6291426

Bacillus subtilis strain for controlling insect and nematode pests Patent

number: 6015553

Strain of Bacillus pumilus for controlling plant diseases caused by fungi

Patent number: 6245551

Bacillus pumilus strain for controlling corn rootworm, nematode and armyworm

infestations Patent number: 6001637

#### SELECTED PERSONAL AND COMPANY AWARDS

- Inducted into the National Inventors Hall of Fame <a href="https://www.invent.org/inductees/pamela-marrone">https://www.invent.org/inductees/pamela-marrone</a> (May 2025)
- Elected to National Academy of Engineering, (March 2024)
- Rosalind Franklin Award from the Biotechnology Innovation Organization, presented to a pioneering woman in the industrial biotechnology and agriculture sectors who has made significant contributions to the advancement of the biobased economy and biotech innovation (2023)
- American Chemical Society (ACS) "Kathryn Hach Award for Entrepreneurial Success" <a href="https://cen.acs.org/articles/100/i3/2022-ACS-National-Award-winners-Part-IV.html">https://cen.acs.org/articles/100/i3/2022-ACS-National-Award-winners-Part-IV.html</a>. First woman awardee. (2022)
- "Distinguished Alumni Award, North Carolina State University, College of Agriculture and Life Sciences (September 2021)
- "Most Admired CEO" Distinguished Career Award, Sacramento Business Journal, (March 2020)
- American Chemical Society (ACS) <u>Award for Innovation in Chemistry of Agriculture</u>, (2019)
- Lifetime Achievement Award for contributions in biopesticides by BioAg World (2019)

- Ecological Farming Association "Sustie" Award (2019)
- International Biocontrol Manufacturers Association 1<sup>st</sup> place Award for Novel Biocontrol Solution (Venerate®) (2018)
- Agrow Award for Best New Biopesticide (Venerate®) (2018)
- Agrow Award for Best New Biopesticide (Majestene®) (2016)
- North Carolina State University Outstanding Alumni Award (2016)
- NAWBO OWL Award "Wind Beneath Our Wings" (2014)
- Best Manager with Strategic Vision, Agrow Awards (2014)
- Sacramento Business Person of the Year (Sacramento Business Journal) (2013)
- Agrow Awards for best New Biopesticide 2012(Grandevo®)
- Cleantech Top 100 and Going Green Global 200, 2012
- Artemis Top 50 Water companies award, 2010, 2011, 2012 for Zequanox®
- NRDC Growing Green Business Leader Award, (2011)
- Agrow Awards Best New Biopesticide (Regalia®) (2010)
- UC Davis, Graduate School of Management, Commencement Speaker (June 2009)
- Governor's Environmental and Economic Leadership Award (2009)
- Elected as AAAS Fellow (Sept 2004)
- UC Davis College of Agriculture and Natural Resources Award of Distinction recipient (Nov 2003)
- 2003 Presidential Green Chemistry Award (Small Business)
- Cornell College of Agriculture and Life Sciences Outstanding Alumni Award (Nov. 2001)
- Sacramento Metro Chamber's Businesswoman of the Year for 2000

#### **SELECTED PRESS FEATURES and PODCASTS:**

Pam has appeared thousands of times in the press and is featured in many videos and podcasts.

# **Examples:**

- Pam Marrone maps the future of sustainable crop protection https://www.agtechnavigator.com/Article/2025/10/29/pamela-marrone-maps-the-future-of-sustainable-crop-protection/
- Big Red Podcast features Pam Marrone, Cornell alum on discovery, development and commercialization of natural products for pest management <a href="https://youtu.be/-7M3\_y9BJEI?si=H9rzM1p0rEiWa7yJ">https://youtu.be/-7M3\_y9BJEI?si=H9rzM1p0rEiWa7yJ</a>
- Scientist in Davis working on solution to invasive Golden Mussels: KCRA Channel 3 <a href="https://youtu.be/urBq3hSMP1s?si=lgSBsJWEmkOH30Gk">https://youtu.be/urBq3hSMP1s?si=lgSBsJWEmkOH30Gk</a>
- Capital Public Radio Insight with Vicki Gonzalez: Eradicating Invasive Golden Mussels <a href="https://www.invasivespeciescorporation.com/all-news/eradicating-invasive-golden-mussels-cap-radio-insight-interview">https://www.invasivespeciescorporation.com/all-news/eradicating-invasive-golden-mussels-cap-radio-insight-interview</a>
- Giving farmers a bigger toolbox <a href="https://topsoil.substack.com/p/biologicals">https://topsoil.substack.com/p/biologicals</a>

- Ag biologicals growth could match chemicals within 20 years. Here's what growers should be asking <a href="https://agfundernews.com/ag-biologicals-growth-could-match-chemicals-within-20-years-heres-what-growers-should-be-asking">https://agfundernews.com/ag-biologicals-growth-could-match-chemicals-within-20-years-heres-what-growers-should-be-asking</a>
- Biological progress or bathtub brews? *The state of US crop biologicals in 2024* March 21, 2024, <a href="https://agfundernews.com/biological-progress-or-bathtub-brews-the-state-of-us-crop-biologicals-in-2024">https://agfundernews.com/biological-progress-or-bathtub-brews-the-state-of-us-crop-biologicals-in-2024</a>, by Jennifer Marsten, Agfunder
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- Leaders on a Mission podcast Nov 21, 2020: https://www.buzzsprout.com/1298228/6286081-leaders-on-a-mission-pam-marrone-entrepreneur-and-pioneer-episode-8.
- Organic wine **podcast** Oct 7, 2020: <u>Pam Marrone Creating Biological Pesticides</u> <u>From The Earth</u>
- ProActive Investors Dec 10, 2019: Video: Marrone Bio CEO looks back on legacy as she steps away from leading company. <a href="https://www.youtube.com/watch?v=mkgTtAvbfZk">https://www.youtube.com/watch?v=mkgTtAvbfZk</a>
- IUPAC 2019 May 27, 2019 Conference Plenary Talk: Video <a href="https://www.youtube.com/watch?v=n5p2LPy92oM&feature=emb\_logo">https://www.youtube.com/watch?v=n5p2LPy92oM&feature=emb\_logo</a>
- Forbes Magazine Dec 5, 2018: How A Quirky Habit Helped This Founder Raise \$200M In Venture Capital. | <u>Article Link</u> | Colleen DeBaise.
- The Story Exchange Oct 9, 2018: Meet the Bug-Loving Entrepreneur Who Kills Pests Without Poison. Video. | Christina Kelly | <u>Article Link</u> |
- Bloomberg Sept 24, 2018: Biopesticides to Feed a Hungry World.
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- Farm and Livestock Directory June 20, 2018: Biopesticides: Part of a stronger crop production and pest management program.
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- The Future of Ag **podcast** June 5, 2018: Fighting Pests Strategically and Sustainably. <a href="https://aggrad.com/future-of-agriculture-019-dr-pamela-marrone-ceo-and-founder-of-marrone-bio-innovations/">https://aggrad.com/future-of-agriculture-019-dr-pamela-marrone-ceo-and-founder-of-marrone-bio-innovations/</a>

- LA Times Oct 21, 2016: She built a career on killing bugs without poison
- <a href="https://www.latimes.com/business/la-fi-himi-marrone-20161021-snap-story.html">https://www.latimes.com/business/la-fi-himi-marrone-20161021-snap-story.html</a>
- TedX talk, Dec 12, 2014: Roots of Inspiration. https://dctv.davismedia.org/content/roots-inspiration

## Other significant features:

- Front page feature, Wall Street Journal, Nov 18, 2005
- National Public Radio Interview with business correspondent Chris Arnold. May 2002.
- LA Times, Main feature in business section (May 4, 1998)
- Front cover, SUCCESS magazine (Nov 1995)

## MANAGEMENT AND BUSINESS TRAINING:

Took over 40 leadership, management, marketing and finance courses. Selected examples:

- NACD Annual Summit
- Compliance & Ethics Institute Annual Meeting
- Personal training with Kristin Rivera, PWC forensic partner, 10 hours
- Santa Clara University Markkula Center for Applied Ethics, Business Ethics for the Real World and Creating an Ethical Corporate Culture
- California Agribusiness Executive Seminar
- Harvard Agribusiness Executive Seminar
- Purdue University Center for Agribusiness, Information and Field Marketing
- Columbia Graduate Business School, Marketing Management
- The Executive Committee (TEC): The International Organization of CEOs (10 hours/month for 6 months)
- Novo Nordisk 2-week Executive Leadership (instructors from top business schools)
- CORO Foundation "Women in Leadership" Training Program (16 hours/wk for 6 months)
- International Management Training: Cultural Differences and Management Style