

What can the IIGB cores do for you? Metabolomics.

The Metabolomics Core Facility at UCR aims to provide the highest level of research support, services, and expertise in metabolomics for the UCR research community and external interested groups. The core is fully equipped with sample processing instrumentation and state-of-the-art mass spectrometers capable of performing targeted and untargeted metabolomics including one triple quadrupole for targeted experiments (Waters TQ-XS) two quadrupole time of flight instruments for untargeted experiments (Waters G2-XS and Synapt G2-Si) and a GC-MS for targeted and untargeted approaches (Thermo; equipped with a head space injector for volatiles). Routine services include assays for central carbon metabolism, lipidomics, secondary metabolites, phytohormones, neutral sugars and oxylipins. The core offers comprehensive services in data processing, statistics, and analysis with tools for data visualization and exploration. The Core has the mission of assisting in the metabolomics training of undergraduate, graduate students, postdocs, and general research community. It is our shared goal with other IIGB cores to provide support and expertise in multi omics and system biology research, for that purpose we have been developing a software platform to integrate multi omics data. In its 4 years of existence the Core has worked with more than 60 different research groups on and off campus and has contributed directly to 20 publications.