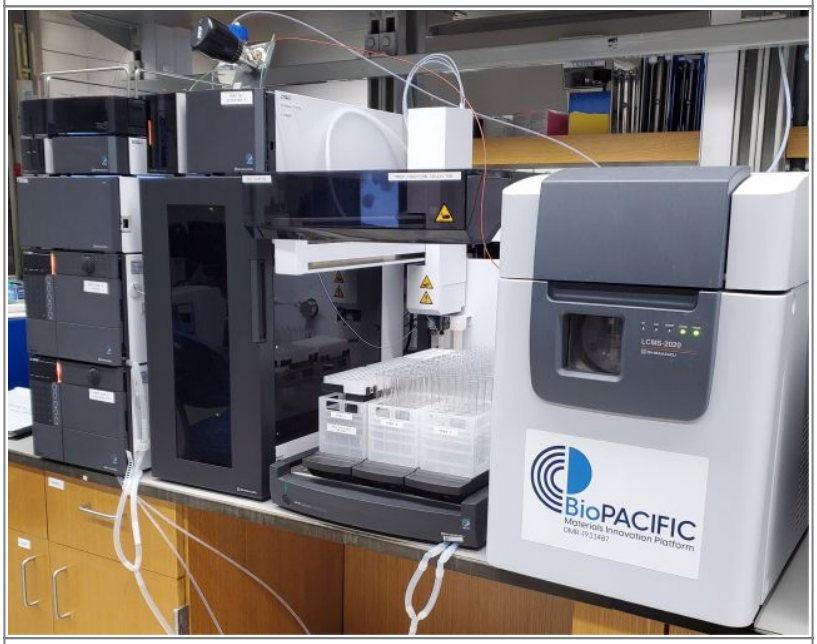
Shimadzu Nexera Preparative HPLC-MS

Shimadzu Nexera HPLC-MS

Tool Type: Reverse-phase Preparative Purification
Location: Elings Hall 2411

Principal Scientist	Training and Operations Lead
Morgan Bates	Zachary Nett
morganbates@ucsb.edu	zjnett@ucsb.edu

About

The Shimadzu Nexera Preparative HPLC system at BioPACIFIC MIP marks a significant advancement in preparative chromatography. Integrating an inline single quadrupole MS detector (LCMS-2020) with the HPLC system, it elevates the standard UV-based fractionation process to allow for direct on-line mass spectrometry. This integration ensures efficient collection of only fractions containing the target compound, significantly reducing or even eliminating the need for subsequent offline MS analysis.

Equipped with a 6-way switch valve, the system enables automated switching between three semi-preparative columns (19 mm ID) and two high-capacity preparative columns (50 mm ID), all installed simultaneously. This feature provides remarkable flexibility in column selection, controlled within the programmed method, and allows for optimized separation and purification processes to meet diverse research requirements.

Reference Documentation

NSF BioPACIFIC MIP Preparative HPLC-MS User Manual

Manufacturer Hardware Manuals

NSF BioPACIFIC MIP Analytical HPLC-MS User Manual