KANSAS STATE UNIVERSITY

PROTEIN AND BIOPOLYMER ANALYSIS CORE LAB

The Protein and Biopolymer Analysis Core Lab, or PBACL, provides integrated synthetic and analytical capabilities for biological materials, including proteins, peptides, and glycans. The Core encompasses a wide range of sophisticated technical expertise and state-of-the-art instrumentation.

WE ARE AVAILABLE TO THE K-STATE COMMUNITY, AS WELL AS EXTERNAL CUSTOMERS WORLDWIDE. WE ARE COMMITTED TO EDUCATING STUDENTS AND RESEARCHERS AND WILL WORK WITH YOU FROM INITIAL EXPERIMENTAL DESIGN THROUGH PUBLICATION.

THE PBACL PROVIDES THE FOLLOWING SERVICES TO CUSTOMERS:

- Mass spectrometry-based approaches for identification, characterization, or quantitation of proteins and glycans from tissues, cells, or other biological samples.
- Peptide synthesis and purification.
- Complete characterization of bio- and synthetic-based polymers.
- High-resolution fluorescent imaging of biomolecules in gels, plates, and live cells

TECHNOLOGY

OUR EQUIPMENT INCLUDES:

- BMG CLARIOstar plus microplate reader with FP capability.
- CEM Liberty Blue 2.0 HT4 automated microwave peptide synthesizer with Razor cleavage.
- GE AKTA Pure 25 FPLC system.
- GE Amersham Imager 680.
- GE Amersham Typhoon 5.
- Leica Thunder imager 3D live cell.
- Thermo Scientific Nanodrop One dilution-free UV-Vis Spectrometer.
- Waters ACQUITY advanced polymer chromatography (APC) coupled with Malvern OMNISEC REVEAL detectors (RI, UV/Vis PDA, light scattering, and viscometer).
- Waters ACQUITY H-class UPLC with UV/Vis PDA and fluorescence detectors.
- Waters Xevo G2/XS ToF mass spectrometer coupled with nano-ESI and Waters ACQUITY M-Class nanoUPLC.
- Three Lenovo workstations loaded with complete software for proteomic and glycan analyses.

k-state.edu/pbacl