OHSU Research Cores and Shared Resources Bioanalytical/Pharmacokinetics

OHSU's cores are your campus technology partners dedicated to the success of your project. For optimal results, take advantage of the state-of-the-art scientific resources within the OHSU community.

www.ohsu.edu/cores



The Bioanalytical Shared Resource/Pharmacokinetics Core provides the OHSU research community with access HPLC, GC/MS and LC-MS/MS instrumentation and expertise for the analysis of small molecules from biological sources.

Director

Dennis R. Koop, Ph.D koopd@ohsu.edu 503-494-7803

Associate Director

Andrea DeBarber, Ph.D debarber@ohsu.edu 503-494-3154

Senior Research Assistants Jenny Luo Iuoj@ohsu.edu

Lisa Bleyle bleylel@ohsu.edu

Location

Third floor, Richard Jones Hall 3340

Directors office: Richard Jones Hall 3367

3181 SW Sam Jackson Park Road, Portland OR 97239



Email koopd@ohsu.edu

Phone 503.494.8034

Web www.ohsu.edu/bsrpk

Service Overview

The Bioanalytical Shared Resource/Pharmacokinetics Core (BSR/PK Core) provides five essential services:

- Provide the OHSU research community with access to highly specialized instrumentation for the analysis of small molecules that can include training to operate the instruments.
- Provide specialized expertise essential to assay development, sample preparation, training on instrumentation and interpretation of mass spectral data. The Core can function as a service laboratory to provide complete analysis of samples including the development of analytical methods, sample preparation, and data analysis.
- Support for experimental design and the interpretation and modeling of pharmacokinetic and pharmacodynamic data can be obtained.
- Provide access to equipment needed for sample preparation for analysis in the BSR/PK Core. This includes nitrogen evaporation systems, heating blocks, specialized glassware and fume hoods.
- Educate the OHSU research community about the capabilities of the analytical instrumentation and stimulate new research programs.

Equipment

Liquid Chromatography/Tandem Mass Spectrometry Systems include:

- Two Applied BioSystems 4000 QTRAP triple-quadrupole, linear ion trap hybrid mass spectrometers provide quantitative and qualitative performance with UPLC capability available from an in-line Shimadzu Prominence system.
- An Applied BioSystems 5500 QTRAP triple-quadrupole, linear ion trap hybrid mass spectrometers provide quantitative and qualitative performance with UPLC capability available from an in-line Shimadzu Prominence system. Offers greater sensitivity than the 4000 QTRAP and the ability to perform MS³ experiments.

Gas Chromatography

• An Agilent 7890B/5977A GC/MSD that includes an autosampler, split/spiltless and multimode injectors for use with molecules requiring a gas chromatographic interface for separation. The instrument includes electron impact or chemical ionization modes as well as a separate flame ionization detector.

High Pressure Liquid Chromatography

• An Agilent 1100 HPLC system with a photodiode array and fluorescence detectors.

