

NEWS RELEASE

OKLAHOMA ACQUIRES NEW IMAGING TECHNOLOGY

First to provide direct imaging of biomolecules inside living cells

Oklahoma City, OK, September 04, 2013 Protea Biosciences announced today that the University of Oklahoma's Institute for Natural Products Applications and Research Technologies (INPART) has acquired the LAESI DP1000 biomolecular imaging system. INPART is directed by Robert Cichewicz, PhD., associate professor in the Department of Chemistry and Biochemistry. The instrument will be used for the Institute's natural products-based drug discovery operations.

Cichewicz will be using this new instrument to characterize newly discovered compounds produced by fungi and other microbes, in an effort to develop new treatments for life-threatening infections.

LAESI (short for Laser Ablation Electrospray Ionization) is designed to rapidly generate imaging profiles of the biomolecules present in cells and to analyze tissue sections identical to those used in pathology. The LAESI DP-1000 is intended to allow the direct identification of biomolecules in living cells and bacterial colonies, with analysis completed in seconds to minutes. Thus, molecular changes that occur in cells over time can be identified and tracked.

Cichewicz said, "This instrument is designed to allow us to examine the changes that occur in fungal and bacterial colonies such as their production of secondary metabolites, permitting us to identify and characterize new candidate antimicrobial compounds."

Cichewicz's laboratory studies microbial natural products, which are the unique compounds produced by fungi and bacteria. These compounds play important roles in helping microorganisms adapt to their environment, and they exhibit a diverse array of novel structures. The Cichewicz Laboratory focuses on using secondary metabolites from fungi and bacteria for the treatment of human diseases such as life-threatening infections and cancer.

The LAESI DP1000, developed by Protea Biosciences, was selected by an independent judging panel and the editors of R&D Magazine to receive a prestigious 2012 R&D 100 Award, as one of the 100 most technologically significant products introduced in the past year.



About Protea Biosciences Group, Inc.

Protea is a technology leader in the field of mass spectrometry ("mass spec") molecular imaging - the identification and localization of the molecular products of living cells, that is foundational science for all pharmaceutical, medical, and life science research.

Protea website: www.proteabio.com

About LAESI: https://proteabio.com/LAESI

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