

## **NEWS RELEASE**

### **FOR IMMEDIATE RELEASE**

## **PROTEA BIOSCIENCES OPENS NEW DEMONSTRATION AND TRAINING CENTER**

Presents Novel Data on *In Vivo* Mass Spectrometry at ASMS Conference

**Morgantown, WV; 8:30 AM EST June 12, 2012** – Protea<sup>®</sup> Biosciences Group, Inc. (the “Company” or “Protea”), a leading developer of technologies and services for biomolecular analysis, today announced the opening of a dedicated customer demonstration and training center for the Company’s proprietary LAESI<sup>®</sup> (Laser Ablation Electrospray Ionization) DP-1000 system. The new facility, located in the Company’s headquarters in Morgantown, West Virginia, uses state-of-the-art mass spectrometers that interface with Protea’s proprietary LAESI DP-1000 system.

“We are excited to provide potential customers with the opportunity to interact first-hand with our LAESI DP-1000 system,” said Alessandro Baldi, Protea’s Vice President and General Manager. “This dedicated facility will allow interested scientists to train on the LAESI DP-1000 and use the system to analyze their samples, allowing them to gain familiarity with the platform and its many applications. The opening of our demonstration and training center follows the successful launch of our Bioanalytical Services laboratory, a 10,000 square foot facility dedicated to conducting bioanalytical projects for biopharmaceutical companies. These two facilities illustrate our commitment to fulfilling our customers’ needs by supplying both products and services, giving them the ability to determine which Protea solution better enhances their research.”

Highlighting expanded applications of Protea’s LAESI technology, several posters featuring LAESI were presented at the 60th Annual American Society for Mass Spectrometry (ASMS) Conference in May.

“At the ASMS conference, we saw extremely strong interest in our LAESI DP-1000 system.” Baldi continued. “For the first time, we presented applications of *in vivo* mass spectrometry, profiling metabolites directly from cell cultures or bacteria colonies at ambient pressure, with no sample preparation. When profiling a living entity, this means metabolites can be mapped over time, adding an entirely new and valuable dimension to biological research.”

The posters presented at ASMS 2012 detailed research done by scientists at Protea, as well as esteemed collaborators from prestigious research institutions such as Ohio University, West Virginia University, and FOM Institute AMOLF in Amsterdam. Each of the independent studies highlighted the advantages provided by LAESI DP-1000 over traditional sample methods for mass spectrometry, including its minimal sample preparation, wide

range of sample types, 2D & 3D mapping, and high throughput. In these studies the LAESI DP-1000 direct ionization system was interfaced with multiple mass spectrometry platforms, demonstrating its broad commercial potential to enter laboratories worldwide.

Posters featuring LAESI DP-1000 presented at ASMS (presenting author underlined):

*Direct Analysis of Forensic Samples by Laser Ablation Electrospray Tandem Mass Spectrometry (LAESI-MS/MS)*

Glen Jackson<sup>1</sup>; Trust Razunguzwa<sup>2</sup>; Brent Reschke<sup>2</sup>; Matthew Powell<sup>2</sup>

<sup>1</sup>Ohio University, Athens, OH

<sup>2</sup>Protea Biosciences, Inc., Morgantown, WV

*Evaluation of a Novel Laser Ablation Electrospray Ionization Source for the Imaging of Bacteria from High Salt Content Liquid Medium*

Andras Kiss<sup>1</sup>; Donald Smith<sup>1</sup>; Brent Reschke<sup>2</sup>; Gregory Boyce<sup>2</sup>; Callee Walsh<sup>2</sup>; Matthew Powell<sup>2</sup>; Ron M.A. Heeren<sup>1</sup>

<sup>1</sup>FOM Institute AMOLF, Amsterdam, NETHERLANDS

<sup>2</sup>Protea Biosciences, Inc., Morgantown, WV

*MS Imaging of Lipids from Mouse Brain Using LAESI-MS and MALDI-MS*

Brent Reschke; Gregory Boyce; Pamela Williams; Holly Henderson; Matthew Powell

Protea Biosciences, Inc., Morgantown, WV

*Mass Spectrometric Profiling of Bacterial and Mammalian Cells with LAESI-MS*

Callee Walsh<sup>1</sup>; Holly Henderson<sup>1</sup>; Gregory Boyce<sup>1</sup>; Alan Sextstone<sup>2</sup>; Laura Gibson<sup>3</sup>; Matthew Powell<sup>1</sup>

<sup>1</sup>Protea Biosciences, Morgantown, WV

<sup>2</sup>Environmental Microbiology, WVU, Morgantown, WV

<sup>3</sup>WVU Mary Babb Randolph Cancer Center, Morgantown, WV

*Analysis of Thin Layer Chromatography (TLC) Plates Using Laser Ablation Electrospray Ionisation Mass Spectrometry (LAESI-MS)*

Trust Razunguzwa; Gregory Boyce; Pamela Williams

Protea Biosciences, Morgantown, WV

**About Protea Biosciences Group, Inc.**

Protea's LAESI (Laser Ablation Electrospray) technology allows for two and three dimensional distribution profiles of molecules in biological samples for unambiguous drug / target interaction studies, as well as the study of bio-dynamics directly from living cell cultures or colonies.

Protea's bioanalytical services laboratory provides biopharmaceutical companies the expertise to examine a wide array of biomolecules using GLP validated methodologies as well as innovative methods such as LAESI imaging to accelerate the discovery process, reduce time to market, and provide more accurate and reliable information throughout the drug development process.



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Protea is a leader in the field of bioanalytics – the identification and characterization of proteins, metabolites, and other biomolecules, which are the products of all living cells and life forms – technology that is foundational for all pharmaceutical and life science research.

### **Forward-Looking Statements**

*This press release may contain certain statements relating to future results, which are forward looking statements. These statements are not historical facts, but instead represent only the Company's belief regarding future events, many of which, by their nature, are inherently uncertain and outside of the Company's control. It is possible that the Company's actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Further, information concerning the Company and its business, including factors that potentially could materially affect the Company's financial results, are contained in the Company's filings with the Securities and Exchange Commission. All forward-looking statements included in this press release are made only as of the date of this press release, and we do not undertake any obligation to publicly update or correct any forward-looking statements to reflect events or circumstances that subsequently occur or of which we hereafter become aware.*

### **For more Information:**

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LAESI DP-1000: <https://proteabio.com/LAESI>  
LAESI DP-1000 ASMS 2012 posters: <https://proteabio.com/LAESI/Resources/posters>  
Protea Bioanalytical Services: <https://proteabio.com/services>