

Media Release

Protea Biosciences and InSphero AG Successful in Mass Spectrometry Imaging of 3D Microtissues

Schlieren, Switzerland and Morgantown, West Virginia, October 2, 2014 - Protea to present data at upcoming InSphero User Group Meetings.

Protea Biosciences Group, Inc. (OTCQB:[PRGB](#)) and InSphero AG jointly announced today an update from their collaboration focused on mass spectrometry imaging of InSphero's 3D InSight™ microtissues. In August 2014, Protea received microtissues from InSphero and hosted members of InSphero's scientific team for onsite training on the handling and preparation of the microtissues. Protea has since developed workflows for processing the 3D microtissues for mass spectrometry imaging and direct analysis. In addition, Protea has generated data from 3D microtissues grown from the HCT-116 colon cancer cell line that showed the ability for mass spectrometry imaging to detect and image numerous native proteins in 3D microtissues in a single experiment, as well as putatively identify several proteins known to be present at elevated levels in colon cancer cells. Erin Seeley, PhD, Protea's Senior Scientist for Mass Spectrometry Imaging, will present the first data from Protea and InSphero's collaboration at InSphero's upcoming User Group Meetings being held in San Francisco, California on Friday, October 24th, 2014 and in Boston, Massachusetts on Thursday, November 20th, 2014. Information about the User Group Meetings can be found in the links below:

San Francisco User Group Meeting:

<http://www.insphero.com/component/content/article?id=404>

Boston User Group Meeting:

<http://www.insphero.com/component/content/article?id=405>

"We are pleased with the initial results from our collaboration with InSphero and look forward to presenting the data at their upcoming User Group Meetings", stated Protea's CEO Stephen Turner. He added, "Now that our scientists are trained on the handling of InSphero's microtissues and workflows have been developed, we look forward to developing new applications through the combination of our respective technologies and moving forward towards commercial offerings for our pharmaceutical and biotechnology customers."

"The swift completion of the initial technology transfer puts Protea's skilled team into a great position to generate novel and highly relevant mass spectrometry imaging data from a variety of 3D microtissue types", said InSphero's CEO Jan Lichtenberg. "Getting a better insight into the internal structure of microtissues is a key interest of our customers in the life-science industry. Protea's impressive progress will be exciting news to the 3D cell-culture community at our upcoming user-group meetings."

For more information about InSphero, visit www.insphero.com.

For more information about Protea, visit www.proteabio.com.

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About InSphero

InSphero is a leading supplier of organotypic, biological in vitro 3D microtissues for highly predictive drug testing. The company, headquartered in Zurich, Switzerland, with subsidiaries in the USA and in Germany, currently counts all of the top ten global pharmaceutical and cosmetics companies as customers. InSphero 3D Insight™ Microtissues enable more biologically relevant in vitro applications in efficacy and toxicology. The spin-off company of the Swiss Federal Institute of Technology (ETH) Zurich and the University Zurich has been recognized for its scientific and commercial achievements with a number of national and international awards, including being named the #1 Swiss Startup for 2014. InSphero is certified to the ISO 9001:2008 standard for its Quality Management System.

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About Protea Biosciences Group, Inc.

Protea (OTCQB:[PRGB](http://www.proteabio.com)) is a molecular information company providing innovative bioanalytical solutions to the pharmaceutical, agricultural, and life science industries. Protea has developed a new, fully automated, molecular information technology platform, known as "LAESI" (Laser Ablation Electrospray Ionization), that enables the direct analysis of molecules without the need for sample preparation. Large molecular datasets are generated on native biological samples that can also be visually displayed as 2D and 3D images. Protea maintains its own laboratory facilities where services are provided to its clients, using LAESI and complementary technologies and expertise.

Protea and LAESI are registered trademarks of Protea Biosciences Group, Inc.

Forward-Looking Statements

This press release may contain certain statements relating to future results. 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.