Spectroscopy Society of Pittsburgh
November Meeting
Wednesday – November 16, 2016
Held at Duquesne University

5:30 PM Technology Forum Speaker's Presentation **– Power Center Ballroom Section C**
5:30 PM Social Hour **– Power Center Fides Shepperson Suite**
6:45 PM Dinner **– Power Center Ballroom Section C**
8:00 PM Business Meeting **– Power Center Ballroom Section C**
8:15 PM Technical Program Speaker's Presentation **– Power Center Ballroom Section C**

Deadline for Dinner Reservations: Friday, November 10, 2016 at 12:00 noon

Dinner Reservations:
Please register on-line **at http://www.ssp-pgh.org to make dinner reservations NO LATER THAN Wednesday, November 10, 2016 at noon. Dinner will cost $10** ($5 for students) and checks must be made payable to the SSP. This month's Main Entrée: **Honey Glazed Ham**. Vegetarian Entrée: **Creamy Polenta with Herb Roaster Vegetables.** If you have any dietary restrictions, please indicate them when you RSVP.

Parking:
The Duquesne University Parking Garage is located on Forbes Avenue. Upon entering the garage, receive parking ticket and drive to upper floors. Pick up a parking chit at the dinner or meeting.

TECHNOLOGY FORUM - 5:30 PM

Meredith Grelli
Co-Founder of Wigle Whiskey Distillery

"If The Distillery Fails, We'll Have Everything We Need to Start a Liberal Arts College"

Wigle Whiskey Distillery owner and founder Meredith Meyer Grelli will tell her story of growing a profitable, bricks and mortar manufacturing company in the age of venture capital-backed apps. She will discuss Wigle's innovative approach to the marketing, regulatory and distribution frameworks of the spirits industry and the distillery's efforts to bring Rye Whiskey back to Western Pennsylvania, the birthplace of American Whiskey.

Biography

Meredith Meyer Grelli is Co-Founder and Co-Owner of Wigle Whiskey, Pittsburgh's first distillery since Prohibition. Since beginning distilling in December 2011, Wigle Whiskey has worked to restore Pittsburgh's legacy of Rye Whiskey. More than 75,000 visitors visit the Distillery each year to learn about Whiskey production and regional history. Wigle spirits are distributed across the Mid-Atlantic and East Coast and have won a host of medals, including Best in Category Rye Whiskey, Wheat Whiskey and Genever-style Gin in America, by the American Craft Spirits Association.

Meredith also teaches New Product Development in Chatham University's Master of Food Studies Program, as well as Entrepreneurship courses for Chatham's Center for Women's Entrepreneurship.

Before starting Wigle, Meredith worked in brand management at the H.J. Heinz Company, received her MBA from Carnegie Mellon University, worked in community development around brownfield sites, studied cooking at Le Cordon Bleu Paris and received her BS in urban history and geography at University of Chicago. Meredith co-founded Burgh Bees, a Pittsburgh urban beekeeping organization and started the nation's first community apiary in the Homewood neighborhood of Pittsburgh. She serves on the Board of The Sprout Fund, Ethics Committee for the American Craft Spirits Association, Advisory Council for the Pittsburgh Technology Council and the Community Advisory Board for WQED. She has also served on the boards of the Mattress Factory and The New Hazlett Theater.

Meredith was named Alumna of the Year in 2016 by the Tepper School of Business at Carnegie Mellon University; a 2016 Athena Award finalist; a 2016 Business Women First Winner, a 2008-2010 Forte Fellow, and received the 2010 Canfield Roseman Entrepreneur of the Year Award, as well as the 2006 Harold Goettler Political Institutions Prize.

She lives in Pittsburgh with her husband and daughter.

Social Media Handles

Twitter: @wiglewhiskey, @threadbarecider
Facebook: Wiglewhiskey, threadbarecider
instagram: wiglewhiskey, threadbare cider

TECHNICAL PROGRAM – 8:15 PM

Professor Rohit Bhargava
University of Illinois at Urnana-Champaign

"Infrared Chemical Imaging: From Theory to Therapy"

A new paradigm in biomedical imaging is emerging in which the intrinsic chemical content of tissue is used to provide contrast in images. The approach utilizes spectroscopic methods to record the chemical information and computational methods to visualize the information. While knowledge extraction from chemical imaging is very powerful in that a single recording of data from unperturbed samples can be related to a variety of pathophysiologic states, the process of knowledge extraction and quantification of confidence in information is not straightforward. The constituent instrumentation, numerical methods, samples and statistics all play inter-related roles in the quality of information obtained. Here, we first present a case study of rapid analysis of breast biopsies, in which the role of sample and data quality is elucidated. We describe next strategies to ensure quality control over extracted information and provide examples of the use of numerical methods for the same. This requires an understanding of the image formation process from first principles. Finally, a synergistic control over quality of instrumentation, data and information extraction is shown to improve analyses that can impact prostate cancer care. Throughout, we describe challenges and potential solutions that have arisen, demonstrating how a combination of various disciplines leads to practical and innovative solutions.

Biography

Prof. Rohit Bhargava is Founder Professor of Engineering and Chemistry at the University of Illinois at Urbana-Champaign. He received dual B.Tech. Degrees (in Chemical Engineering and Polymer Science and Engineering) from the Indian Institute of Technology, New Delhi in 1996. His doctoral thesis work at Case Western Reserve University (in Macromolecular Science and Engineering) was in the area of polymer spectroscopy and developing infrared imaging. As a Research Fellow at the National Institutes of Health (2000-2005), subsequently, he formulated infrared imaging as a tool for molecular digital pathology. Rohit has been at Illinois since, with a research home at the Beckman Institute for Advanced Science and Technology, as Assistant Professor (2005-2011), Associate Professor (2011-2012) and Professor (2012-). Research in the Bhargava laboratories focuses on theory and simulation for spectroscopic imaging, developing new instrumentation and making chemical imaging practical for digital molecular pathology. Using 3D printing and engineered tumor models, his recent research seeks to elucidate hetero-cellular interactions in cancer progression. Among recent national honors for research are election as Fellow of the Society for Applied Spectroscopy (SAS) as well as of the American Institute for Medical and Biological Engineering (2015), the Meggers Award (SAS, 2014), Craver Award (Coblentz Society, 2013) and the FACSS Innovation Award (2012). Recently, he founded and served as the coordinator of the Cancer Community@Illinois. The effort is now designated to become a science and engineering-focused Cancer Center. Earlier in his career, Rohit was the first assistant professor hired into the new Bioengineering department at Illinois and played a key role in its establishment and development. His dedication to education has been recognized (Rose and Everitt awards) and he is routinely nominated to the list of teachers ranked excellent at Illinois. Among recent educational innovations is the development of a challenge-inspired model for undergraduate education (Cancer Scholars Program) and National Institutes of Health (NIH)-funded graduate training program focusing on the Tissue Microenvironment. His research is supported by the NIH (NCI, NIBIB, NIMH, NIGMS), Department of Defense (Intelligence Advanced Research Projects Activity, Office of Naval Research), National Science Foundation, non-profit foundations and industry.