**Seventh Charleston Workshop on**

**LIGHT MICROSCOPY FOR THE BIOSCIENCES (LMB)**

**Medical University of South Carolina**

**June 9-14, 2019**

The **Seventh Charleston Workshop on LIGHT MICROSCOPY FOR THE BIOSCIENCES** (**LMB)** will provide a solid introduction to the concepts and practical applications of light microscopy relevant to modern cell and molecular biology. Students will have opportunities for extensive hands-on experience with state-of-the-art equipment for optical imaging, digital image processing, fluorescence, confocal/multiphoton microscopy and super-resolution microscopy guided by experienced academic and commercial faculty. Lectures and laboratory exercises will include: optics of image formation; microscope alignment; phase contrast and differential interference contrast microscopy; video and digital cameras; contrast enhancement by analog and digital image processing; principles of fluorescence and fluorescence microscopy; ion imaging and fluorescent probes, including green fluorescent protein; fluorescence resonance energy transfer; laser scanning confocal and multiphoton microscopy and super-resolution microscopy. Commercial faculty representing leading microscope manufacturers will make available for students use of the latest and most advanced instrumentation for light microscopy, image detection and computerized image analysis. The **LMB Workshop** is designed for doctoral level scientists, pre-doctoral students and high level technical personnel. No prior experience with microscopy is required. All students will benefit from in-depth interaction with instructors. Students are encouraged to bring their own specimens for analysis.

**Keynote Speaker: Dr. Eeva-Liisa Eskelinen of the University of Turku, Finland** who will speak on **Correlative Light-Electron Microscopy (CLEM)**

**Course fee: $650.00 (limited scholarships will be available from Hollings Cancer Center)**

**Application Deadline: April 25, 2019**

**Organizing Committee:**

John J. Lemasters, M.D., Ph.D., Workshop Director

Monika Beck Gooz, M.D., Ph.D.

Anna-Liisa Nieminen, Ph.D.

**To apply**, send a curriculum vitae and a brief letter describing your research interests and reasons for enrolling as a **single PDF e-mail attachment** to Monika Gooz (beckm@musc.edu). Because the course is expected to be oversubscribed, applicants should inquire as soon as possible. Please indicate your complete mailing address, telephone/fax number and email address. Full consideration will be given to applications received by **April 25, 2017.**

**For further information and to apply, contact:**

***Monika Beck Gooz, MD, PhD***

**Research Associate Professor**

**Cell & Molecular Imaging Core, Hollings Cancer Center**

**Drug Discovery Building DD507**

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