

Fall 2017 SUP Newsletter

Message from the President

Dear SUP colleagues and friends,
It's been a long time since we've produced a newsletter, and for that I apologize. The world spins faster and faster, making it hard to find time to prepare one. I've been overwhelmed with the lack of technical assistance for many months, but fortunately, just recently hired a new lab manager. I also have been teaching, writing, and traveling; and have been shepherding the arrival of a new electron microscope that will do 3D EM. My original serial block face scanning electron microscope arrived in February completely destroyed and had to be remanufactured in Germany. The "new" new SEM arrived at the end of June and has been under assembly by a very capable engineer. I have excited clients/colleagues lined up ready to use it, and our training by the applications engineers is almost complete.



As for SUP news, several things have occurred or are on the horizon. First, Dr. Antonio Pedro Alves de Matos resigned his post as SUP president due to additional institutional responsibilities. Also, since the current president-elect, Dr. Giovanna Crisi, is busy planning both the SUP USCAP companion meeting in Canada in March 2018 and Ultrathin 19 in Rhode Island in June 2018, she was reluctant to take over the presidency early, and I was tapped by the board to serve again.

Second, several ultrastructural pathology meetings are in the news. The SUP Companion Meeting to USCAP in Vancouver on March 18, 2018 will be on Pathology of the Nervous System, chaired by Drs. Giovanna Crisi and Elizabeth Pavlisko. The program will be as follows:

8:30-9:15	Brent T. Harris, MD, PhD	Peripheral neuropathy electron microscopy
9:15-10:00	Anne Buckley, MD, PhD	Electron microscopy in skeletal muscle disorders
10:00-10:30	Juan Valdez	Practical in coffee effects on wakefulness
10:30-11:15	Sylvia L. Asa, MD, PhD	The role of electron microscopy in the diagnosis and management of patients with lesions of the pituitary region: past, present and future
11:15-12:00	Caterina Giannini, MD, PhD	Electron microscopy in the diagnosis of CNS tumors: dead or alive?

As always, there will be a competition for the best trainee posters. Please see that your residents and students are aware of this opportunity and encourage them to participate.

UltraPath 19 is being organized by SUP president-elect Dr. Giovanna Crisi in Newport, RI, at the Hotel Viking.



UltraPath 19 continued...

<https://www.jetsetter.com/hotels/newport/rhode-island/3937/hotel-viking>)

It will be held between June 24—June 29. The program for that is shaping up, and there will be a free one-day basic ultrastructural pathology session on Sunday as there was at UltraPath 18. We hope that many of our trainees will be able to come a day early for this informative course. Meeting sessions will cover renal, neural, pulmonary, and pediatric pathology and infectious diseases. Also, special topics will be presented on EM in modern pathology as will a tribute to Dr. Juan Rosai. More information will be available as the program unfolds.

On another training note, the UltraPath 101 course sponsored in part by SUP and taught by Dr. Gary Mireau and Eric Wartchow was again completely filled and extremely successful. This was a 3-day meeting during which basic ultrastructure was taught at the Stanley Hotel in Estes Park, CO, an idyllic setting for learning and forming lasting relationships with others involved in diagnostic ultrastructure. After the last workshop in 2015, a network of students and colleagues was formed for discussion of difficult cases.



The Stanley Hotel

Here's a report from Eric:

ULTRASTRUCTURAL PATHOLOGY 101: Fundamentals of Diagnostic Electron Microscopy Estes Park, Colorado – September 24-27, 2017

Following the success of the initial *ULTRASTRUCTURAL PATHOLOGY 101: Fundamentals of Diagnostic Electron Microscopy* workshop held in 2015, the Society for Ultrastructural Pathology again sponsored an intensive four-day introductory course in diagnostic electron microscopy at the historic Stanley Hotel in Estes Park, Colorado. The curriculum was presented as a combination of didactic lectures and informal discussion sessions covering a wide variety of topics, including:

Management of the EM Service

Renal Disease

Liver/GI Disease

Metabolic Storage Disease

Respiratory Disease

Hematologic Disease

Skin Disease

Neuromuscular Disease

Neoplastic Disease

Technical Forum

Fundamentals of Diagnostic Electron Microscopy meeting continued...

Directed by Eric Wartchow and Gary Mierau (Children's Hospital Colorado), the workshop welcomed an international group of attendees with backgrounds ranging from non-physician electron microscopists, pathologists in training, practicing pathologists, veterinary pathologists and industry product managers. Registration was again limited to 40 participants who were treated to valuable exchanging of ideas and engaging discussions while the beautiful venue and informal atmosphere also allowed time for relaxation, reflection and relationship building.



2017 UltraPath 101 Attendees

Finally, Microscopy and Microanalysis, the annual meeting of the Microscopy Society of America (MSA) and the Microanalysis Society (MAS) was held August 6-10 in St. Louis this year. An excellent program on diagnostic pathology was organized by the Diagnostic EM Focused Interest Group on “Utilizing Microscopy for Research and Diagnosis of Diseases in Humans, Plants and Animals”.

This was the 75th anniversary of MSA, and the meeting was a very special celebration of its formation. Plenary talks included one by Dr. Eric Betzig from Jenelia Research of the Howard Hughes Medical Institute who shared the Nobel Prize for developing super-high resolution fluorescence microscopy ("Eric Betzig - Facts". *Nobelprize.org*. Nobel Media AB 2014. Web. 5 Nov 2017. <http://www.nobelprize.org/nobel_prizes/chemistry/laureates/2014/betzig-facts.html>).

Anniversary lectures were presented by Dr. Robert Glaeser on “Development of High-Resolution TEM for Imaging Native, Radiation-Sensitive Biomolecules” and Dr. Ondrej Krivanek on “Smarter Than an iPhone: The Emergence of the Modern Microscope”.

There was a pre-meeting congress for early career professionals in microscopy and microanalysis that provided an opportunity to share cutting edge research, to network, and to engage with peers.

Special short courses were offered, including sessions on specimen preparation for resin-embedment; cryo-methods; correlative light and electron microscopy; immunolabeling; image analysis; and 3D imaging reconstruction and instrumentation. The next M&M meeting will be August 5-9, 2018 in Baltimore, MD.

If you have SUP-worthy news to share, don't hesitate to send it, and I'll include it in the next newsletter. Also, don't forget to visit our website, ably and generously managed by webmaster Charlie Register: <http://www.ultrapath.org/>

Very best wishes for the autumn season,

Sara Miller, President SUP

November, 2018