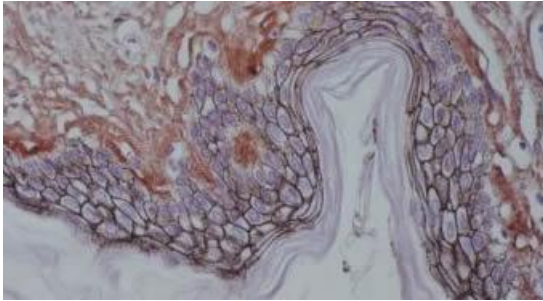


# **EMS MICROSCOPY ACADEMY**

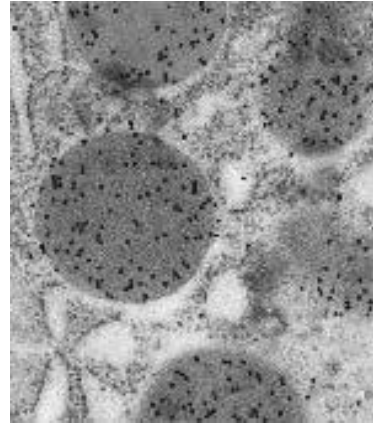
## **AURION IMMUNOGOLD SILVER STAINING WORKSHOP**

### *Examples of the endless possibilities when doing Immunogold Staining*

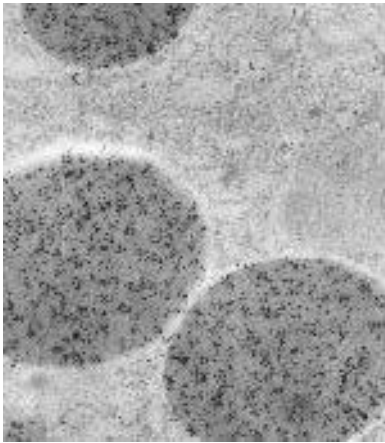


Immunogold silver staining of E-cadherin on a paraffin section of human skin.  
Courtesy of R. Moella, Dept. of Exp. Path., EUR, The Netherlands

- Mouse monoclonal anti E-cadherin
- GAM IgG Ultra-Small
- Aurion R-Gent SE-LM

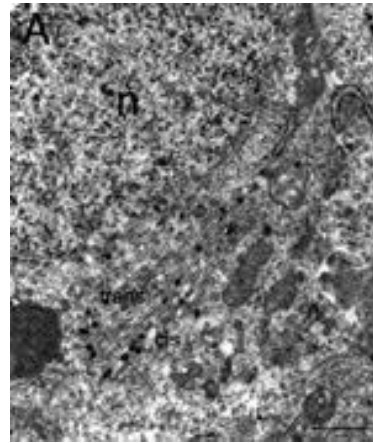


Immunogold silver staining of alpha-amylase on Lowicryl HM20 section of rat pancreas.  
• Goat-anti-Rabbit, 15nm



Immunogold silver staining of alpha-amylase on Lowicryl HM20 section of rat pancreas.

- Goat-anti-Rabbit, 15nm
- Ultra-small R-Gent (Dansher Method)



Pre-embedding immunogold labeling of Huntingtin Interacting Protein 3 in Mouse Brain using Aurion GAR Fab-US and Aurion SEEM.

Courtesy of Ms Hong Yi, Emory University, Atlanta, GA

# **EMS MICROSCOPY ACADEMY**

## **AURION IMMUNOGOLD SILVER STAINING WORKSHOP**

### **Details**

Tuesday - Thursday  
March 26 - 28, 2019  
8:30 a.m. - 4:30 p.m.  
Hatfield, Pennsylvania, USA

### **Targeted Participants**

Students, researchers, and microscopists who want to learn the most up to date theory and practice in immunogold labeling.

### **Scope of Class**

The objective of the course is to provide researchers with the opportunity to learn the theory and practice of immunogold labeling. Participants will process their own samples under the expert guidance of our tutors, who are experts in immunogold Silver Staining techniques.

During the workshop attendees will receive theory, including but not limited to immune detection, in situ hybridization, silver enhancement, as well as background issues. There will be time for practice, as well. Attendees will be able to work with their own specimens, as well as ones we will have prepared. A full review of incubation methods, testing of antigenicity and reactivity, complete principles of immunogold labeling, and preparation of conjugates for EM and LM will be covered.

### **The EMS Microscopy Academy**

Located in Hatfield, Pennsylvania, the Academy provides electron microscopy classes, workshops and training sessions for all fields of microscopy, including materials science and biological science.

### **Instruments Available**

<b>Hitachi TEM</b>	<b>Inverted Light Microscope</b>	<b>Transmitted Light Microscope</b>
<b>Orbital Shakers</b>	<b>Magnetic Stirrers</b>	<b>PH Meter</b>

### **Format**

Lecture, demonstration, and hands-on practice, as well as round table tips and tricks discussions. Participants are encouraged to bring their own samples to work on during lab time.

# **EMS MICROSCOPY ACADEMY**

## **AURION IMMUNOGOLD SILVER STAINING WORKSHOP**

### **Note**

Specimens need to be “ready to use”, e.g., sections of chemically fixed cells on coverslips. For each combination of primary antibody and gold conjugate that you want to test during the workshop, you need at least 3, preferably 4, specimens. This enables you to test different dilutions of the primary antibody and to check the Immuno Gold/Silver reagents (negative control).

For pre-embedment immuno labeling, also include specimens that will be immuno labeled for evaluation on the light microscope. These specimens are used to see if the experiment is successful. During the workshop there is no time/no option to further process pre-embedment specimens for EM evaluation. Plastic embedment and sectioning needs to be done at your own facility.

### **Instructors**

**Peter Van De Plas** has a background in histology and immunocytochemistry and joined Aurion in 1991. During the pioneering phase of Aurion in the early nineties, he worked closely with Dr. Leunissen in founding a firm basis for Aurion. He contributed not only to the development of product applications, but also in designing the Aurion Immuno Gold Silver Staining workshop. He has been invited to many international microscopy conferences and workshops, and is especially experienced in providing hands-on training. Former workshop attendees and customers appreciate Peter for his technical support on, and his thorough knowledge of, the Immuno Gold silver staining techniques. The Aurion Immuno Gold workshops in Europe, Asia, Australia, and the US have all been fully attended and very well received.

**Michael Kostrna** was the program director of the Electron Microscopy Technician program at Madison Area Technical College and has more than 35 years in EM technical education and research experience. He has been training EM students for 30 years and has developed curricula and lab exercises for TEM, SEM, OLM, lab safety, introductory and advanced biological EM, EM, maintenance, and x-Ray microanalysis. He has worked with companies such as SC Johnson Polymer, Dow Chemicals, Io Genetics, Virent Technologies, ABS Global, NanoOnocology, and Microscopy Innovations, and in the process gained insight to the various applications of EM.

**Al Coritz** has been working in the Electron Microscopy field for 39 years, beginning at the Yale School of Medicine and ending up on the commercial side with several key EM companies. His specialty is Cryo-techniques and Thin Film Technology: i.e. Freeze Fracture/ Rotary Shadowing, High Pressure Freezing, and more. He is currently with Electron Microscopy Sciences where he has been the Technical Director for over 20 years.

# **EMS MICROSCOPY ACADEMY**

## **AURION IMMUNOGOLD SILVER STAINING WORKSHOP**

### **Main Curriculum**

Gold nanoparticle conjugation

Theory underlying immunogold labeling protocols

Silver enhancement of gold particles

Immunogold labeling on a variety of sample preparations of OLM

Immunogold labeling for EM

- a. Pre-embedment immunogold labeling using ultra small gold conjugates and silver enhancement
- b. Post-embedment immunogold labeling on plastic and ToKuyasu cryo sections using conventional colloidal conjugates and ultra small gold conjugates
- c. Manual and automated immunogold labeling

Pre/Post-embedment double immunogold labeling

Background minimization in immunogold labeling

Troubleshooting

### **Registration Fee: \$995.00 Includes**

A workshop syllabus, all supplies, reagents and solutions, lunches, coffee, tea, and dinner on the opening evening of the workshop.

### **Lodging**

Participants are responsible for making their own hotel reservations.

The following hotel has been designated as the host hotel:

#### **Homewood Suites**

1200 Pennbrook Parkway

Lansdale, PA 19446

Phone: 215-362-6400

The special rates are \$119.00 per night (plus tax) which includes a hot breakfast and a light dinner in the evening.

Please make your reservations and mention you are participating in the EMS Workshop.

GROUP CODE: EMS WORKSHOP

Everyone should plan to arrive the night before class begins.

### **Enrollment Note**

Registration will be limited to a maximum of 15 participants.

EMS will provide samples to those who prefer not to bring their own.

**EMS MICROSCOPY ACADEMY**  
**AURION IMMUNOGOLD SILVER STAINING WORKSHOP**

**Printable Registration Form**

\_\_\_\_\_ M / F  
Name / Title

\_\_\_\_\_  
Institution

\_\_\_\_\_  
Department

\_\_\_\_\_  
Mailing address

\_\_\_\_\_  
City / Zip

\_\_\_\_\_  
Country

\_\_\_\_\_  
Telephone / Fax

\_\_\_\_\_  
Email:

Will you bring your own specimens? Yes\_\_\_ / No\_\_\_ (See Note on prior page)  
What Samples are you bringing and most interested in?

\_\_\_\_\_  
All registrations must include payment.  
Rate \$995.00 per Person  
Number of Participants \_\_\_\_\_  
Total \$\_\_\_\_\_

Pay by check: make payable to EMS and reference "Aurion Workshop Mar 19".  
Pay by credit card: Credit Card Type \_\_\_\_\_  
Credit Card Number \_\_\_\_\_  
Expiration Date \_\_\_\_\_ 3 Digit Code \_\_\_\_\_

\_\_\_\_\_  
Signature / Date

Return your registration to:  
Stacie Kirsch  
1560 Industry Road  
Hatfield, PA 19440 USA  
Phone: 215-412-8402  
E-Mail: [info@emsdiasum.com](mailto:info@emsdiasum.com) or Fax: 215-412-8452

**TO REGISTER ONLINE, CLICK [HERE](#).**