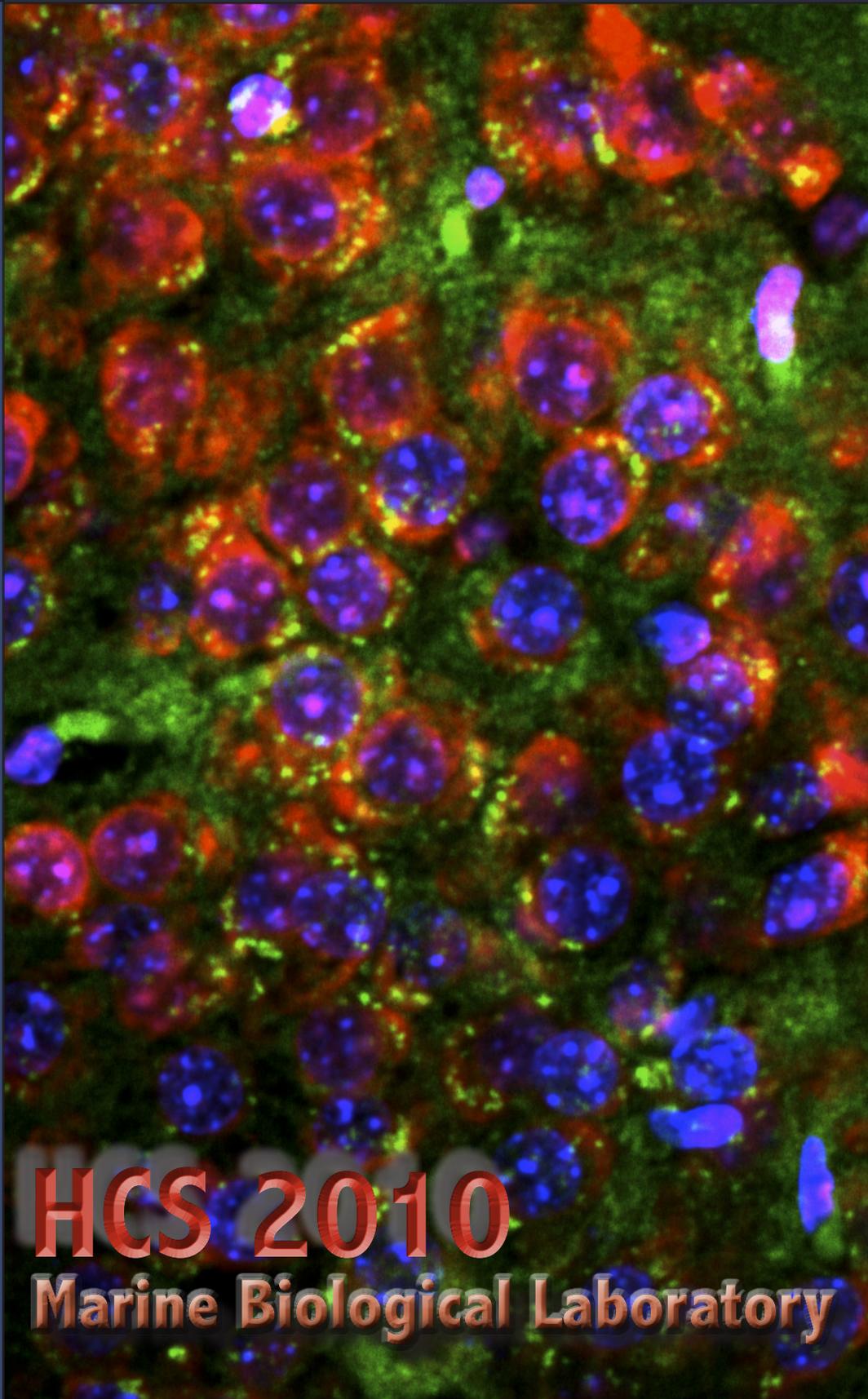




The Histochemical Society NEWSLETTER

Winter 2010

Vol. 23 Number 1



HCS President's
Message • 2

Sage is New
JHC Publisher • 3

New Members • 4

Call for Nominations • 4

JHC on Facebook • 4

John Couchman Appointed
Editor-in-Chief • 5

Meeting Deadlines • 5

Minority Awards
for Short Course • 5

Short Course Info • 6

Short Course Schedule • 7

2010 Meeting Schedule • 9

President's Message

Hola amigas y amigos of The Histochemical Society (HCS)!

The members of the Rosa-Molinar Laboratory and I hope you enjoyed your holidays and that the New Year will bring you joy and good things. I would like to begin the year by thanking all members of the HCS staff for their invaluable assistance, particularly Meg McGough, Tanda Jaipen, and Suzanne Paquette; the HCS Executive Council and committees for their hard work and dedication; and Bill Stahl for his insights and mentorship.

Mark Sanders, University of Minnesota and I have put together what we think will be an exciting scientific program for the 61st annual HCS meeting to be held March 21-23, 2010 at the Marine Biological Laboratory, Woods Hole, Massachusetts. The meeting, ***“Three-Dimensional Imaging Technologies: Bridging the Gap between Light and Electron Microscopy,”*** promises posters and presentations rich with exciting ideas, peer support, opportunities for collaborations, and mentorships. Registration and information for the meeting can be found at:

<http://www.histochemistry2010.org/>.

The expanded hands-on short course on immunocytochemistry: ***“Immunohistochemistry and Microscopy”*** will be held March 23-26, 2010 at the Marine Biological Laboratory, Woods Hole, MA. Registration and course information can be found at: <http://immunohistochem.com/>.

It has been a pleasure serving you the last year, and I expect that at Woods Hole you will be able to indulge your passion for science and your appetite for new ideas and experiences!

Ed Rosa-Molinar

President, The Histochemical Society



HCS President Ed Rosa-Molinar in his lab at University of Puerto Rico-Rio Piedras



Members of the Rosa-Molinar Laboratory

From left to right: Nydia Rivera-Rivera, Eduardo Rosa-Molinar, Noriada Martinez, Ria Richardson, Irma Torres-Vazquez, and Jose Serrano-Velez

New Publisher

Sage is chosen by HCS as Publisher of the Journal of Histochemistry and Cytochemistry

When HCS began publishing the *Journal of Histochemistry and Cytochemistry* (JHC) in print in 1953, it did so with the help of a commercial publisher. Over the years, HCS changed publishers several times but in 1986, it took the JHC to self-publishing. Based on a number of criteria

including financial, editorial control and production quality, it was an excellent decision for

the time. Under HCS oversight, JHC manages its own editorial process and production of the print and the online journal. These operations are carried out in partnership with our printer Sheridan Press and High-Wire Press which is responsible for production of the on-line edition. This model has been very successful and has supported the missions of the Journal and Society.

HCS and JHC must continually weigh the success of self publishing against the evolution of scholarly publishing in the marketplace and within the confines of the scholarly tradition.

We must consider the impact of Open Access literature on peer reviewed literature, the decline of print subscriptions in favor of online, the consolidation of publishers into few, large, multinational companies, the change in reading from paper to e-devices and of critical importance, the continued diminution of library budgets.

The balancing of the JHC success against the evolving publish-

ing landscape remains the focus of much of Council's agenda for HCS. Because of this, in October of 2008, The Histochemical Society's Council met for a Strategic Planning Meeting to discuss the future of the Society and that of the *Journal of Histochemistry and*

The HCS Council directed that the Society and Journal staff explore all options for JHC publishing, including a return to a commercial publisher.

Cytochemistry. Extensive discussions were carried out about the current status of the Journal

with stated concerns for the future of publishing. The HCS Council directed that the Society and Journal staff explore all options for JHC publishing, including a return to a commercial publisher. Initially this required creation of a request for proposal (RFP) for publishing of the Journal. Direction was provided by the HCS Publication Committee under Tom Wight and Executive Director, Bill Stahl. Preliminary discussions were carried out with a number of potential publishers and our RFP was sent to five publishers in early Spring of 2009.

Four commercial publishers responded with proposals, which the Publication Committee vetted and followed

with a recommendation to Council to continue discussions with two of the publishing companies. The finalist publishers were asked for more detailed information regarding management of the JHC, future business plans, and opinions on

academic publishing. HCS also requested in person presentations and a business meeting with each company. Tom Wight, Bill Stahl, Denis Baskin, Meg McGough, Tanda Jaipen, Ed Rosa-Molinar (by conference call) and Antonio Nanci (by conference call) met with representatives of both companies in early Summer of 2009. Recommendations from these individuals were forwarded to the Publication Committee which settled on SAGE Publishing as their final choice. After extensive deliberation the Committee recommended to Council that HCS enter into contract negotiations with SAGE Publishing for publication of JHC beginning in January of 2011. Council agreed and negotiations proceeded. HCS and SAGE finalized their negotiations and, in December 2009, HCS signed a five year contract with SAGE to publish JHC. HCS retains ownership of the Journal and is responsible for content and editorial oversight, while SAGE will manage print and on-line production of the Journal.

HCS retains ownership of the Journal and is responsible for content and editorial oversight, while SAGE will manage print and on-line production of the Journal.

SAGE Publications is the world's fifth largest publisher of academic journals and they are an independently owned com-

pany with a commitment to remain independent. They began publishing with a focus on social sciences and then moved into science, technology and medicine. This is where their focus remains and JHC

continued next page

New Publisher *continued ...*

fits well into their plans for growing their core business.

Although based in Thousand Oaks, California, SAGE has branches in London, New Delhi, Singapore and Washington DC. They are a HighWire Press publisher which will ease the transition to them becoming JHC's publisher. Addi-

tionally, they already have moved all of their online journals on to HighWire's H2O platform of web 2.0 functionality.

HCS is looking forward to working with SAGE on JHC and is beginning the partnership with a new venture of creating an online short course archive of the HCS Micros-

copy and Immunohistochemistry Course which we will be recording in March at the HCS annual meeting.

Meg McGough, Marketing and Subscriptions Manager, JHC
Bill Stahl, Executive Director, HCS

We'd Like to Welcome Our 2010 New Members:

T.A. Franz-Odendaal
Mount Saint Vincent University

Rachel Gonzalez

Kelly L. Hudkins
University of Washington

Sanjay Jain
Washington University School of
Medicine

Elena L. O'Brien
Abcam, Inc.

Paulo T. Oliveira
University of Sao Paolo

Andreea Csilla Pataki
University of Copenhagen

George Perry
University of Texas at San Antonio

Meghan M. Reusch
Abcam, Inc.

Sybille Rex
Abcam, Inc.

Glenn K. Sherer
University of St. Thomas

Nissi Varki
University of California San Diego

Xinglong Wang
Case Western Reserve University

Noriada Martinez-Rivera
Univ of Puerto Rico - Rio Piedras

Nydia Rivera-Rivera
Univ of Puerto Rico - Rio Piedras

Carlos Toledo-Hernandez
Univ of Puerto Rico - Rio Piedras

Irma Torrez-Vazquez
Univ of Puerto Rico - Rio Piedras

Jose Serrano-Velez
Univ of Puerto Rico - Rio Piedras

Call for Nominations

Nominations for the positions of President-Elect (2-year term as President, 2011-2013), and Councilor (2010-2014) should be sent by February 5, 2010 to the Executive Director via email at: wlstahl@u.washington.edu.

Persons providing nominations should have permission from the candidate(s) before submitting their names. All nominations will be reviewed by the HCS Nominating Committee. The President-Elect shall have served on Council at least one year prior to being eligible for election. Councilors shall have held membership in the Society for at least two consecutive years prior to the start of his/her term.



Visit JHC on Facebook for highlights from the latest issues articles. Authors talk about their research and display an image that exemplifies the work.

<http://bit.ly/jhcfacebook>

Couchman Appointed Editor-in-Chief



John R. Couchman, Ph.D., the Danish National Research Foundation Professor at the University of Copenhagen, will assume the Editor-in-Chief position of the *Journal of Histochemistry and Cytochemistry* in January 2011 as Kevin A. Roth, M.D., Ph.D steps

down from his five year tenure. Dr. Couchman is a cell biologist by training with active research areas of cell adhesion to extracellular matrix, signaling from adhesion receptors; potential involvement of cell surface proteoglycans and their ligands in tumour progression; and heparan sulphate biosynthesis and regulation.

According to Couchman, "JHC has an important role in the continued publishing of articles on pathology, neuroscience, and microscopic and histologic techniques. However, there is room to bring more mainstream articles from cell biology into JHC and that will be one of my focuses."

Previous to becoming the Danish National Research Foundation Professor, Dr. Couchman was the Head of the Division of Biomed-

cal Sciences at Imperial College London and before that, Director of the Cell Adhesion/Matrix Research Center, at the University of Alabama at Birmingham. He served as President of The Histochemical Society from 2003-2004.

Dr. Couchman was Editor of *Biochemical Journal* from 2000-2007. Presently, he is an Associate Editor of the JHC is on the Editorial Board of the *International Journal of Experimental Pathology* and will be joining the Editorial Board of the *Journal of Biological Chemistry* in 2010.

Dr. Couchman received his Ph.D. in Cell Biology from the University of Wales, U.K. and took 1st Class honors with his B.Sc. Degree in Zoology at the University College Swansea.

MEETING DEADLINES

Jan. 22, 2010 - Deadline for HCS Awards Applications (Extended!)

Feb 26, 2010 - Deadline for submission of LATE BREAKING ABSTRACTS.

Feb. 26, 2010 - Last day to receive early registration rates.

HCS Receives Funds to Support Minority Students

FASEB's Office of MARC and Professional Development Programs is offering travel awards for underrepresented minority graduate students, postdoctorates and junior faculty (assistant professors within 1 year of appointment) to support participation in the Immunohistochemistry & Microscopy Short Course. Participation in this 4-day course is limited. The \$1850 award must apply to related travel expenses (air/ground transportation) and course registration for applicants who are approved to participate in the short course and receive approval for the travel award. Participation in the HCS meeting preceding the course is encouraged if within the \$1850. Call: 206-616-5894 or Email: mail@histochemicalsociety.org.

Cover Image

The image on the front cover was provided by the Rosa-Molinar lab, and shows immunohistochemical detection of tyrosine hydroxylase (green) in microwave-processed paraffin tissue section of mouse cerebrum. Neuron cell bodies and nuclei counterstained with NeuroTrace® [530/615], red-fluorescent Nissl stain (red) and TO-PRO® -3 iodide [642/661] (blue).

HCS HANDS-ON SHORT COURSE
on
IMMUNOHISTOCHEMISTRY and MICROSCOPY

A SHORT COURSE organized and sponsored by The Histochemical Society
at
The Marine Biological Laboratory, Woods Hole, MA
March 23-26, 2010

This course will follow The Histochemical Society Annual Meeting
(March 21-23, 2010) at The Marine Biological Laboratory

Organizers: William L. Stahl, University of Washington and The Histochemical Society,
Eduardo Rosa-Molinar, University of Puerto Rico-Rio Piedras,
Denis G. Baskin, VA Puget Sound Health Care System and University of Washington

Tuesday-Friday, March 23-26:

Lectures and Laboratory Sessions

Topics: General principles, fixation, labeling, controls, antigen retrieval, amplification, direct & indirect staining, double-labeling strategies, visualization techniques by light, fluorescence and electron microscopies, acquiring and validating image authenticity. Laboratory sessions will utilize light and fluorescence detection techniques.

The course will be limited to 30 participants, so early registration is important. Registration includes all course materials and room and board at the MBL for three days. A limited number of stipends to help defray costs associated with attending the course are available for doctoral students who are members of HCS. Applications for membership in The Histochemical Society are available at the Society's website: www.histochemicalsociety.org.

Summary of Contacts:

SHORT COURSE WEBPAGE: <http://www.immunohistochem.com/>

THE HISTOCHEMICAL SOCIETY WEBPAGE: www.histochemicalsociety.org

Additional information – Contact William L. Stahl: wlstahl@u.washington.edu

**PRELIMINARY SCHEDULE FOR
HCS HANDS-ON SHORT COURSE at WOODS HOLE
*Immunohistochemistry and Microscopy***

<http://immunohistochem.com/>

Schedule is subject to change.

DAY 1

TUESDAY March 23, 2010

- 2-6 PM Participants arrive at Marine Biological Labs: registration/sleeping room assignments
6 Dinner at MBL
7 Optional lecture presented as part of HCS Annual Meeting
8 PM **ORIENTATION SESSION** for participants in course
William Stahl, The Histochemical Society and University of Washington

DAY 2

WEDNESDAY, March 24, 2010

Chairs for Morning sessions: William Stahl, The Histochemical Society and Nancy Sawtell, Cincinnati Children's Hospital

- 7 AM Breakfast
8-8:15 Opening of session
8:15-9:15 **INTRODUCTION TO IMMUNOHISTOCHEMISTRY**
Charles Frevert, University of Washington, Seattle
9:15-10 **Lab session**
10-10:15 Refreshment break
10:15-10:45 **ANTIBODIES 1 - general principles**
Hinke Multhaupt, University of Copenhagen, Denmark
10:45-11:15 **ANTIGEN RETRIEVAL**
Allen Gown, Phenopath Laboratories, Seattle, WA
11:15-12 **Lab session**
12-1 PM Lunch

Chairs for Afternoon sessions: Joseph Mazurkeiwicz, Albany Med. College and Allen Gown, Phenopath Laboratories

- 1-2:30 **Lab session**
2:30-3:15 **CONTROLS & FIXATION**
Denis Baskin, University of Washington and VA Puget Sound Medical Center
3:15-3:30 Refreshment break
3:30-4:30 **DOUBLE LABELING/LOCALIZATION TECHNIQUES**
Gloria Hoffman, Morgan State University
4:30-6 **Lab open (Antigen retrieval demonstration)**
6 Dinner

Chair for Evening Session: Eduardo Rosa-Molinar, University of Puerto Rico-Rio Piedras

- 7-8 **OPTIMIZATION OF WORKFLOW AND THROUGHPUT IN A MODERN
HISTOLOGY CORE ENVIRONMENT**
Laura Miller, Leica Microsystems

- 8 PM **Lab open**

continued next page

PRELIMINARY SCHEDULE FOR HCS HANDS-ON SHORT COURSE

cont...

DAY 3

THURSDAY, March 25th

Chairs for Morning Sessions: Gloria Hoffman, Morgan State University and John Shacka, Univ. Alabama at Birmingham

7-8 AM Breakfast

8-9:30 **Lab session**

9:30-10 **ANTIBODIES 2 – testing/problems**

Hinke Multhaupt, University of Copenhagen

10-11 **PRINCIPLES OF FLUORESCENCE, MICROSCOPY**

Margarida Barroso, Albany Medical College

11-12 **PRINCIPLES OF ELECTRON MICROSCOPIC IHC**

Antonio Nanci, University of Montreal

12-1 PM Lunch

Chairs for Afternoon sessions: Hinke Multhaupt, University of Copenhagen and Antonio Nanci, University of Montreal

1-2:30 **Lab Session**

2:30-3 **AMPLIFICATION METHODS**

Kevin Roth, University of Alabama at Birmingham

3-3:15 Refreshment break

3:15-6 **Lab Session**

6-7 Dinner

Chair for Evening Session: Charles Frevert

7-8 **MOLECULAR LABELING TECHNOLOGIES FOR FLUORESCENCE MICROSCOPY**

Iain Johnson, Invitrogen/Molecular Probes

8 PM **Lab open to complete work**

DAY 4

FRIDAY, March 26th

7-8 AM Breakfast, checkout of sleeping rooms

Chairs for Final Session: Margarida Barroso, Albany Medical College and Denis Baskin, University of Washington and VA Puget Sound Medical Center

8-9 **ANTIBODY CHARACTERIZATION AND THE AUTHENTICATION OF IMAGES**

Irving E. Vega and Eduardo Rosa-Molinar, University Puerto Rico-Rio Piedras

9-11 Wrap-up: questions, reports, troubleshooting

11 (approx.) – depart MBL

Trends in Microscopy and Immunohistochemistry Histochemistry 2010

61st Annual Meeting of The Histochemical Society
March 21-23, 2010

The Marine Biological Laboratory, Woods Hole, MA

Organizers: Eduardo Rosa-Molinar, University of Puerto Rico-Rio Piedras
Mark A. Sanders, University of Minnesota

NOTE: March 24-26, 2010 Short Course (separate registration, see page 6)

Meeting Theme:

Three-Dimensional Imaging Technologies: Bridging the Gap between Light and Electron Microscopy

The focus of the annual meeting will be breakthroughs in new 3D imaging technologies and the tools (i.e. reagents as well as preservation and instrumentation methodologies for subcellular and molecular level studies) required to achieve their full potential and advance cell biological and biomedical research.

PRELIMINARY PROGRAM

Sunday, March 21

12-7 PM: Registration, arrival of participants

6 PM: Dinner (Swope Conference Center)

8 PM: Evening lecture: David Piston, Vanderbilt University; *“Live cell imaging of insulin secretion mechanisms”*

Monday, March 22

7-8 AM: Breakfast (Swope)

8 AM-12 Noon:

Imaging Modalities and Techniques 1: Confocal and Interference Microscopies (Additional speakers will be chosen from abstracts)

Mark A. Sanders, University of Minnesota; *“Advances in sample preparation and imaging methods for relational 3D confocal and electron optics”*

Brian Wilson, University of Toronto; *“Hyperspectral pathology: New opportunities for tissue analysis from the convergence of optics and chemistry”*

Michael Stanley, Chroma Technologies Corp; *“Optics and applications in fluorescence and related microscopies”*

12-1 PM: Lunch (Swope)

continued next page

1-3 PM:

Imaging Modalities and Techniques 2: Non-Linear Microscopies

Eric O. Potma, University of California-Irvine; *"Multimodal nonlinear optical microscopy for biological and biomedical applications"*

Peter A. Santi, University of Minnesota; *"Thin-sheet laser imaging and 3D reconstruction of the inner ear in the mouse and zebrafish"*

Stephen T. Ross, Nikon Inc./USA; *"Imaging Beyond the Diffraction Limit"*

3-5 PM: Poster Session (Swope)

5-6 PM: Dinner (Swope)

7 PM: Evening Lecture:

Luke Lavis, HHMI Janelia Farms; *"Tailoring Fluorescent Dyes for Imaging"*

Tuesday, March 23

7 AM: Breakfast (Swope)

8 AM-Noon:

Imaging Modalities and Techniques 3: Transmission Electron Microscopies (Additional speakers will be chosen from abstracts)

Carmen Manella, Wadsworth Center; *"Electron tomography of frozen-hydrated cells and tissue: FIB-milling of specimens for cryo-TEM imaging"*

John E. Rash, Colorado State University; *"Freeze-fracture replica immunogold labeling (FRIL): Beauty AND brains"*

Wim F. Voorhout, FEI Company, The Netherlands; *"3D Imaging: Bridging the gap between light microscopy and electron microscopy"*

12- 1 PM: Lunch (Swope)

1-3 PM:

Imaging Modalities and Techniques 4: Scanning Electron Microscopies

Eduardo Rosa-Molinar, University of Puerto Rico-Rio Piedras; *"Advances in serial block-face scanning electron microscopy for the 3D reconstruction of a spinal neural circuit"*

Rick Powell, Nanoprobes Inc.; *"Not just for TEM: High-Resolution SEM Gold Labeling"*

Donna Guarrera, JEOL USA Inc.; *"Introduction to atmospheric scanning electron microscopy: Correlative microscopy applications"*

3-5 PM:

HCS/JHC Business Meeting/JHC Editorial Board Meeting/Outstanding Young Investigator Presentation/Presentation of Awards.

5-6 PM: Lobster Dinner; (Scientific session attendees & short course attendees) (Swope)

7 PM:

Ralph Albrecht, University of Wisconsin Madison; *"Nanoparticle labels for co-localization at high spatial resolution"*

8 PM: Annual Meeting Closing Reception

Wednesday, March 24: Depart MBL

**HCS Thanks
the Following Sponsors
of the 2010 Meeting
and
Short Course**



**HCS Committees
2009-2010**

Awards and Membership Committee

- * John Shacka, Chair <shacka@uab.edu>
- * Margarida Barroso <barrosm@mail.amc.edu>
- * Buffie Clodfelder-Miller <clodbuff@uab.edu>
- * Charles Frevert <cfrevert@u.washington.edu>
- * Rima Wazen <rima.wazen@umontreal.ca>
- * William Stahl, ex officio <mail@histochemicalsociety.org>

Finance Committee

- * Charles Frevert, Chair <cfrevert@u.washington.edu>
- * Eduardo Rosa-Molinar <ed@hpcf.upr.edu>
- * Allen M. Gown <gown@phenopath.com>
- * Heinz-Ulrich Weier <ugweier@lbl.gov>
- * Kevin Roth, ex officio <karoth@uab.edu>
- * William Stahl, ex officio <mail@histochemicalsociety.org>

Program Committee

- * Hinke A.B. Multhaupt, Chair <hinke.multhaupt@BRIC.dk>
- * Richard Levenson <RML@post.harvard.edu>
- * Antonio Nanci <antonio.nanci@umontreal.ca>
- * Eduardo Rosa-Molinar <ed@hpcf.upr.edu>
- * Lise Lyck <LL@visiopharm.com>
- * Heinz-Ulrich Weier <ugweier@lbl.gov>
- * Elizabeth Unger <eru0@cdc.gov>
- * Thomas Wight <twight@benaroyaresearch.org>
- * Tanda Jaipean, ex officio <tjaipean@histochemicalsociety.org>

Publications Committee

- * Thomas Wight, Chair <twight@benaroyaresearch.org>
- * Vincent Gattone <vgattone@iupui.edu>
- * Stephen Hewitt <genejock@helix.nih.gov>
- * Gloria Hoffman <gehoffma@umaryland.edu>
- * Nathan Mowa <mowacn@appstate.edu>
- * Kelley Murphy <kmurphy@genetics.utah.edu >
- * Nancy Sawtell <sawtn0@cchmc.org>
- * Shan-Rong Shi <sshi@usc.edu>
- * Denis Baskin, ex officio <johc@u.washington.edu>
- * Meg McGough, ex officio <mmcgough@histochemicalsociety.org>
- * Kevin Roth, ex officio <karoth@uab.edu>

The Histochemical Society • Newsletter

Journal of Histochemistry and Cytochemistry

Editorial Office

Dept. of Pathology
University of Alabama at Birmingham
1530 Third Ave S., WP 210
Birmingham, AL 35294-7331

Phone 205-934-8344
Fax: 205-934-6700
Email: johc@histochemicalsociety.org

Editor-in-Chief

Kevin A. Roth
Email:
johc@histochemicalsociety.org

Editorial Assistant

Angela L. Schmeckebier
Email: aschmeck@uab.edu

Publication Office

Mailing Address:
University Station, P.O. Box 85630
Seattle, WA 98145-1630

Shipping Address:
1107 NE 45th St., Suite 327
Seattle, WA 98105

Phone: 206-616-5894
Fax: 206-616-5842
Email:
johc@histochemicalsociety.org

Executive Editor

Denis G. Baskin
Email: baskindg@u.washington.edu

Managing Editor

Tanda Jaipean
Email:
tjaipean@histochemicalsociety.org

Marketing & Subscriptions Manager

Meg McGough
Email:
mmcgough@histochemicalsociety.org

Computer and Editorial Specialist

Suzanne Paquette
E-mail: johc@histochemicalsociety.org

The Histochemical Society Administrative Office

University Station, P.O. Box 85630
Seattle, WA 98145-1630
Phone: 206-616-5278
Fax: 206-616-5842
Email:
mail@histochemicalsociety.org

Executive Director

William L. Stahl
Email: mail@histochemicalsociety.org

Executive Secretary

Tanda Jaipean
Email:
tjaipean@histochemicalsociety.org

The Histochemical Society Officers and Councilors

Officers

President

ROSA-MOLINAR, Eduardo
University of Puerto Rico-Rio Piedras
E-mail: ed@hpcf.upr.edu

Immediate Past-President

WEIER, Heinz-Ulrich
Lawrence Berkeley National Laboratory
E-mail: ugweier@lbl.gov

Secretary/Treasurer

FREVERT, Charles W. (2009-2012)
VA Puget Sound Medical Center,
Seattle
E-mail: cfrevert@u.washington.edu

Councilors

BARROSO, Margarita (2008-2011)
Albany Medical College
E-mail: barrosm@mail.amc.edu

HEWITT, Stephen (2009-2013)
National Cancer Institute, NIH
genejock@helix.nih.gov

HOFFMAN, Gloria (2008-2012)
Morgan State University
E-mail: gloria.hoffman@morgan.edu

LEVENSON, Richard (2007-2011)
Brighton Consulting Group
E-mail: RML@post.harvard.edu

SAWTELL, Nancy (2007-2011)
Cincinnati Children's Hospital
E-mail: nancy.sawtell@chmcc.org

SHACKA, John (2007-2010)
University of Alabama at Birmingham
E-mail: shacka@uab.edu

SHI, Shan-Rong (2006-2010)
University of Southern California
E-mail: sshi@hsc.usc.edu

WIGHT, Thomas (2006-2010)
Benaroya Research Institute
E-mail: twight@benaroyaresearch.org