



The Histochemical Society NEWSLETTER

April 2014

Vol. 27 No. 2



In this Issue...

Report on
IHCM 2014 • 2

HCS Travel Awardees • 2

IHCM 2014
Class Photo • 3

Photo Gallery
IHCM 2014 • 4 - 11

JHC Moblie App
Coming Soon • 11

FASEB
Travel Awardees • 12

HCS 2014
Program Schedule • 13 - 14

Irma Torres-Vazquez is an HCS member and faculty member in the IHCM course at the MBL at Woods Hole. She teaches in the Department of Biology and does research in the Biological Imaging Group at the University of Puerto Rico-Rio Piedras.

Report on: 2014 Immunohistochemistry and Microscopy Course

The 2014 **Immunohistochemistry and Microscopy** (IHCM) course was held March 15th through the 19th, at the Marine Biology Laboratory, Woods Hole, MA (http://hermes.mbl.edu/education/courses/special_topics/ihcm.html).

The IHCM course was developed, managed, and directed by Eduardo Rosa-Molinar (director and past president) and Charles W. Frevert (co-director and president) of the Histochemical Society.

The four full days and evenings of lecture and laboratory sessions with experts in the field of immunohistochemistry (IHC) and microscopy started with introductory lectures on Saturday night followed by a day of boot camp to familiarize and train students in the theory and practical issues surrounding optical microscopy taught predominantly through hands-on

practical sessions. This was followed on Monday and Tuesday with laboratory modules that utilize chromogen and fluorescent methods for detecting the specific markers in tissue sections.

The IHCM course emphasizes hands-on laboratory time and small breakout discussions with faculty and staff. The IHCM course is suitable for both novices and more experienced individuals wanting to gain a greater understanding and practical experience with IHC and microscopy.

The HCS provided travel awards to partially support the attendance of five students. The FASEB MARC (Maximizing Access to Research Careers) Program provided travel awards to fully support the attendance of four under represented students in science.

HCS Travel Awardees



HCS Travel Awards to attend 2014 Immunohistochemistry and Microscopy were presented by Denis Baskin, Chair of HCS Awards & Membership Committee, to: Leila Rieder, Brown University; Rebecca Helm, Brown University; Sherri Eldridge, University of Massachusetts Dartmouth; Ana Ortiz Colon, University of Puerto Rico Medical Science Campus; Fatima-Zahra Saddouk, Albany Medical College.

Report on 2014 IHCM



2014 IHCM Class and Faculty

HCS thanks the following companies for their sponsorship of the 2014 IHCM Course:

Applied Precision, a GE Healthcare Company
Bitplane-Andor Technology, an Oxford Instruments Company
Carl Zeiss MicroImaging, LLC
Chroma Technology Corporation
Dako, an Agilent Technologies Company
Datacolor
Electron Microscopy Sciences
Innovex Biosciences, Inc.
Journal of Histochemistry and Cytochemistry
Life Technologies, Thermo Scientific, Fisher Scientific, Inc.
SPOT Imaging Solutions, a division of Diagnostic Instruments, Inc.
Vector Laboratories Inc.

Report on 2014 IHCM



Phil Merlo and students at microscope



Bill Stahl assists Jennifer Colon and Sabah UI-Hasan in Chromogen Module

Report on 2014 IHCM

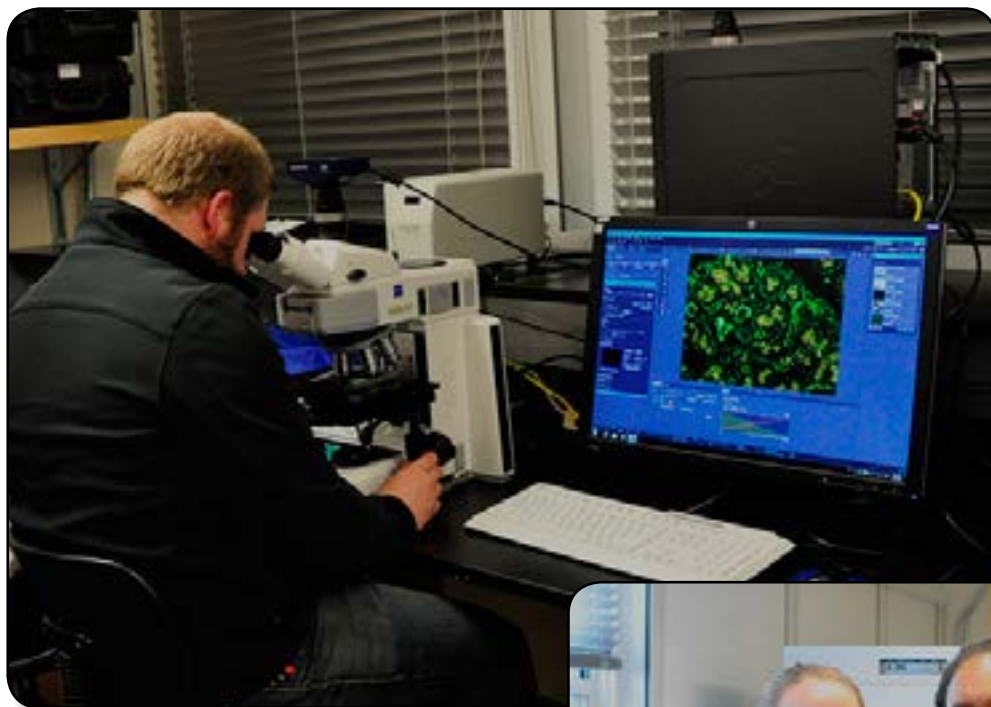


Student working in lab



Rylan Allemang-Grand and Alan Pehrson doing image analysis

Report on 2014 IHCM



Alan Pehrson collecting images



Martha Delaney,
Ed Rosa-Molinar
and Brian Johnson

Report on 2014 IHCM



Stephen Hewitt teaching in the Chromogen Module



Melissa Clouse discussing aspects of lab work with Martha Delaney

Report on 2014 IHCM



Brendan Collins and
Stephen Hewitt in
the main lab



Chuck Frevert discusses aspects of fluorescence
methods in breakout session

Report on 2014 IHCM



Students applying reagents to slides



Denis Baskin leads discussion in a breakout session of the Fluorescence Module

Report on 2014 IHCM



Paul Goodwin with students at Delta Vision™ microscope



Chuck Frevert and Stephen Hewitt lead breakout session on automated immunohistochemistry

HCS Thanks Jose Serrano-Velez



Jose is a Bioinformatics and Visualization Specialist in the Biological Imaging Group and is a doctoral degree candidate in the Graduate Program in the Department of Biology at the University of Puerto Rico-Rio Piedras.

He is responsible for managing 3D fluorescence optical sectioning microscopy technologies housed in the laboratory, including laser scanning confocal microscopy and structured illumination microscopy all which provide 3D information about the neuron. He teaches the use of light and fluorescence microscopy technologies and image analysis in the IHCM course.

All photos in this newsletter are courtesy of Jose L. Serrano-Velez



**ACCESS THE LATEST RESEARCH AT YOUR FINGERTIPS
DOWNLOAD THE JHC APP TODAY!**

Stay on the cutting-edge with the JHC App.

- ✓ View the latest issues and OnlineFirst articles
- ✓ Browse and search the journal, accessing articles in full-text and PDF view
- ✓ Quickly access abstracts or full-text of referenced articles
- ✓ Search within an article or full issue
- ✓ View images and tables
- ✓ Mark your favorite articles
- ✓ Download issues and archive full volumes
- ✓ Email articles to your colleagues or share via social media



Available for download in May, 2014

Simply go online, visit the App Store or Google Play to download the app of your choice.



1148198

FASEB MARC Travel Awardees

In attendance at 2014 Immunohistochemistry and Microscopy Course

Mayra Sanchez-Garcia, University of Puerto Rico, Rio Piedras [HCS member]

Mario Oyola, Baylor College of Medicine, [ENDO member]

Jennifer Colon Mercado, University of Puerto Rico School of Medicine [APS & HCS member]

Sasha Vega Alvarez, Purdue University [ENDO member]

Looking Ahead to 2015

Immunohistochemistry and Microscopy 2015 will be held at the Marine Biological Laboratory between Saturday, March 14 and Wednesday, March 18, 2015. The formal announcement will be found at the MBL website (http://hermes.mbl.edu/education/courses/special_topics/index.html) later this year. Further information will be available at that time on the HCS website. Ed Rosa-Molinari and Chuck Frevert are co-directors of the course.

We encourage early application (typically Fall of 2014) for the course since only 30 slots are available. HCS and FASEB-MARC awards are available to support attendance by qualified applicants.

HCS Member Renewal

It's time to renew your membership in HCS. The longer you wait the more you miss in terms of your subscription to JHC, discounts on meeting registration, and keeping up with your friends and colleagues in the Society. So don't delay any longer. **Log in today to your HCS account and renew for 2014.** Your Society needs you!

IMPORTANT DATES

April 27, 2014:

HCS Scientific Sessions including HCS Plenary Lecture (Convention Center)

April 27, 2014 6-8 PM:

HCS Reception, student presentations and Business Meeting (Marriott Hotel)

April 29, 2014 5:30-7:30 PM:

Immunohistochemistry & Microscopy Special Interest Group (Marriott Hotel)

HISTOCHEMISTRY 2014

The Histochemical Society Annual Meeting

April 26 - 30, 2014

San Diego, California

Meeting as a guest society of the American Society for Investigative Pathology
at Experimental Biology 2014

The Histochemical Society Scientific Program

Sunday, April 27, 2014

San Diego Convention Center, 16A

8:30 -10:30 AM

ADVANCED IMAGING TECHNIQUES AND SYSTEMS FOR LIVE CELL MICROSCOPY SYMPOSIUM

Chaired by: **Eduardo Rosa-Molinar**, University of Puerto Rico and **Paul Goodwin**, Applied Precision, A GE Health Care Company

Sharper and Faster: New 4D Imaging Technologies for Use in Biology

Hari Shroff, National Institute of Biomedical Imaging, National Institute of Health

Developments in Zernike Phase Contrast Technologies When Applied to Cryo-Electron Tomography Studies of Bacteria

Elizabeth R. Wright, The Robert P. Apkarian Integrated EM Core and Department of Pediatrics, Emory University School of Medicine

Advances in High-Resolution Imaging of Complex Biological Systems

Scott Fraser, University of Southern California, Los Angeles, California

10:30 to 11:30 AM

JOURNAL OF HISTOCHEMISTRY & CYTOCHEMISTRY PLENARY LECTURE

Chaired by **John Couchman**, University of Copenhagen

Structural Basis of Force Transmission During Direct Cell Migration, One Assembly at a Time

Dorit Hanein, Sanford-Burnham Medical Research Institute, La Jolla, California

For more information about Dr. Hanein's research please view the Youtube video at:

<http://www.youtube.com/watch?v=ZBkaoE6CrpA>

2:00 to 5:00 PM

UNLOCKING NEW TOOLS FOR EXPERIMENTAL PATHOLOGY:

ADVANCES IN IMMUNOHISTOCHEMISTRY AND IN SITU HYBRIDIZATION

Chaired by: **Charles Frevert**, University of Washington and **Stephen Hewitt**, National Cancer Institute, National Institute of Health

cont. next page..

cont. from previous page

Exploration of the Human Proteome Using Antibody-Based Proteomics - Updates on the Human Protein Atlas

Fredrik Ponten, Uppsala University, Uppsala, Sweden

Unlocking the Relationships Between Genes, the Brain, Behavior and Disease: Updates from the Allen Institute for Brain Science

Amy Bernard, Allen Institute for Brain Science, Seattle, Washington

Synapse Discrimination and Classification by Array Tomography: The Synaptome meets the Connectome

Stephen J. Smith, Stanford University, Stanford, California

Highly Multiplexed Immunohistochemistry on Individual Cells in Tissues: The Example of Hodgkin Lymphoma

Lawrence M. Weiss, Clariant Diagnostic Services, Inc., Aliso Viejo, CA

The Histochemical Society Awards Presentation and Business Meeting

Sunday, April 27, 2014

Santa Rosa Room, The San Diego Marriott Marquis and Marina

6:00 - 8:00 PM

Chaired by: **Charles Frevert**, University of Washington and **William L. Stahl**, University of Washington

The Histochemical Society invites all members and their guests to join us at our annual social event. HCS officers will update us on the health of the Society and its ongoing initiatives. There will be an update on the JHC from Editor-in-Chief, John Couchman. We will hold our annual HCS student presentations and celebrate all HCS meritorious awardees. Refreshments will be served and there will be ample time to catch up with colleagues and friends. **Save the Date!**

American Society for Investigative Pathology Scientific Interest Groups

IMMUNOHISTOCHEMISTRY and MICROSCOPY

Tuesday, April 29, 2014

Marina Ballroom E, San Diego Marriott Marquis and Marina

5:30 - 7:30 PM

Chaired by: **Charles W. Frevert**, University of Washington and **Stephen M. Hewitt**, National Cancer Institute, National Institute of Health

ASIP Scientific Interest Group Poster Sessions will be held at the same time in the same location. Select posters from each Scientific Interest Group will be on display for informal discussions

HCS Committees 2013-2014

Awards and Membership Committee

- * **Denis Baskin, Chair**
- * Eduardo Rosa-Molinar
- * Mark Sanders
- * Jose Serrano-Velez
- * Alejandro Adam
- * Stephanie Brosius
- * Douglas Taatjes
- * William Stahl, *ex officio*
- * Tanda Jaipen, *ex officio*

Finance Committee

- * **Margarida Barroso, Chair**
- * Charles Frevert
- * Stephen Hewitt,
- * Nancy Sawtell
- * Eduardo Rosa-Molinar
- * John Couchman, *ex officio*
- * William Stahl, *ex officio*
- * Tanda Jaipen, *ex officio*

Program Committee

- * **Charles Frevert, Chair**
- * John Couchman
- * Rebecca Hull
- * Paul Goodwin
- * John Shacka
- * Stephen Hewitt
- * Doug Rosene
- * Nancy Sawtell
- * William Stahl, *ex officio*
- * Meg McGough, *ex officio*

Publications Committee

- * **Elizabeth Unger, Chair**
- * Toshio Fujimoto
- * James Mandell
- * Robin Lorenz
- * Margarida Barroso
- * Stephen Hewitt,
- * Denis Baskin, *ex officio*
- * Meg McGough, *ex officio*
- * John Couchman, *ex officio*
- * Tanda Jaipen, *ex officio* <



Visit the HCS Facebook Page

All HCS members may post to our Facebook page. So, please visit the page, like it and share with us what you are doing in your lab. Are you coming to the annual meeting? Do you have questions or issues regarding the Society or the Journal of Histochemistry & Cytochemistry? Feel free to post any interesting images (must be jpeg format) that you might want to share with colleagues.

The HCS Facebook is located at: <https://www.facebook.com/histochem>

The Histochemical Society • Newsletter

Journal of Histochemistry and Cytochemistry

Editorial Office

University Station, P.O. Box 85630
Seattle, WA 98145-1630
Phone 425-329-2610
Fax: 425-483-1058
Email: johc@uw.edu

Publication Office

Mailing Address:
University Station, P.O. Box 85630
Seattle, WA 98145-1630
Phone: 425-329-2610
Fax: 425-483-1058
Email: johc@uw.edu

Editor-in-Chief

John R. Couchman
Email: johc@uw.edu

Executive Editor

Denis G. Baskin
Email: baskindg@uw.edu

Managing Editor

Tanda Jaipen
Email: johc@uw.edu
Phone: 206-832-7903

Director Of Marketing HCS and JHC

Meg McGough
Email: mmcough@histochemicalsociety.org
Phone: 206-832-9853



Mailing Address

University Station, P.O. Box 85630
Seattle, WA 98145-1630
Phone: 425-329-2610
Fax: 425-483-1058
Email: mail@histochemicalsociety.org

The Histochemical Society Administrative Office

Executive Director

William L. Stahl
Email: wlstahl@uw.edu



Officers

President

FREVERT, Charles W. (2013-2015)
University of Washington
E-mail: cfrevert@uw.edu

President-Elect

ROSENE, Doug (2013-2015)
Boston University Medical Center
E-mail: drosene@bu.edu

Immediate Past-President

SAWTELL, Nancy (2013-2015)
Cincinnati Children's Hospital
E-mail: nancy.sawtell@chmcc.org

Secretary/Treasurer

BARROSO, Margarida (2011-2014)
Albany Medical College
E-mail: barrosm@mail.amc.edu

Councilors

HEWITT, Stephen (2009-2014)
National Cancer Institute, NIH
E-mail: hewitts@mail.nih.gov

GOODWIN, Paul (2013-2017)
AppliedPrecision/GE,
paul.goodwin@ge.com

TAATJES, Douglas (2011-2015)
University of Vermont
School of Medicine
E-mail: Douglas.Taatjes@uvm.edu