

Spring 2008 Vol. 21 Number 1

# EB2008 To do list...

Visit HCS Booth: #1305 in the Conventiion Center

Register for and attend Immunocytochemistry Short Course

Be there early on Apr 6. for Plenary Lecture

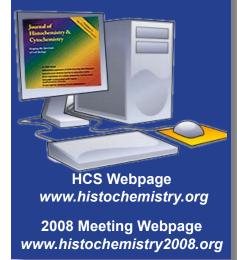
Make it to the Live Imaging Symposium

Remember Laser Capture Symposium

Monday - go to Phenoms Symposium

Go to HCS Business Meeting - say hi to new officers

Attend JHC Editorial Board Meeting



# A Message from The Newsletter Editor



Dear Colleagues:

Starting with the current issue, we plan to publish three issues of The HCS Newsletter annually: a Spring issue appearing in mid-March just prior to the Annual Meeting of The Histochemical Society; a Summer issue appearing in mid-August and; a Fall/Winter issue, appearing in late – November. The annual meeting is the highpoint in the activity calendar of the HCS and each issue will have as its center point, topics related to some aspect of the meeting.

In the Spring issue the focus will be on the meeting for that year. Similar to what you will see as you read further in this issue, will be links to the finalized program and the details of a newly re-instituted endeavor by the HCS: Short Courses on a variety of topics that utilize the expertise for which the HCS is noted. The Short Course for this year's meeting is entitled "The Principles and Applications of Immunocytochemistry". The results of the annual election of officers and councilors will also be reported. For 2008, The HCS will meet in San Diego April 5-9 as part of Experimental Biology 2008, as a guest society of the American Society for Biochemistry and Molecular Biology (ASBMB).

The Summer issue will include reports on activities that occurred at the annual meeting, including such topics as the Student Travel cont. next page....

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# The Histochemical Society Officers

#### **President**

SANDELL, Linda Washington University School of Medicine

E-mail: sandelll@msnotes.wustl.edu

#### **President-Elect**

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

#### **President-Elect Designate**

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

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MULTHAUPT, Hinke A. B. University of Copenhagen E-mail: h.multhaupt@bric.dk

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FREVERT, Charles W. (2001-2005) VA Medical Center, Seattle E-mail: cfrevert@u.washington.edu

#### Councilors

LEVENSON, Richard (2007-2011) CRI, Inc. rlevenson@cri-inc.com

OSAMURA, R.Y. (2004-2008) Tokai University School of Medicine E-mail: osamura@is.icc.u-tokai.ac.jp

SAWTELL, Nancy (2007-2011) Cincinnati Childrens Hospital E-mail: Sawtn0@chmcc.org

SHACKA, John (2007-2010) University of Alabama, 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

## **Executive Director**

STAHL, William L. E-mail: mail@histochemical.org

# Editor's Message cont.

Award Recipients; the Outstanding Young Investigator Award; and other awards presented by the Society that are presented on a less regular basis including the Anna-May Carpenter-Ellen Rasch Award, the Ralph D. Lillie Award, and The Vector Laboratories Young Investigator Award.

The major business of the Society is conducted at two Council Meeting held during the annual meeting, one prior to and one immediately following the meeting activities. The Summer issue will highlight reports, from the several standing committees of The Society as well as the deliberations of the Council, that impact on the Society's membership.

As you may have already noted, the HCS has moved to holding the annual meeting in conjunction with the Federation of American Societies for Experimental Biology as a guest of a member society of the FASEB. Meeting with this larger group of scientists makes our Society more visible, provides our members with a wide range of sessions to attend during the annual meeting and gives stability to the HCS calendar by holding the annual meeting at a set time of year.

Members of the Program Committee have already begun planning events for future meetings and preliminary discussions could be a topic of that Newsletter.

The Fall issue will also contain information related to the next meeting of the Society in the following Spring, reporting on the progress of the program as it develops. We will solicit input from the membership for future symposia topics, workshops and most of all, volunteers to work with the Program Committee in planning and manning future meetings.

In addition to the focus on the annual meeting, each issue of the Newsletter will serve to keep membership abreast of happenings related to members of the HCS and issues that can have an impact on the HCS membership and HCS as an entity.

This inaugural issue is short and sweet, but we plan to expand on topics as this endeavor matures.

Joe Mazurkiewicz Newsletter Editor January 2008

# **Newsletter Contributions**

HCS members who wish to contribute articles and announcements to upcoming newsletters should send the material to Joe Mazurkiewicz by email: **mazurkj@mail.amc.edu** 

Articles should be of interest to HCS members to be considered for inclusion in the newsletter.



# Message From The Executive Director



Dear Members,

I invite you to review the sessions that the Society will be sponsoring at the Experimental Biology meetings in San Diego that are presented in this newsletter. Please consider registering for the meeting as an HCS member (reduced rate) and attend our sessions and many others that are part of the EB2008 meeting.

At the meeting, plan to visit the HCS booth in the exhibit area to meet HCS staff and Council members. Also, The Journal of Histochemistry and Cytochemistry

Editorial Board Meeting on Monday afternoon is open to members and non-members and provides an opportunity for you to meet with the Editor-in-Chief. Kevin Roth: members of the Board; and staff members responsible for operation of the Journal. The HCS Business Meeting will be held on Monday evening and will provide an opportunity to meet with colleagues and provide input to Council about the operations and future activities of the Society. The Business Meeting is also open to both members and non-members.

On Saturday, April 5, 2008, HCS has organized a one-day, premeeting short course focused on the important aspects of Immunocytochemistry for Scientists working in research and clinical laboratories. The course will benefit a broad range of users of the technique. If you have a colleague, fellow, student or technician in your laboratory who is either using or planning to utilize immunocytochemistry in their work, this course will be of value to them. It is not too late to register for this course.

This course on Immunocytochemistry is the first of a planned series of short courses that HCS will organize at the Experimental Biology meetings and the HCS Program Committee would welcome your recommendations about future courses. Hinke Multhaupt is chair of the Program Committee.

The Society continues to recruit new members. You may know that the Council has recently authorized a new category of awards (Travel Awards for Research Scientists) to bring more established scientists into HCS. The new award category is listed on the HCS webpage (www.histochemicalsociety. org) and provides an award of \$1,000 for a successful candidate to attend and present at the next Experimental Biology in 2009 in New Orleans (joint meeting with the American Association of Anatomists).

I hope to see you in San Diego in April.

**Bill Stahl**Executive Director

# 2009 HCS Annual Meeting

Joint Meeting with American Association of Anatomists Ernest N. Morial Convention Center, New Orleans

Short Course: Saturday, April 18th, 2009

Joint meeting: Sunday April 19-Monday April 20th, 2009

Business Meeting & Editorial Board Meeting:

Monday, April 20th, 2009

Plan ahead to meet with HCS at EB2009 in New Orleans



# **HCS 2008 Short Course**

HCS SESSIONS at SAN DIEGO, APRIL 5-7, 2008 Saturday, April 5, 2008, 8 AM-4:30 PM

# A Technique Specific Short Course

# Principles & Applications of Immunocytochemistry

(http://immunocytochem.wordpress.com/)

Separate registration fee required.

San Diego Marriott Hotel and Marina, San Diego, CA Organizers: Denis G. Baskin and William L. Stahl

# **SYLLABUS**

8:00 AM

Introduction

**William Stahl**, The Histochemical Society and University of Washington School of Medicine, Seattle, WA

8:15 AM

Concepts Related to the Practice of Immunocytochemistry Gwen V. Childs, University of Arkansas School of Medicine, Little Rock, AK

9:00 AM

Sample Preparation – Fixation

Richard Burry, Ohio State University, Columbus, OH

9:35 AM

**Antibodies** 

Allen Gown, PhenoPath Laboratories, Seattle, WA

10:10 AM Coffee Break

10:25 AM

Detection Methods: The Labels, Direct, Indirect, ABC; Label types - Fluorescence, HRP, Amplification, Q-dots

Richard Burry, Ohio State University, Columbus, OH

11:10 AM

Detection Methods: The Procedures, Tissue prep, Reagents, Antibodies, Protocols, Microscopy



# **HCS 2008 Short Course**

Richard Burry, Ohio State University, Columbus, OH

11:45 AM

# **Antigen Retrieval**

Allen Gown, PhenoPath Laboratories, Seattle, WA

12:20 PM Lunch

1:00 PM

# **Amplification Methods**

**Kevin Roth**, University of Alabama School of Medicine, Birmingham, AL and the *Journal of Histochemistry and Cytochemistry* 

1:35 PM

Double-Labeling and Localization Strategies
Gloria Hoffman, University of Maryland at Baltimore, MA

2:25 PM

## **Controls**

Richard Burry, Ohio State University, Columbus, OH

3:00 PM

# **Interpreting Microscopic Images**

Alison J. North, Rockefeller University, New York, NY

3:45PM

# Closing Remarks and Questions from the audience

**Denis G. Baskin**, University of Washington School of Medicine and VA Puget Sound Medical Center, Seattle, WA and the Journal of Histochemistry and Cytochemistry

# **Immunocytochemistry Short Course**

This course will bring together an unusually gifted group of histochemists with extensive experience with immunocytochemistry. It is a great opportunity for everyone to get together and learn immunocytochemistry.

There is still space in the short course; send your colleagues, students, fellows and techs. The course includes lectures, lunch, and the printed manual of the course. It is a great opportunity to meet, learn and discuss immunocytochemistry.



# Annual Meeting of the Histochemical Society Jointly Held with the American Society for Biochemistry and Molecular Biology at

# **Experimental Biology 2008**

San Diego, California, April 5-7, 2008

Sunday, April 6, 2008 8:00-9:00 AM

San Diego Convention Center, Room 6D Upper Level

The Journal of Histochemistry and Cytochemistry
Plenary Lecture

Genome-Wide Mapping of Gene Expression in the Adult Mouse Brain Ralph B. Puchalski, Allen Institute of Brain Science, Seattle, WA

9:55 AM-12:15 PM

San Diego Convention Center, Room 1B Upper Level

Joint Symposium of HCS and ASBMB Live Imaging of Developmental Processes

**Chairs** 

**Linda Sandell**, Washington University, St. Louis, MO and

Robert Mecham, Washington University, St. Louis, MO

Time-Lapse Imaging of Extra-Cellular Matrix Assembly
Robert Mecham, Washington University School of Medicine, St. Louis, MO

Time-lapse Confocal Analysis of Cell Movement in the Embryo Paul Kulesa, Stowers Institute For Medical Research, Kansas City, MO

Computational Analysis of Local Motion versus Tissue Displacement in Early Embryos: Which cells are really moving and where are they going?

Charles Little, University of Kansas Medical Center, Kansas City, MO

High-Throughput, Whole-Embryo, Time-Lapse Imaging of Zebrafish Embryogenesis Sean Megason, Harvard University, Boston, MA

Live-Cell Imaging of Endothelial Cell Tube Formation: Inhibition by Chondrostatin Linda J. Sandell, Washington University, St. Louis, MO



# 3:00 PM-5:00 PM San Diego Convention Center, Room 1B Upper Level HCS and ASBMB Joint Symposium

# Laser Capture Micro-Dissection for Molecular Analysis Chairs

**Thomas N. Wight**, Hope Heart Program, Benaroya Research Institute, Seattle, WA and

Denis G. Baskin, Seattle VA Puget Sound Health Care System, Seattle, WA

Relevance of Molecular Signatures of Cancer Cells

James L. Wittliff, University of Louisville, Louisville, KY

Coupling LCM to Gene Expression and Microproteomics: Novel Approaches to Molecularly Define Pediatric Coronary Artery Intimal Occlusive Lesions Amy L Juraszek, Children's Hospital Boston, Harvard Medical School, Boston, MA

The Use of LCM for Proteomic Analysis of Inclusions in Neurodegenerative Disease
Thomas Montine, University of Washington, Seattle, WA

# Tracing Studies in Rat provide Sensitive Gene Expression Data for Neurons Innervating the Bladder and Urethra

**Hannah Brinkman**, Pfizer, Drug Safety Research and Development, Sandwich Laboratories, Ramsgate Road, Sandwich, UK

Laser Capture Micro-Dissection: Combining LCM with Immunohistochemistry to Investigate NMDA Receptor Subunit Composition

John A. Curry, Pfizer, Biomarkers and Translational Biology, Ramsgate Road, Sandwich, UK

Use of Laser Capture Micro-Dissection for the Study of Functional Differentiation of Pituitary Adenoma Cells

**Robert Y. Osamura,** Tokai University School of Medicine, Isehara-city, Kanagawa, Japan

Program Continues on next page

# HCS Thanks 2008 Meeting Sponsors

E-Y Laboratories
MDS Analytical Technologies
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The Journal of Histochemistry and Cytochemistry



# Monday, April 7, 2008

9:55 AM-12:15 PM

San Diego Convention Center, Room 1B Upper Level HCS Symposium

# Phenoms in the Phenome: Experts in Cellular Imaging from Single Molecules to Mice

## Chairs

**Eduardo Rosa-Molinar**, University of Puerto-Rico, San Juan, Puerto Rico and

Richard Levenson, Cambridge Research and Instrumentation, Inc., Cambridge, MA

# **Visualization of Viruses and Embryos**

Rusty Lansford, California Institute of Technology, Pasadena, CA

High-Speed and Long-Term Imaging of Cell Dynamics in the Developing Heart
Michael Liebling, University of California-Santa Barbara, Santa Barbara, CA

# Fluorescent Biosensors for Cell Pathways

Alan S. Waggoner, Carnegie Mellon University, Pittsburgh, PA

Cellular Communication in Insulin Secretion Ex Vivo and in Vivo David W. Piston, Vanderbilt University Medical Center, Nashville, TN

The Digital Fish Project- In Toto Imaging and Flip Traps for Digitizing Development Sean Megason, Harvard University, Boston, MA

## 12:00-2:00PM

# Journal of Histochemistry and Cytochemistry Editorial Board Meeting

Editorial Board Meeting is open to all HCS members and interested persons.

(refreshments served)

San Diego Marriott Hotel and Marina

#### 5:30-7:00PM

# The Histochemical Society Business Meeting

HCS Business Meeting is open to all HCS members and interested persons.

# (refreshments served)

San Diego Marriott Hotel and Marina

# You are Invited to Attend

The JHC Editorial Board and the HCS Council invites you to attend the Journal of Histochemistry and Cytochemistry Editorial Meeting on Monday, April 7th from 12-2 PM in the Coronado Room of the Marriott Hotel. Open to all. Lunch. Learn more about your Society's Journal.

The HCS Council and staff encourages HCS members and friends to come to the HCS Business Meeting on Monday, April 7th, 5:30-8 PM in the Coronado Room of the Marriott Hotel. Light hors d'oeuvres. This an opportunity to meet colleagues, friends and new members and to discuss issues that are important for the future of HCS. Bring a colleague! This is an open meeting.



# **AWARDS AT EB2008**

HCS congratulates the following recipients of awards which will be presented at the Business Meeting of the Society on Monday, April 7, 2008 at the Marriott San Diego Hotel and Marina.

# **HCS Outstanding Young Investigator Award**

# **James Whiteford**

University of Copenhagen

# Ralph Lillie Award

# **Julia Schmitz**

University of Alabama at Birmingham

# **Vector Laboratories Outstanding Young Investigator**

# **Ernest Blevens**

University of Washington

## **HCS Research Scientist Travel Award**

## **Buffie Clodfelder-Miller**

University of Alabama at Birmingham

# **Student Travel Awards**

James Whiteford, University of Copenhagen
Ernest Blevens, University of Washington
Julia Schmitz, University of Alabama at Birmingham
K.C. Walls, University of Alabama at Birmingham
Carolyn Durham, University of Alabama at Birmingham
Nicole M. Brossier, University of Alabama at Birmingham



# Results of the 2008 HCS Election



PRESIDENT-ELECT DESIGNATE

ANTONIO NANCI

(President 2011)

Professor, Cell Biology, Director, Department of Stomatology, and Director of the Laboratory for the Study of Calcified Tissues and Biomaterials at the Faculty of Dentistry at Université de Montréal, QC, Canada

**Positions Held:** Past-President of the Canadian Association of Dental Research; HCS Council, 2003-2006; Chair, HCS Publications Committee, 2005-present.

**Editorial Board:** Associate Editor for the Journal of Histochemistry and Cytochemistry.

Research Interests: the study of the cell and molecular events implicated in the formation of normal and pathological calcified tissues (tooth and bone), in their repair and in the osseointegration of biomaterials. Ultimately, he is interested in translating the knowledge acquired to the development of innovative therapeutic approaches and biomaterials based on biologics. More specifi-

cally, the laboratory is developing nanostructured surfaces that can intrinsically provide physicochemical cuing for cell differentiation and can selectively influence cell growth. The approaches used are histochemistry, electron microscopy, molecular analyses, and local gene transfer.



COUNCILOR
MARGARIDA BARROSO
( 3-year Term)

Assistant Professor, Center for Cardiovascular Sciences, Albany Medical College, NY, 2003-present.

Education and positions held: BS/MS, Biology, Faculty of Science, University of Lisbon, Lisbon, Portugal, 1986; Ph.D., Genetics, Faculty of Science, University of Lisbon/ Gulbenkian Institute of Sciences, Oeiras, Portugal, 1986-91; Post Doctoral Research Associate, Cell Biology, Department of Molecular Biology, Princeton University, 1991-94; Research Staff Member, Cell Biology, Department of Molecular Biology, Princeton University, 1994-95; Assistant

Professor, Department of Biology, University of Virginia (UVA), 1995-2003.

Honors: NSF, Wellcome Trust and Cancer Society (UK) and ETH Zurich Research Commission, adhoc grant reviewer, 2000-present; NSF, Cellular Organization Review Panel, 2001; Keck Center for Cellular Imaging (KCCI), UVA, FRET Microscopy Workshop, Faculty, 2002-present; KCCI, FRET Microscopy Workshop, Scientific Advisory Panel, 2003; NIH, Director's Roadmap Initiatives for Biomedical Science "Technology Centers for Networks and Pathways" Study Section, 2004-05; NIH, Light Microscopy Shared Instrumentation Study Section, 2005; EMBO, Light Microscopy in Living Cells Course, Institute Gulbenkian of Science, Oeiras, Portugal, Faculty, 2005; NIH NIDDK, Special Emphasis Review Panel, 2006; NIH, Confocal Microscopy and High-end Instrumentation Study Section, 2006.

Scientific Societies: American Society of Cell Biology (ASCB), Biophysical Society, Histochemical Society, Sigma Xi.

Research Interests: Regulation of membrane trafficking in epithelial polarized cells, high-resolution analysis of membrane receptor organization, low-density lipoprotein (LDL) receptor trafficking, automated quantitative FRET/FLIM analysis, FRET biosensors, confocal and spectral imaging microscopy, quantum dots, quantitative immunohistochemistry of cancer markers.

Election News continues on next page





# Election Results cont.



COUNCILOR GLORIA E. HOFFMAN (4-year Term)

Professor, Deptartment Anatomy and Neurobiology and Psychiatry, University of Maryland, 1996-present.

**Education and positions held:** 

BS, Biology and Chemistry University of Illinois, Chicago, 1968; MS/PhD Pharmacology, University of Illinois Medical School, Chicago, 1974; Postdoctoral fellowship, Anatomy, University of Rochester, 1974-1978.; Assistant Professor, Anatomy and Neurobiology, University or Rochester, 1978-1983; Associate Professor, Anatomy and Neurobiology, University of Rochester, 1983-1987; Adjunct Associate Professor, Anatomy and Neurobiology. University of Rochester. 1987-1990; Associate Professor, University of Pittsburgh, 1987-1994; Professor, University of Pittsburgh, 1995-1997.

#### Honors:

NIH Research Career Development Award, 1977-1982; Andrew Mellon Foundations Award for Teaching and Scholarship, 1985-1987

## **Scientific Societies:**

Society for Neuroscience, The Histochemical Society (Council 1989-1993; Awards Committee, 1995-present); Editorial Board Experimental Neurology, Editorial board, J. Chemical Neuroanatomy; Editorial Board, Endocrinology.

## **Research Interests:**

Dr. Hoffman's work has focused on the CNS control of endocrine and autonomic function. This research evolved to study of the processing of excitatory stimuli to the neurons that contain luteinizing hormone releasing hormone (LHRH or gonadotropin releasing hormone, GnRH) and trigger ovulation and their mediation by ovarian steroids. A separate, although related direction in her laboratory focuses on the consequences of ovarian steroids on the injured brain. These studies examine the role that ovarian hormones play in seizure-induced brain damage, secondary damage following head trauma, and neuronal damage induced by the CNS inflammatory disease experimental allergic encephalitis. Amalgamation of injury projects with studies of autonomic regulation addressing the question of how brain circuits controlling food intake and metabolism change under conditions of chronic REM sleep deprivation. In addition, recent projects focus on how neurons of the accessory motor systems are affected by the premutation of the Fragile X gene.



# **ICHC 2008**

The ICHC 2008
13th International Congress of
Histochemistry & Cytochemistry
Imaging of
Cell Dynamics
23 August - 27 August
Medical University of Gdansk
Gdansk, Poland
GDANSK, Poland
GDANSK, Poland
www.ichc2008.org

The International Federation of Societies for Histochemistry and Cytochemistry will hold its quadrennial meeting ICHC2008: "Imaging of Cell Dynamics" in Gdansk Poland, August 23 – 27, 2008. Visit the Congress web site http://www.ichc2008.org and take a look at the Program.

The Histochemical Society feature prominently in the program as several Symposia and workshops are chaired by HCS members.

The site for the meeting, Gdansk (www.gdansk.pl) is located on the Baltic Sea coast in the northern part of Poland. The city is renowned for its 1000 year-long history, picturesque Old Town and beautiful surroundings with many lakes and hills. A new era in Poland's history started in Gdansk in 1980 with the establishment of the "Solidarity" movement under the leadership of Lech Walesa. Early registration and abstract submission are still open.



# Journal of Histochemistry and Cytochemistry

## **Editorial Office**

Dept. of Pathology Univeristy of Alabama at Birmingham 1530 Third Ave S, SC 961E Birmingham, AL 35294-0057 Phone 205-934-8344

Fax: 205-934-6700

Email: johc@histochemicalsociety.org

## **Editor-in-Chief**

Kevin Roth

Email: johc@histochemicalsociety.org

## **Editorial Assitant**

Angela L. Schmeckebier Email: alsgigi@uab.edu

# **Publication Office**

Univeristy of Washington School of Medicine Dept. of Biological Structure

Box 357420

Seattle, WA 98195-7320 Phone: Phone: 206-616-5894

Fax: 206-616-5842

Email: johc@histochemicalsociety.org

### **Executive Editor**

Denis Baskin

Email: baskindg@u.washington.edu

# Marketing & Subscriptions Manager

Margaret McGough

Email: mmcgough@histochemicalsociety.

# Computer and Editorial Specialist

Suzanne Paquette

# The Histochemical Society

## Administrative Office

P.O. Box 85630. University Station

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

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## **Newsletter**

Newsletter Editor: Joseph Mazukiewicz

Copy Editor: Christine Brushwood

Production Editor: Kathy L. Stahl