



DIVISION OF BIOLOGICAL CHEMISTRY AMERICAN CHEMICAL SOCIETY

NEWSLETTER

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

Secretary: N. G. J. Richards

February 2012

Message from the Chair JoAnne Stubbe

Our hats are off to the Program Chairs of our Division (Marty Bollinger, Dewey McCafferty, and Tom Wandless) who have set up spectacular symposia highlighting both young and established investigators on a very broad range of topics. I am particularly grateful to Dewey who managed a "first" last August due to inclement weather; a Skype presentation of the Pfizer Award Symposium by Sarah O'Connor! Our spring and fall symposia continue to increase in attendance and attract scientists with broad interdisciplinary interests. Perhaps we are breaking down the Division lines that have resided within the ACS for so long.

I would like to thank Scott and Nigel for the smoothly run election in the Fall 2011. We are delighted to announce the results. Our new Program Chair, subsequent to Sheila David, will be Virginia Cornish. Replacing our fantastic treasurer Scott Silverman will be Chris Whitman. Chris has big shoes to fill given the spectacular contributions from Scott over the past three years. The BIOL division is very grateful. A new member, Anne-Frances Miller, has been added to the nominating committee and two Councilors and two Alternative Councilors have been elected: Nicole Sampson and Michelle Chang, and Jin Zhang and Stefan Lutz, respectively. We are grateful for their service and hope to see them at the semi-annual business meetings.

I would also like to congratulate the 2012 Division Award winners: Lilly, Pfizer and Repligen awardees: Chris Chang from U.C. Berkeley, Jin Zhang from Johns Hopkins University, and Carol Fierke from the U. of Michigan. We look forward to their symposia in August. I would also like to congratulate the 2012 ACS *Chemical Biology* Lecturer, Carolyn Bertozzi and the 2012 Hammes Lecturer, Angela Gronenborn, the latter lecture being sponsored by the journal *Biochemistry*. In addition, I note that a special symposium has been organized for the ACS Fall meeting (Aug 20th) titled "50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research". The lineup is excellent and includes a number of BIOL division members: Carolyn Bertozzi, Steve Buchwald, Linda Hsieh-Wilson, Anna Mapp, Tom O'Halloran, Smita Patel, Dan Romo, Melanie Sanford, Brian Shoichet, and Vern Schramm.

Please encourage all of your colleagues, especially undergraduate and graduate students, to join the ACS and ATTEND the meetings. We will certainly continue our programming efforts to ensure that ACS meetings become the "CAN'T MISS MEETINGS" of the year. Over the next few years, our division will make continued efforts to include young scientists in the symposia of the award winners and to support joint symposia among the inorganic, organic and physical divisions, and other divisions as well.

Best, JoAnne Stubbe

Meetings of the Division of Biological Chemistry at the 2012 National Meetings of the American Chemical Society

243rd ACS National Meeting, March 25-29, 2012, San Diego, CA. Dewey McCafferty, Department of Chemistry, Duke University will serve as the Chair of the Program Committee for this meeting (dewey@duke.edu).

244th ACS National Meeting, August 19-23, 2012, Philadelphia, PA. Tom Wandless, Department of Chemical & Systems Biology, Stanford University will serve as the Chair of the Program Committee for this meeting (wandless@stanford.edu).

Please note that this meeting will also feature the **50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research**, which will be held on Sunday, August 20, 2012 (8:30 a.m. - 12:00 noon, and 1:30-4:30 p.m.). Speakers will include **Carolyn Bertozzi, Steve Buchwald, Linda Hsieh-Wilson, Anna Mapp, Tom O'Halloran, Smिता Patel, Dan Romo, Melanie Sanford, Brian Shoichet, and Vern Schramm.**

In keeping with our programming at recent national meetings the division will be offering opportunities for graduate student and postdoctoral researchers to deliver short-format invited talks, which will be selected from submitted abstracts. **If a student or postdoc wishes to be considered for an oral presentation, please select this option during the time of submission of the abstract.**

Poster Presentations. Posters will be presented at several sessions during the week of the ACS meeting. The division encourages submission of abstracts for posters. Contributions on topics related to the themes of the organized symposia are particularly encouraged.

Submission of Abstracts. The instructions for submissions of abstracts for poster and oral presentations are given towards the end of this Newsletter.

Travel Awards. The division offers travel awards for graduate students and postdoctoral fellows to attend the 244th ACS National Meeting from August 28-September 1, 2012 and the 245th

ACS National Meeting from April 7-11, 2013. The level of support is \$500, which can be used to offset travel costs and registration fees. Detailed information about these awards is provided later in this Newsletter and on the updated division web site.

2012 Award Symposia

Angela Gronenborn (Pittsburgh) was selected as the winner of *Biochemistry's* Gordon Hammes award and lectureship, and she will deliver her lecture at the Spring ACS meeting in New Orleans in April 2013. **Carolyn Bertozzi** (Berkeley) was chosen to be the 2012 winner of *ACS Chemical Biology's* lectureship, and she will present her talk at the Spring ACS meeting in San Diego in March 2012. **Christopher Chang** (Berkeley) was named the winner of the Eli Lilly Award in Biological Chemistry, **Jin Zhang** (Johns Hopkins) received the Pfizer Award in Enzyme Chemistry, and **Carol Fierke** (Michigan) was announced as the winner of the Repligen Award in the Chemistry of Biological Processes. The Lilly, Pfizer and Repligen award lectures and symposia will all take place at the Fall ACS meeting that will be held in Philadelphia later this year. Details for nominating individuals for the 2013 Lilly, Pfizer and Repligen awards are outlined later in this newsletter. More information about the work of these award winners can be found at the following web site:

<http://www.divbiolchem.org/awards/recipients>

We would also like to congratulate and recognize **Jeffrey Kelley** (Scripps) who has received the 2012 Goodman Award, sponsored by *Biopolymers*. The symposium for this award will be held at the Fall ACS meeting in Philadelphia in August 2012.

Future National Meetings

245th ACS National Meeting, April 7-11, 2013, New Orleans, LA. Tom Wandless, Department of Chemical & Systems Biology, Stanford University will serve as the Chair of the Program Committee for this meeting (wandless@stanford.edu).

246th ACS National Meeting, September 8-12, 2013, Indianapolis, IN. Sheila David, Department of Chemistry, UC Davis will serve as the Chair of the Program Committee for this meeting (david@chem.ucdavis.edu).

Regional ACS Meetings

Regional meetings of the American Chemical Society provide young chemists, particularly graduate students and postdoctoral fellows, the opportunity to make professional contacts and hone their presentation skills. The Division of Biological Chemistry encourages its members to participate in the following regional meetings.

43rd Middle Atlantic Regional Meeting (MARM)
<http://marmacs.org/2012/>
May 31–June 2, 2012. Baltimore, MD

43rd Central Regional Meeting (CERM)
<http://2012cerm.sites.acs.org/>
June 5–9, 2012, Dearborn, MI

67th Northwest Regional Meeting (NORM)
<http://www.snakeriveracs.com/norm2012.html>
June 24-27, 2012, Boise, ID

38th Northeast Regional Meeting (NERM)
<http://nerm.sites.acs.org/>
September 30-October 3, 2012, Boise, ID

23rd Rocky Mountain Regional Meeting (RMRM)
<http://rmrm2012.sites.acs.org/>
October 17-20, 2012, Westin Westminster, CO

Joint 47th Midwest Regional Meeting (MWRM)
October 24-27, 2012, Omaha, NE

64th Southeast Regional Meeting (SERMACS)
<http://www.sermacs2012.org/>
November 14-17, 2012, Raleigh, NC

68th Southwestern Regional Meeting (SWRM)
<http://swrm2012.org/wordpress/>
November 4-7, 2012, Baton Rouge, LA

Other Meetings of Interest

3rd Southeastern Enzyme Conference, April 4, 2012, Atlanta, GA. Robert Phillips, Department of Chemistry, University of Georgia will serve as the Chair of this meeting.
<http://chemistry.gsu.edu/sec/>

Trends in Enzymology, June 3-6, 2012, Göttingen, Germany. Kai Tittmann, Department of Bioanalytics, University of Göttingen, and John Kozarich, ActivX Biosciences, Inc. will serve as the co-Chairs of this meeting.
<http://www.tine2012.com/>

Bioorganic Chemistry GRC, June 10-15, 2012, Andover, NH. Mary Kay Pflum, Department of Chemistry, Wayne State University and Russell Petter, Avila Therapeutics Inc. will serve as Co-Chairs of this meeting.
<http://www.grc.org>

Enzymes, Co-Enzymes and Metabolic Pathways GRC, July 15-20, 2012, Waterville Valley Resort, NH. Greg Reinhart, Department of Biochemistry, Texas A&M, and Steve Rokita, Department of Chemistry, University of Maryland, will serve as Co-Chairs of this meeting.
<http://www.grc.org>

23rd Enzyme Mechanisms Conference, January 3-7, 2011, Coronado Bay, CA. Tom Meek, GlaxoSmithKline will serve as the Chair of the Program Committee for this meeting.
<http://www.enzymemechanismsconference.org/>

Support for Meetings

The Division of Biological Chemistry provides grants to support symposia at ACS Regional meetings and for conferences in research areas of interest to the division membership. Members interested in applying for support from the division for a symposium or conference during 2012-2013 should submit an outline for the event as an e-mail attachment to Tom Wandless (wandless@stanford.edu).

These proposals will be reviewed twice a year at the division's business meetings, which are held during the spring and fall ACS national meetings. **The deadlines for receipt of applications are March 1 and August 1 for review at the spring and fall meetings, respectively. Unfortunately, due to increased numbers of funding requests, proposals received after a given deadline will only be considered at the business meeting held after the next deadline.**

These awards are intended to provide division members with new forums in which to present their work as well as to support focused conferences in biochemistry and chemical biology. Proposals that are judged not to meet these objectives, such as requests for blanket support of regional ACS meetings, are unlikely to be funded. The division provided support for the following symposia and meetings held in 2011.

241st ACS National Meeting, Heme Modification, Transport and Regulation Symposium. March 27-31, 2011, Anaheim, CA

241st ACS National Meeting, Magnetic Spectroscopic Approaches to the Study of Metals in Biology Symposium. March 27-31, 2011, Anaheim, CA

2nd Southeast Enzymes Conference. April 2, 2011, Atlanta, GA

17th International Symposium on Flavins & Flavoproteins. July 24-29, 2011, Berkeley CA

2011 Bioorganic Chemistry GRC. June 12-17, 2011, Andover, NH

2011 High Throughput Chemistry & Chemical Biology GRS. June 18-19, 2011, New London, NH

2011 Enzymes, Coenzymes and Metabolic Pathways GRC. July 10-25, 2011, Waterville Valley Resort, NH

242nd ACS National Meeting, Graduate Student & Postdoc Reception. August 28-September 1, 2011, Denver, CO

242nd ACS National Meeting, GSSPC Symposium. August 28-September 1, 2011, Denver, CO

2011 International Symposium on Aminoacyl-tRNA Synthetases. September 25-30, 2011, Snowbird, UT

31st Midwest Enzyme Chemistry Conference. October 15, 2011, Chicago, IL

Alma College Fall Scientific Meeting. October 22, 2011, Alma, MI

Joint 46th Midwest Regional Meeting/39th Great Lakes Regional Meeting of the ACS (MWRM/GLRM), Biomolecular Structure & Function Symposium. October 19-21, 2011, Saint Louis, MO

2011 Western Regional Meeting of the ACS (WRM). November 10-12, 2011, Pasadena, CA

Travel Awards for 2011

The Division of Biological Chemistry promotes the work of our young talent (students and postdocs) through the award of Travel Grants. The following list contains the names of recipients for travel to the spring ACS meeting in Anaheim, CA in March 2011, together with their affiliations and advisors.

Kennedy Alila, Department of Chemistry, Saint Louis University (Dana Baum)

Maria Bednar, Department of Chemistry, Duke University (Dewey McCafferty)

Dr. Amie Boal, Department of Chemistry, Northwestern (Amy Rosenzweig)

Ying Huang, Department of Chemistry, Texas A&M (Wenshe Liu)

Charles Johnson, Department of Chemistry, Saint Louis University (Brent Znosko)

Mohammed Khanfar, Department of Basic Pharmaceutical Sciences, Louisiana-Monroe (Khalid El Sayed)

Jesse Kleingardner, Department of Chemistry, University of Rochester (Kara Bren)

Jianing Li, Department of Chemistry, Columbia University (Richard Friesner)

Julie Pollock, Department of Chemistry, Duke University (Dewey McCafferty)

Stacey Richardson Department of Chemistry, University of Illinois at Urbana-Champaign (Anne Baranger)

Liton Roy, Department of Chemistry, University of Vermont (Martin Case)

Benjamin Stein, Department of Chemistry & Chemical Biology, University of New Mexico (Martin Kirk)

Dr. Graham West, Department of Chemistry, Duke University (Patrick Griffin)

Dr. Jian Wang, Department of Biological Chemistry, UCLA (Leonard Rome)

The following list contains the names of recipients for travel to the fall ACS meeting in Denver, CO in August 2011, together with their affiliations and advisors.

Na An, Department of Chemistry, University of Utah (Cynthia Burrows)

Wes Asher, Department of Chemistry, University of Rochester (Kara Bren)

Ellen Broering, Department of Chemistry, University of Georgia (Shanta Dhar)

Hsiao-Nung Chen, Department of Chemistry, University of Utah (Ken Woycechowski)

Priyanka Chitranshi, University of the Pacific (Liang Xue)

Alissa Goble, Department of Chemistry, Texas A&M (Frank Raushel)

Ronald Jenkins, Department of Medicinal Chemistry, University of Michigan (Garry Dotson)

Kanishk Kapliastrami, Department of Chemistry, SUNY Stony Brook University (Peter Tonge)

Huei-Jiun Li, Department of Chemistry, SUNY Stony Brook University (Peter Tonge)

Xin Liu, Department of Chemistry, University of Michigan (Carol Fierke)

Maria Merced Malabanan, Department of Chemistry, SUNY Buffalo (John Richard)

Nader Nasief, Department of Chemistry, SUNY Buffalo (David Hangauer)

Argentina Ornelas, Department of Chemistry, Texas A&M (Frank Raushel)

Sara Schlesinger, Department of Chemistry & Biochemistry, Baylor (Sung-Kun Kim)

Vanja Stojkovic, Department of Chemistry, University of Iowa (Amnon Kohen)

Stephen Zano, Department of Chemistry, University of Toledo (Ron Viola)

Wen Zhang, Department of Chemistry, Georgia State University (Zhen Huang)

CALL FOR NOMINATIONS

Division of Biological Chemistry Awards for 2013

Nominations are requested for the Eli Lilly Award in Biological Chemistry, the Pfizer Award in Enzyme Chemistry, and the Repligen Award in Chemistry of Biological Processes.

Eli Lilly Award in Biological Chemistry:

Nominees shall have accomplished outstanding research in biological chemistry of unusual merit and independence of thought and originality. The nominee shall not have passed the 38th birthday by April 30, 2013, and shall be actively engaged in the line of research for which the award is made. This prize cannot be made to a person who received another award sponsored by Eli Lilly and Company for the same technical accomplishment.

Recent recipients: Jacqueline Barton (1987), Peter Walter (1988), Michael Cox (1989), George McLendon (1990), Peter Schultz (1991), William DeGrado (1992), Stuart Schreiber (1993), Peter Kim (1994), Jeremy Berg (1995), Gregory Verdine (1996), Alanna Schepartz (1997), John Kuriyan (1998), Chaitan Khosla (1999), Xiaodong Wang (2000), Jennifer Doudna (2001), Kevan Shokat (2002), Andreas Matouschek (2003), Benjamin Cravatt (2004), Dewey McCafferty (2005), Linda Hsieh-Wilson (2006), Anna Mapp (2007), Paul Hergenrother (2008), Scott Silverman (2009), Alice Ting (2010), Nathanael Gray (2011) and Christopher Chang (2012).

Pfizer Award in Enzyme Chemistry:

Nominees shall have accomplished outstanding work in enzyme chemistry where the presence of

enzyme action is unequivocally demonstrated. The nominee shall be engaged in noncommercial work and shall not have passed the 40th birthday by April 30, 2013. This prize cannot be made to a person who received another award sponsored by Pfizer, Inc. for the same technical accomplishment.

Recent recipients: Gregory Petsko (1987), John Kozarich (1988), Kenneth Johnson (1989), James Wells (1990), Ronald Vale (1991), Carl Pabo (1992), Michael Gelb (1993), Donald Hilvert (1994), Gerald Joyce (1995), Andrew Karplus (1996), Daniel Herschlag (1997), Ronald Raines (1998), David Christianson (1999), Eric Kool (2000), Ruma Banerjee (2001), Karin Musier-Forsyth (2002), Dorothy Kern (2003), Wilfred van der Donk (2004), Nicole Sampson (2005), James Berger (2006), Neil Kelleher (2007), Carsten Krebs (2008), Virginia Cornish (2009), Vahe Bandarian (2010), Sarah O'Connor (2011) and Jin Zhang (2012).

Repligen Award in Chemistry of Biological Processes: Nominees shall have made outstanding contributions to the understanding of the chemistry of biological processes with particular emphasis on structure, function and mechanism. There are no restrictions on age or membership affiliation for the Repligen Award.

Recipients: Gregorio Weber (1986), Thomas C. Bruice (1987), Robert Abeles (1988), Stephen Benkovic (1989), Harold Scheraga (1990), William Parson (1991), Frank Westheimer (1992), Jeremy Knowles (1993), Judith Klinman (1994), Wallace Cleland (1995), William Jencks (1996), James Spudich (1997), David Eisenberg (1998), Christopher Walsh (1999), Perry Frey (2000), Rowena Matthews (2001), Dale Poulter (2002), John Gerlt (2003), JoAnne Stubbe (2004), David Cane (2005), Vern Schramm (2006), Michael Marletta (2007), Hung-Wen (Ben) Liu (2008), Frank Raushel (2009), Ron Raines (2010), Richard Armstrong (2011) and Carol Fierke (2012).

The Gordon Hammes ACS Biochemistry Lectureship: This lectureship is administered jointly by the Editor-in-Chief of *Biochemistry*, Richard Armstrong (Vanderbilt) and the ACS Division of Biological Chemistry. The objective of the lectureship is to honor, at an annual ACS meeting, the contributions of an individual who has had a major impact on scientific research at

the interface of chemistry and biology particularly in the realm of biochemistry, biological chemistry and molecular biology. There are no restrictions on age or membership affiliation for the Hammes lectureship, but candidates must have published at least one paper in *Biochemistry*. Recipients: William Eaton (2009), Perry Frey (2010), Douglas Turner (2011) and Angela Gronenborn (2012).

ACS Chemical Biology Lectureship: This annual lectureship will honor the contributions of an individual who has had a major impact on scientific research in the area of chemical biology. The lectureship will be administered jointly by the Editor-in-Chief of *ACS Chemical Biology*, Laura Kiessling (University of Wisconsin, Madison) and the ACS Division of Biological Chemistry. There are no restrictions on age or membership affiliation for the lectureship. Recipients: Alanna Schepartz (2010), Stuart Schreiber (2011) and Carolyn Bertozzi (2012).

For all of these awards, a nominator should send the curriculum vitae of the candidate with a list of publications and a letter explaining the special achievements of the candidate. Additional letters of support for the specific candidate are desirable. Information about the nominating process is also posted at:

<http://www.divbiolchem.org/awards/nominations/>

The Deadline for Receipt of Nomination Materials is June 1, 2012 - All materials should be sent to:

Nigel G. J. Richards
Department of Chemistry
P. O. Box 117200
University of Florida
Gainesville, FL 32611
richards@chem.ufl.edu

Nominations of Officers

The Nominating Committee:

Deborah Hung (hung@molbio.mgh.harvard.edu)
Anne-Frances Miller (afm@uky.edu)
Alice Ting (ating@mit.edu)

encourages nominations of candidates for the following offices in 2012. Please send your suggestions to any committee member by May 1, 2012.

Chair-Elect (2 year term)
Secretary (3 year term)
Program Committee Member (4 year term)
Nominating Committee Member (3 year term)
Advisory Committee (Two for 3 year terms)

Program Committee. The 2012-2013 Program Committee Chair, Tom Wandless, in consultation with the Program Committee (below) prepares the divisional program for ACS National meetings. The committee requests suggestions for symposia for national and regional ACS meetings.

Virginia Cornish (vc114@columbia.edu)
Sheila David (david@ucdavis.edu)
Dewey McCafferty (dewey@duke.edu)
Tom Wandless (wandless@stanford.edu)

244th ACS National Meeting, August 28-September 1, 2011 - Philadelphia, PA

Tom Wandless (wandless@stanford.edu) is the division Program Chair. The call for papers has been posted at (<http://www.acs.org/meetings/>). Abstracts for invited talks and poster presentations should be submitted online (<http://oasys.acs.org/>). This records the abstract in the automated OASYS system that is used to organize this meeting. Abstracts for the Philadelphia meeting can be submitted until **March 19, 2012**, at which time the website will be closed to further submissions. Instructions for authors, including procedures for incorporating graphics or equations in the abstract, can be accessed at this website.

New to the Fall 2011 Philadelphia ACS meeting, the division will be offering a special scientific session for graduate student and postdoctoral researcher short format invited talks, which will be selected from submitted abstracts. **If a student or postdoc wishes to be considered for an oral presentation, please select this option during the time of submission of the abstract.** As always, students are also welcome

and strongly encouraged to contribute research posters for the division poster sessions.

THE DEADLINE FOR SUBMISSION OF YOUR ABSTRACT TO THE ACS WEBSITE IS **March 19, 2012!**

Founders Travel Award

Tom Bruice, Bill Jencks, and Myron Bender, as a mechanism to foster collegial interactions within the community of chemists and biochemists interested in understanding the chemical basis for enzymatic catalysis and the regulation of enzyme action, founded the Winter Enzyme Mechanisms Conference in 1969. The passing of William P. Jencks coincided with the 20th meeting of the Winter Enzyme Mechanisms Conference, and this loss was felt keenly by many senior participants at that conference. The interest in recognizing Bill's many contributions to mechanistic enzymology, in a manner that would help to ensure the vibrancy of the community that he helped to create, resulted in the creation of the "Founders Travel Award", which supports the participation of students and/or postdocs at the Winter Enzyme Mechanisms Conference. The ACS Division of Biological Chemistry manages the investment of funds contributed for this award and has established the process for the competitive selection of the awardees.

Travel Awards to Attend the ACS 244th and 245th National Meetings

The division will offer travel awards on a competitive basis for graduate students and postdoctoral fellows to attend the meeting and present a poster on their research. The selected awardees will be reimbursed up to \$500 for travel and registration expenses. Receipts must be submitted along with a request for reimbursement after the meeting. No more than two awards will be made to one laboratory. In addition, **please note that no individual can win more than one division travel award in their lifetime, and that preference will be given to presenters within the division.** A list of travel awardees for 2011 is given on page 5 of this newsletter.

How to apply for a Travel Award

- (1) Fill in the Travel Award Application on the next page.
- (2) Attach a printed copy of your abstract.
- (3) Attach a one page CV.
- (4) Attach a signed letter of recommendation from your faculty advisor.
- (5) Send **ONE COMPLETE PDF FILE** of this material as *single* EMAIL attachment to the Program Chair Tom Wandless at wandless@stanford.edu.

Be sure to use a subject line of "ACS Travel Awards" in your electronic application.

The deadline for submission of an application for a travel award to the 244th ACS National Meeting (Philadelphia) is **June 15, 2012**.

The deadline for submission of an application for a travel award to the 245th ACS National Meeting (New Orleans) is **January 15, 2013**.

**Application for a Travel Award for Graduate Students
and Postdoctoral Fellows**

Deadline June 15, 2012 (Philadelphia) or January 15, 2013 (New Orleans)

Name: _____ Advisor: _____

Department _____ Graduate Student: _____ Postdoctoral Fellow: _____

Institution: _____ Street: _____

City, State, Zip: _____

Tel: _____ E-mail: _____

Is an Abstract attached? _____ Is a CV attached? _____

Is a recommendation letter attached? _____