



DIVISION OF BIOLOGICAL CHEMISTRY AMERICAN CHEMICAL SOCIETY

NEWSLETTER

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

Secretary: N. G. J. Richards

February 2014

Message from the Chair Ben Liu

I hope that your 2013 concluded on a high note and that 2014 starts with the promise of success and happiness. It has been a privilege for me to serve as your Chair for a year. As I begin my term for the second year, I would like to request your continued support for our Division and to thank you for the contributions, both scientific and professional, you bring to our community. Our Division continues to grow and is in good financial condition. As an ACS Division, we meet twice a year during the ACS National Meetings. We also co-sponsor many other scientific meetings and symposia by providing financial support. This year we will hold meetings in Dallas in March and in San Francisco in August. A special thanks goes to our Program Chairs (Tom Wandless and Sheila David) who organized successful programs last year. The current Program Chairs (Sheila David and Virginia Cornish) are working hard to put together this year's programs. There will be many exciting symposia covering interesting topics. We will maintain the single-session format for our programs in the National Meetings, and continue our efforts to include more young scientists as speakers. Please join us and bring your students and postdocs with you to the meetings. The Division offers travel awards on a competitive basis for graduate students and postdocs to attend these meetings and present a poster or oral talk on their research. Please check the Division website for details.

I am very grateful to have a team of highly capable and devoted colleagues to help me run our Division. They are Dewey McCafferty (Chair-elect), Nigel Richards (Secretary), Chris Whitman (Treasurer), and Tom Wandless, Sheila David, Virginia Cornish, Craig Crews (Program Committee). I want to thank Nigel for a successful 2013 election. We are delighted to have Vahe Bandarian join the Program Committee, replacing

Tom who completed his term with flying colors. We would like to congratulate Coran Watanabe for being elected to the Nominating Committee. Other members of this committee are Anne-Frances Miller and Scott Silverman. We also welcome Carole Fierke and James Petersson to the Advisory Committee. They will serve with Anna Mapp and Eugene Mueller on this important committee. The newly elected councilors are Christine Chow and Thomas Magliery, and the alternate councilors are David Tiernery and Webster Santos. We thank them for their willingness to serve. Our current councilors, who will continue their service, are Michelle Chang and Nicole Simpson. The two other alternate councilors are Stefan Lutz and Jin Zhang. Neil Kelleher and Paul Thomas have done a wonderful job as our Webmasters. We also have Yi Tang as our new ACS Multi-disciplinary Program Planning Group (MPPG) representative. To those who completed their term at the end of 2013, Tom Wandless, Alice Ting, Frank Raushel, Jim Stivers, Michael Burkart, Stewart Fisher, Kate Carroll, Giovanni Gadda, and Squire Booker, we owe them our deepest appreciation and thanks. We wish them well and hope that we can count on their help in the future.

Every year the Division presents several Awards to recognize the accomplishments of members of our Division. I would like to congratulate the 2014 Division Award winners: Yi Tang from UCLA for the Eli Lilly Award in Biological Chemistry; Hening Lin from Cornell University for the Pfizer Award in Enzyme Chemistry; John Lipscomb from the University of Minnesota for the Repligen Award in Chemistry and Biological Processes; Tom Poulos from the University of California, Irvine for the Gordon Hammes *Biochemistry* Lectureship; and Peter Dervan from Caltech for the ACS *Chemical*

Biology Lectureship. All of these award symposia will be held at the ACS Fall meeting (August 10-14) in San Francisco, except for the ACS *Chemical Biology* Lectureship, which will be held at the ACS Spring meeting in Dallas (March 16-20). We are also delighted and honored to have the opportunity to host the ACS Award Symposium for Creative Invention in honor of Marvin Caruthers from the University of Colorado at the Spring meeting in Dallas. Please mark your calendar and plan to attend these exciting award symposia. I should mention that since it appears that young investigators are starting their independent careers a little later, we are considering, in consultation with the sponsors, the possibility of changing the age requirement for both the Lilly and Pfizer Awards. Please refer to the Division website for more information and updates on our progress in changing the

requirements of these awards.

Many of us continue to feel the impact of the government's fiscal crisis on scientific funding. It is difficult for one to manage the operations of a laboratory not knowing whether a grant will be renewed or not. There is a genuine danger that an entire generation of new investigators will be lost as promising young scientists choose other careers. I hope that the leadership of our government has the vision to reinvest in preserving the research enterprise of which we are a part. Let's all remain optimistic and try to weather this storm together. Until the next time we meet, be strong, do good work, and take care.

Best wishes,
Hung-wen (Ben) Liu

Meetings of the Division of Biological Chemistry at the 2014 National Meetings of the American Chemical Society

247th ACS National Meeting, March 16-20, 2014, Dallas, TX. Sheila David, Department of Chemistry, UC Davis will serve as the Chair of the Program Committee for this meeting (ssdavid@ucdavis.edu).

Peter Dervan (Caltech) will deliver his ACS *Chemical Biology* Lectureship award lecture at the Spring ACS meeting in Dallas.

Marvin Caruthers (Colorado) will also deliver an award lecture in the ACS Award for Creative Invention Symposium that will be held at the Spring ACS meeting in Dallas.

248th ACS National Meeting, August 10-14, 2013, Indianapolis, CA. Virginia Cornish, Department of Chemistry, Columbia University will serve as the Chair of the Program Committee for this meeting (vc114@columbia.edu).

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 248th ACS National Meeting in San Francisco, CA from August 10-14, 2014 and the 249th ACS National Meeting in Denver, CO from March 22-26, 2015. 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.

2014 Award Symposia

Tom Poulos (UC Irvine) was selected as the winner of *Biochemistry's* Gordon Hammes award

and lectureship, and he will deliver his lecture at the Fall ACS meeting in San Francisco in August 2014. **Peter Dervan** (Caltech) was chosen to be the 2014 winner of *ACS Chemical Biology's* lectureship, and he will present his talk at the Spring ACS meeting in Dallas in April 2014. **Yi Tang** (UCLA) was named the winner of the Eli Lilly Award in Biological Chemistry, **Hening Lin** (Cornell) received the Pfizer Award in Enzyme Chemistry, and **John Lipscomb** (Minnesota) 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 San Francisco in 2014. Details for nominating individuals for the 2015 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 website:

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

We would also like to congratulate and recognize **Steven Boxer** (Stanford), who has received the 2014 Goodman Award, sponsored by *Biopolymers*. The symposium for this award will be held at the Fall ACS meeting in San Francisco in August 2014.

Future National Meetings

247th ACS National Meeting, March 16-20, 2014, Dallas, TX. Sheila David, Department of Chemistry, UC Davis will serve as the Chair of the Program Committee for this meeting (Sheila David (ssdavid@ucdavis.edu)).

248th ACS National Meeting, August 10-14, 2013, San Francisco, CA. Virginia Cornish, Department of Chemistry, Columbia University will serve as the Chair of the Program Committee for this meeting (vc114@columbia.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.

45th Central Regional Meeting (CERM)
<http://2013cerm.sites.acs.org/2014cerm.htm>
October 1-4, 2014, Pittsburgh, PA

69th Northwest Regional Meeting (NORM)
<http://norm14sites.acs.org>
June 22-25, 2014, Missoula, MT

49th Midwest Regional Meeting (MWRM)
<http://www.mwrm2014.org/index.php>
November 12-15, 2014, Columbia, MO

65th Southeast Regional Meeting (SERMACS)
<http://www.sermacs2014.org/>
October 16-19, 2014, Nashville, TN

70th Southwestern Regional Meeting (SWRM)
<http://www.swrm.org/>
November 17-20, 2014, Ft. Worth, TX

Other Meetings of Interest

5th Southeastern Enzyme Conference, April 5, 2014, Atlanta, GA. Liz Howell, Department of Biochemistry, Cellular and Molecular Biology, University of Tennessee will serve as the Chair of this meeting.
<http://chemistry.gsu.edu/sec/>

36th Steenbock Symposium in honor of W.W. "Mo" Cleland, May 22-24, 2014, Madison, WI. Hazel Holden, Department of Biochemistry, University of Wisconsin-Madison will serve as the Chair of this meeting.
<http://www.biochem.wisc.edu/seminars/steenbock/symposium36/>

Bioorganic Chemistry GRC, June 8-13, 2014, Andover, NH. Michael Burkart, Department of Chemistry & Biochemistry, University of California San Diego, and Stacie Canan, Celgene will serve as Co-Chairs of this meeting.
<http://www.grc.org>

Enzymes, Co-Enzymes and Metabolic Pathways GRC, July 13-18, 2014, Waterville Valley, NH. Walter Fast, Department of Medicinal Chemistry, University of Texas, and Paul Thompson, Department of Chemistry, Scripps Florida, will serve as Co-Chairs of this meeting.
<http://www.grc.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 2014-2015 should submit an outline for the event as an e-mail attachment to Virginia Cornish (vc114@columbia.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 2013.

2013 Enzyme Mechanisms Conference. January 3-6, 2013, Coronado, CA

4th Southeast Enzymes Conference. April 20, 2013, Atlanta, GA

44th Central Regional Meeting of the ACS (CERM). May 15-17, 2013, Mt. Pleasant, MI

7th International Conference on Iron-Sulfur Cluster Biogenesis and Regulation. May 20-24, 2013, Columbia, SC

245th ACS National Meeting, Graduate Student & Postdoc Reception. April 7-11, 2013, New Orleans, LA

245th ACS National Meeting, GSSPC Symposium. April 7-11, 2013, New Orleans, LA

2013 Bioorganic Chemistry GRC. June 9-14, 2013, Andover, NH

2013 Enzymes, Coenzymes and Metabolic Pathways GRC. July 14-19, 2013, Waterville Valley Resort, NH

246th ACS National Meeting, Graduate Student & Postdoc Reception. August 19-23, 2012, Philadelphia, PA

246th ACS National Meeting, GSSPC Symposium. August 19-23, 2012, Philadelphia, PA

9th International Retroviral Nucleocapsid Protein & Assembly Symposium. August 25-28, 2013, Montreal, Canada

33rd Midwest Enzyme Chemistry Conference. October 13, 2013, Chicago, IL

Travel Awards for 2013

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 New Orleans, LA in March 2013, together with their affiliations and advisors.

Biebele Abel, Department of Chemistry, Morgan State University (Kadir Aslan)

Lillian Kamau, Department of Chemistry, Georgia State University (Zhen Huang)

Sean Marrache, Department of Chemistry, University of Georgia (Shanta Dhar)

Muzaffer Mohammad, Department of Chemistry, Morgan State University (Kadir Aslan)

Gayani Mugalide, Department of Chemistry, Wayne State University (Christine Chow)

Randy Parker, Department of Biochemistry, UT Southwestern (Jennifer Kohler)

Ling-Hsien Tu, Department of Chemistry, Stony Brook (Daniel Raleigh)

Yasanandana Wijayasinghe, Department of Chemistry, University of Toledo (Ron Viola)

The following list contains the names of recipients for travel to the Fall ACS meeting in Indianapolis, IN in September 2013, together with their affiliations and advisors.

Hannah Bowman, Department of Chemistry, University of Wisconsin-Madison (Judith Burstyn)

Chih-Chi Chu, Department of Chemistry, University of Illinois at Urbana-Champaign (Scott Silverman)

Graham Erwin, Department of Biochemistry, University of Wisconsin-Madison (Aseem Ansari)

Ashish Garg, Department of Chemistry, Brown University (David Cane)

James Nelson, Molecular Biophysics & Biochemistry, Yale University & HHMI (Ron Breaker)

Ahmed Said, Department of Chemistry, SUNY Buffalo (David Hangauer)

Nicole Schneck, Department of Chemistry & Biochemistry, University of Maryland College Park (Sang Bok Lee)

Nardos Sori, Department of Chemistry & Biochemistry, Old Dominion University (Lesley Greene)

Shannon Walsh, Department of Chemistry, University of Illinois at Urbana-Champaign (Scott Silverman)

Shuo Wang, Department of Chemistry, Georgia State University (David Wilson)

Xiang Zhai, Department of Chemistry, SUNY Buffalo (John Richard)

CALL FOR NOMINATIONS

Division of Biological Chemistry Awards for 2015

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, 2015, 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.

Prior 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), Christopher Chang (2012), Matt Disney (2013) and Yi Tang (2014).

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, 2015. This prize cannot be made to a person who received another award sponsored by Pfizer, Inc. for the same technical accomplishment.

Prior 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), Jin Zhang (2012), Kate Carroll (2013), and Hening Lin (2014).

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.

Prior 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), Carol Fierke (2012) and David Christianson (2013).

The Gordon Hammes 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*. Prior recipients: William Eaton (2009), Perry Frey (2010), Douglas Turner (2011), Angela

Gronenborn (2012), Christopher Walsh (2013) and Tom Poulos (2014).

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. Prior recipients: Alanna Schepartz (2010), Stuart Schreiber (2011), Carolyn Bertozzi (2012), Wilfred van der Donk (2013) and Peter Dervan (2014).

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 15, 2014 - *All materials should be sent, preferably by e-mail, to:*

Nigel G. J. Richards
Department of Chemistry & Chemical Biology
402 N. Blackford St., LD 326L
Indianapolis, IN 46202

ngrichar@iupui.edu

Nominations of Officers

The Nominating Committee:

Anne-Frances Miller (afm@uky.edu)

Scott Silverman (sks@illinois.edu)

Coran Watanabe (watanabe@chem.tamu.edu)

encourages nominations of candidates for the following offices in 2014. Please send your suggestions to any committee member by **August 1, 2014**.

Chair-Elect (2 year term)

Treasurer (3 year term)

Program Committee Member (4 year term)

Nominating Committee Member (3 year term)

Division Councilors (Two for 3 year terms)

Alternate Councilors (Two for 3 year terms)

Program Committee. The 2014-2015 Program Committee Chair, Virginia Cornish, 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.

Vahe Bandarian (vahe@email.arizona.edu)

Virginia Cornish (vc114@columbia.edu)

Craig Crews (Craig.Crews@yale.edu)

Sheila David (ssdavid@ucdavis.edu)

248th ACS National Meeting, August 10-14, 2014 – San Francisco, CA

Virginia Cornish (vc114@columbia.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 San Francisco meeting can be submitted until **March 10, 2014**, 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.

Attention students and postdocs! At the Fall 2014 San Francisco ACS meeting, the division will again 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 10, 2014!

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 248th and 249th 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 for any single ACS meeting. 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 2013 is given elsewhere in 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, Virginia Cornish at vc114@columbia.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 248th ACS National Meeting (San Francisco) is **June 15, 2014.**

The deadline for submission of an application for a travel award to the 249th ACS National Meeting (Denver) is **January 15, 2015.**

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

Deadline June 15, 2014 (San Francisco) or January 15, 2015 (Denver)

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? _____