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Society Members Urged to Volunteer for Service on NIH Study Sections

In an effort to improve the operation of the Study Sections that evaluate grant applications, the National Institutes of Health (NIH) has asked scientific societies, including the American Peptide Society, to nominate some of their members for duty on the review panels. The nominations are limited to scientists who have substantial and broad independent research experience, understand the review process, have received major peer-reviewed grants from NIH or other equivalent agencies, and are willing to serve for four years on a chartered study section.

In many cases, getting your NIH grant application scored at a level that will result in funding depends on obtaining reports from knowledgeable individuals who understand the science being proposed. If no members of our society serve on relevant Study Sections, getting funding in these difficult times will remain challenging. While this is certainly not a small commitment, serving on a study section is an invaluable experience to better understand the processes involved and will greatly help the novice reviewer prepare their own better grant applications.

In addition, in order to encourage more senior scientists to serve on Study Sections, NIH has revised their policies to permit more flexible submissions from permanent panel members. In essence, applications from members of chartered Study Sections can be submitted at any time during the year, not just when the normal three deadlines apply. These applications may be evaluated by a special emphasis panel, where reviewers are selected for their specific expertise. Again, this would provide an advantage for a grant in that the reviewers would be knowledgeable in the field. This policy would counteract a common problem in which Study Section members are disadvantaged by having to meet deadlines while also preparing reviews of applications.

In order to promote peptide science, the Society feels strongly that senior members who meet the criteria given above should volunteer for service on NIH grant review panels. Individuals interested in this should contact Association Manager Donna Freher-Lyons immediately at aps_member@americanpeptidesociety.org.

2008 Vincent du Vigneaud Award Winners

The American Peptide Society's Vincent du Vigneaud Awards were presented to Jeff Kelly (Scripps Research Institute) and Tom Muir (Rockefeller University) on February 21, 2008 as part of the Gordon Research Conference. These prestigious awards, generously sponsored by Bachem, recognize outstanding achievements in peptide research.

Dr. Jeffery W. Kelly

Dr. Kelly received his Ph.D. in organic chemistry from the University of North Carolina at Chapel Hill (1986) and performed post-doctoral research at The Rockefeller University in the area of chemistry and biology. After rising through the ranks in the chemistry department at Texas A&M University, he joined the Department of Chemistry at The Scripps Research Institute in 1997 as the Lita Annenberg Hazen Professor of Chemistry. Three years later, he became Dean of Graduate Studies and Vice President of Academic Affairs. His research focuses on the physical basis of protein folding, misfolding and aggregation and the influence of small molecules on these processes in vivo. Dr. Kelly and his research group have studied the synergy between the hydrophobic effect and backbone-backbone hydrogen bonding in beta-sheet folding employing side-chain as well as amide-to-ester and amide-to-olefin backbone mutations. His laboratory also studies the etiology of neurodegenerative diseases, including Alzheimer's Disease, Parkinson's Disease, and the familial gelsolin and transthyretin-based amyloidoses – publishing over 200 papers in this area to date. Two small molecules discovered by the Kelly laboratory are now being tested in placebo controlled human clinical trials for the amelioration of peripheral neuropathy caused by amyloidosis. These small molecules selectively bind to the native state of transthyretin and serve as native state kinetic stabilizers – allowing scrutiny of the hypothesis that prevention of amyloidogenesis will ameliorate a neurodegenerative disease.

The Kelly Laboratory has also made considerable progress in discerning the biochemical basis of Gaucher's disease, a loss of function misfolding disease. This mechanistic insight has been used to develop small molecule pharmacologic chaperones that could be useful in ameliorating this lysosomal storage disease. Another current focus of the Kelly group is to restore the protein homeostasis capacity that protects us from numerous diseases similar to those mentioned above when we are young utilizing "proteostasis regulators," small molecules that adapt stress responsive signaling pathways to restore normal cellular balance. They have demonstrated the efficacy of this approach in both gain- and loss-of-function diseases. The Kelly group has also recently discovered functional amyloid structures in humans, revealing the fine line between pathology and physiology.

Kelly has won numerous awards including the American Chemical Society Arthur C. Cope Scholar Award, the State University of New York at Fredonia Alumni Distinguished Achievement Award, the Protein Society-Dupont Young Investigator Award, The Biophysical Society National Lecturer Award, the Texas A&M University Honors Program Teacher / Scholar Award, the Camille Dreyfus Teacher-Scholar Award, the Searle Scholar Award.



From left: Bachem President Philip Ottiger, Vincent du Vigneaud Award winners Tom Muir and Jeff Kelly



Dr. Jeffery W. Kelly

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Vincent du Vigneaud Award Winners

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Dr. Tom W. Muir



Dr. Tom W. Muir

Dr. Muir was born and grew up in Stranraer, Scotland. He received his B.Sc (Hons, 1st class) in Chemistry from the University of Edinburgh in 1989 and his Ph.D. in Organic Chemistry from the same institute in 1993 working under the direction of Professor Robert Ramage, FRS. After postdoctoral studies with Professor Stephen B.H. Kent at the Scripps Research Institute, he joined the faculty at the Rockefeller University in New York City in 1996 and was promoted to Full Professor and Head of the Selma and Lawrence Ruben Laboratory of Synthetic Protein Chemistry in 2002. He has won a number of honors for his research at Rockefeller, including the Burroughs-Wellcome Fund New Investigator Award; the Pew Award in the Biomedical Sciences; the Alfred P. Sloan Research Fellow Award; and The Leonidas Zervas Award from the European Peptide Society.

The Muir laboratory investigates the details of protein function using chemical and biophysical approaches. Specifically, the group has developed a suite of generally applicable technologies that integrate the tools of organic chemistry and recombinant biotechnology. These include methods that allow non-coded groups to be introduced site-specifically into proteins both in vitro and in vivo, as well as approaches for controlling protein function in cells using small molecules. Using these tools, it is possible to gain fundamental insights into how proteins work within the context of complex biological systems of biomedical interest. These generic approaches have been applied to a number of such problems in the Muir group. Current focuses of the group are potassium ion channels and eukaryotic signal transduction proteins, specifically latent transcription factors such as R-Smads and STATs.

GRC: Biology and Chemistry in Peptides, Ventura, California USA

Chaired by Drs. Carrie Haskell-Luevano (University of Florida) and Kit Lam (University of California – Davis), and held February 17 to 22, 2008, the Gordon Research Conference on Biology and Chemistry in Peptides was fully subscribed with a maximum capacity of 150 attendees, who were drawn by topics which included infectious diseases; material sciences and nanotechnology; folding and dynamics; new chemistry approaches in peptide sciences; chemical biology and molecular imaging; peptide/protein design strategies; and ligand-receptor interactions. The American Peptide Society held its biannual council meeting/teleconference during one of the free afternoons.



from left: APS Councilors Kit Lam, Fred Naider, Michael Chorev, DeAnna Long, Richard Houghten, Hank Mosberg, Gregg Fields, and Carrie Haskell-Luevano.

APS General Assembly Minutes

The American Peptide Society General Assembly took place in the main auditorium of the Palais de Congrès, Montréal, at 12:50 p.m. on Thursday, June 28, 2007. It was attended by approximately 15 members of the APS, the Officers of the APS, and the majority of Council members present in Montréal.

The Secretary had sent an e-mail to the APS membership in advance of the Symposium inviting them to suggest subjects for discussion, but no suggestions were received. However, two main points were raised on the spot by members after they had heard brief general and financial reports from the President and Treasurer:

1. Objections to compulsory membership for Symposium registrants

Unlike 2005, when no complaints seem to have been received, in 2007 about 20 people (including at least one member of the APS Council), had quite strong feelings against this requirement. Several such objections had already been made, sometimes very vigorously, to the Symposium organisers well before the General Assembly, and were also raised at the Montréal Council meeting. Many objectors, but not all, were from Europe.

Almost all the objectors were concerned with questions of principle, and found the financial aspects to be of secondary importance, or no importance at all.

It seemed that most objectors were receptive to the point that the APS was constrained by its contractual obligations to restrict certain benefits (certainly the two years of free copies of the Journal, possibly the free Symposium proceedings on CD-ROM), to members only. Most (perhaps all) seemed to find it acceptable that if they were to be allowed to opt out of membership, and thus not to receive these benefits, they would still have to pay the full registration fee.

The Secretary proposed that in future the registration form would contain an opt-out box, which registrants could tick. Registrants who ticked the box would still pay the full fee and enjoy all the on-site benefits of registration. On the other hand, such registrants would not become members of the APS, and would not receive the Journal or any other continuing membership benefits such as access to the web site, eligibility for special offers limited to members, etc. The APS would want to give a free copy of the Proceedings to such registrants and in negotiations with publishers prior to each Symposium it would try, without commitment, to obtain the right to do so.

None of the members present expressed any objection to the above proposal.

2. Digitizing past Symposium volumes

A member reported that he has in his possession a complete run of Symposium volumes and is prepared to let them be digitized. The idea would be to make the result available to members online as a membership benefit. It was explained that the Society would have to settle copyright issues with each of the past publishers, and obtain an estimate of costs, but that a proposal would very likely be gratefully accepted by the APS Council.

No other matters having been raised, the Assembly was brought to a close.

Robin Offord
Secretary, American Peptide Society

American Peptide Society Member Benefits

- A subscription to *Biopolymers* – *Peptide Science*.
- Discounted subscription rates for the following journals:
 - *Chemical Biology & Drug Design*
 - *International Journal for Peptide Research & Therapeutics*
 - *Protein and Peptide Letters*
 - *Current Protein & Peptide Science*
 - *Current Proteomics*
- Free professional position and resume posting on the website.
- Membership in the Federation of American Societies for Experimental Biology (FASEB).

For more information, please visit our website at <http://www.AmPepSoc.org>

World-Wide Events Calendar

TIDES 2008: Oligonucleotide & Peptide
Technology & Product Development
May 18 - 21, 2008
Red Rock Resort & Spa
Las Vegas, Nevada
For more information:
[http://www.ibclifesciences.com/tides/
8490.xml](http://www.ibclifesciences.com/tides/8490.xml)

11th Naples Workshop: New Frontiers in
the Search of Bioactive Molecules:
from Peptides to Drugs
May 24 - 27, 2008
Napoli, Italy
For more information:
[http://www.cirpeb.unina.it/
naples2008](http://www.cirpeb.unina.it/naples2008)

14th Annual Conference on Teaching
Survival Skills & Ethics
June 8 - 13, 2008
Snowmass, Colorado
For more information:
[http://www.survival.pitt.edu/events/
trainer.asp](http://www.survival.pitt.edu/events/
trainer.asp)

10th Chinese Peptide Symposium
July 1 - 5, 2008
Tsinghua University and Northwest-
ern Polytechnical University
Xi'an, China
For more information:
<http://www.cps08.cn>

Protein Society 22nd Annual Symposium
July 19-23, 2008
San Diego, California
For more information:
<http://www.proteinsociety.org>

30th European Peptide Symposium
August 31 - September 5, 2008
Helsinki, Finland
For more information:
<http://www.30eps.fi>

Biophysical Society Discussions:
Calmodulin Modulation of Ion
Channels
October 30 - November 2, 2008
Asilomar Conference Center
Asilomar, CA
For more information:
[http://www.biophysics.org/discus-
sions/](http://www.biophysics.org/discus-
sions/)

American Society for Matrix Biology
Annual Meeting
December 7-10, 2008
Manchester Grand Hyatt, San Diego,
California
For more information:
<http://www.asmb.net>

We welcome member submission of
brief summaries/highlights of peptide-
related meetings for publication in this
newsletter and/or our website. If you are
aware of other meetings our members
should know about, please contact us at
aps_member@americanpeptidesociety.org.

14th Annual Conference on Teaching Survival Skills and Ethics: June 8-13, 2008, Snowmass, Colorado

This trainer-of-trainers conference,
which is funded by the National Institutes
of Health and the Office of Research
Integrity, is designed to prepare faculty
and administrators to establish or
improve instruction in the responsible
conduct of research and in professional
development (e.g., writing research
articles and grant applications; making
oral presentations and teaching; funding
employment; hiring, supervising, and
mentoring). A number of conference
fellowships are available. For more
information, please visit [http://
www.survival.pitt.edu/events/trainer.asp](http://
www.survival.pitt.edu/events/trainer.asp)

10th Chinese Peptide Symposium

It is our pleasure to invite you to
attend the 10th Chinese International
Peptide Symposium in Xi'an, China,
hosted by Tsinghua University and
Northwestern Polytechnical University on
July 1 to 5, 2008. This four-day confer-
ence is an excellent opportunity for you
to meet with participants from all over the
world, share views on peptides, and
create an opportunity for networking,
collaboration, sharing of technical
information and the building of trust
relationships internationally. Participants
representing industry, government policy
makers, as well as academic scholars and
researchers from the peptide science
arena will present and discuss the latest
topics in peptide science and peptide
medicine.

Abstract submission and early
registration deadline is April 30, 2008.
For more information, please visit
www.cps08.cn

We are looking forward to meeting
you in July, in Xi'an, an ancient capital in
Chinese history, located in the heart of
fascinating west China, at what promises
to be a most stimulating and enjoyable
event.

*Prof. Dr. Yan-Mei LI, Chairman
10th Chinese International
Peptide Symposium*

Peptide New Findings - Editor's Choice

Within the past six months, several articles stressing the importance of peptides caught the attention of Peptide Scientists and other readers of prestigious scientific journals. A few of these articles were selected for the Spring issue of the APS Newsletter as an ongoing illustration of the importance of this field in biomedical research.

"A virocidal amphipathic alpha-helical peptide that inhibit hepatitis C virus infection in vitro." Cheng, G. et al., *PNAS*, 2008, 105:3088. Hepatitis C virus (HCV) infects >170 million people worldwide and is the most common cause of liver transplantation in the United States, while no vaccine is available and the only currently approved treatment has limited efficacy and serious side effects. An amphipathic-helical peptide (C5A) was identified to exhibit virocidal activity for HCV at submicromolar concentrations in vitro by destabilizing viral membranes, offering a unique therapeutic approach to HCV and other viral infections. In a later *PNAS* publication (March 31, 2008), they demonstrated that C5A can also prevent transmigration of HIV through primary cells.

"An alpha-Defensin Mutation Causes Black Coat Color in Domestic Dogs." Candille, S.I. et al., *Science*, 2007, 318:1418. While alpha-defensins are known for their antimicrobial activities in both innate and adaptive immune responses in mammals, a new role in pigmentation was discovered. Thus the functional repertoire of defensin CBD103 was expanded to include binding to melanocortin 1 receptor, one of a protein family that controls pigmentation, inflammation, and feeding behavior, leading to the identification of an additional class of ligands for signaling through melanocortin receptors.

"Detection of colonic dysplasia in vivo using a targeted heptapeptide and confocal microendoscopy." Hsiung, P.L. et al., *Nat. Med.*, 2008, March 16. Questions have been raised about whether conventional colonoscopy can reliably detect the full range of premalignant lesions, which are likely to show malignant features. Using phage display technology, Hsiung et al. identified a heptapeptide that binds preferentially to human premalignant colonic tissue with 81 percent sensitivity and 82 percent specificity, representing a new diagnostic imaging approach for the early detection of colorectal cancer.

"Combinatorial synthesis of peptide arrays onto a microchip." Beyer et al., *Science*, 2007, 318:1888. A new technology has been developed to allow combinatorial synthesis of peptide arrays onto microchip surfaces. The future of such a method could be seen in proteomics or diagnosis.

Sylvie E. Blondelle
Editor-in-Chief, APS Newsletter

30th European Peptide Symposium

The Finnish Peptide Society cordially invites you to participate in the 30th European Peptide Symposium (30EPS) to be held at Finlandia Hall in Helsinki, Finland on August 31 to September 5 2008. We wish to offer you a traditional EPS symposium gathering of around 1000 participants. Peptide chemistry is strongly associated with the new trends in life sciences, pharmacology and biotechnology. The symposium will be an excellent possibility for researchers to sustain and create contacts among experts from various fields of peptide chemistry. The preliminary scientific programme is now available on the congress website <http://www.30eps.fi>.

Extended travel grant application deadline: March 31, 2008

Abstract submission deadline for poster presentations: May 10, 2008

Early registration deadline: June 10, 2008

Due to the hotel booking situation in Helsinki in early September, we recommend to register early and book your hotel together with your online registration.

Mark the symposium dates in your 2008 calendar to meet your old and new friends in Helsinki.

Chairpersons of 30th EPS:

Dr. Hilkka Lankinen,

Docent of Biochemistry

Dr. Ale Närvänen,

Docent of Biochemistry

Dr. Per Saris,

Professor of Food Microbiology

American Peptide Society Newsletter

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Editor Ellen T. Brenner

We are always seeking items for your society's newsletter – either scientific or personal, as long as they are relevant to the field of peptide science, the Society, and its members. Please email your news items, along with any photos or graphics, to Editor Ellen Brenner at apsnewsletter@americanpeptidesociety.org. Items should be either Microsoft Word document attachments, or plain text included in the body of the email. Photos should preferably be in either JPEG or EPS format, and not embedded in a Word document.

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