





ASP Presidents at the 31st Annual Meeting banquet, with Baltimore's inner harbor in the background. From left to right: Henry Lim (Past-President), John Spudich (Scientific Program Chair for the Baltimore meeting), Tom Moore (current President), and Frances Noonan (President-Elect). Photo by Herbert Hoenigsmann.

Message from the President

It was great to see so many of you in Baltimore! John Spudich organized an exciting and productive meeting that was topped off by a tour of the Baltimore aquarium and an enjoyable banquet. Henry Lim's year as President reflected his energy and commitment to the Society. He was a superb President and we look forward to "Henry's Meeting" in Seattle next summer. Special thanks also to Dan Yarosh for his guidance and adherence to sound financial practices in steering the Society through this period of declining revenue and increasing costs.

I'd like to share with you several things that came up at Baltimore that are important to the future of the society. To begin with, concern about the "graying" of the society was on some of our minds, bringing up again the need to attract young photobiologists to the ASP. We must continue to find ways to make the annual meeting a "must do" event for young investigators. I say continue because from what I observed we have an exceptional cadre of young scientists eager to make the ASP an important part of their professional lives. Those attending the two award lectures for new investigators, given by **Oded Béjä** and **John Christie**, know what I'm talking about. (I've already asked them to organize symposia for the 2005 meeting, but more

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on that later). Moreover, the work of the student representative (associate ASP member) on the Council, **Laura Lamb**, has borne out the wisdom of establishing this position. She is an effective advocate on the Council for issues affecting her peers and brings energy and innovation to activities such as the mentoring lunch. The bar is set high for her successor.

We worked through budget issues during almost 8 hours of Council meetings. In a nutshell, Society reserves have decreased noticeably over the past few years. In the big picture, cash flow pivots around the journal, the annual meeting, member dues, and the secretariat. The journal and the annual meeting have revenues and expenses. The secretariat provides member services and organizational support at all levels and is an expense. Let's first consider the journal.

I am pleased to report that **Tito Scaiano** and **John Simon** are working though the editorial transition at *Photochemistry and Photobiology* in a smooth and efficient way. This comes at a time when the cash flow associated (*Continued on page 2*)

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with the journal is changing in fundamental ways. To come right to the point, over the years, the journal has been the cash cow for the Society and income from the journal supported activities of the Society and also built up sizeable savings. A combination of factors, mostly related to electronic publishing, have changed this picture with the result that the journal will struggle to break even in next year's budget.

Turning to the annual meeting, the Society has always subsidized the meeting in that the registration fees and fundraising do not cover the costs. Society coffers make up the difference. Beginning with the 2004 meeting, the Council specified that the meeting budget must be balanced without recourse to Society funds. The one exception to this is that the Society will continue to support travel to the annual meetings by young scientists. The Council regards this as a crucial investment in our future and is willing to spend reserves on it. Additional fundraising by the meeting organizer, symposia chairs, etc., and adjustments to the registration fee will be required to balance the meeting budget. But, will this be enough? It is not obvious that it will be and I believe the Council is prepared to authorize additional funds from reserves to ensure a successful 2004 meeting.

While we are on the subject of the annual meeting, the suggestion came up at the Past-Presidents' Luncheon that the annual meeting be held every second year. After much discussion, there was essentially unanimous agreement that this idea has merit. Discussions at the second Council meeting were also positive. The plan would be to synchronize our meeting with ESP meetings (held every 2^{nd} year) so that there would be a major photobiology meeting every year. This would go a long way toward bringing the two societies together. It would also give members of these societies the opportunity to attend and participate in what would become an annual international photobiology meeting. As things stand now, on the years that ASP and ESP both have meetings, the expense and time to attend both is a barrier to closer ties and establishing the personal interactions that spawn collaborative research.

ASP, ESP and their sister societies serve as important interfaces of photobiology to the public, governmental funding agencies, foundations, and industry. Our discipline is increasingly important vis-à-vis growing concern about the myriad global issues that involve photobiological processes. It makes sense for us to put in place mechanisms that bring the disciples together.

Please let me, Council members, or the secretariat know how you feel about changing our annual meeting schedule. Since the ESP is scheduled to meet in 2005, we could first implement the change in our schedule by canceling the 2005 ASP meeting. Because certain Society activities are (Continued on page 3)

Letter from the Editor

I hope that everyone who attended the 31st Annual Meeting in Baltimore enjoyed the diverse scientific program. We had about 340 attendees, slightly fewer than at our previous meeting in Quebec City. Please send your thanks to **John Spudich**, the Scientific Program Chair, and to the ASP Secretariat for all their hard work in planning this meeting.

The role of ASP associate members was an important topic of discussion at the Council meetings in Baltimore. In the coming months and years, the Council will be working to increase the participation of ASP associate members. This issue of the newsletter features an article by **Laura Lamb**, who was appointed associate Councilor in Quebec City. Laura looks forward to hearing your suggestions for improving the experience of associate members within the ASP and at our future annual meetings.

Please make room on your schedule for our 32nd Annual Meeting. It will be from July 10-14, 2004 at the Westin hotel in downtown Seattle. Past-President **Henry Lim** promises an exciting scientific program. Seattle also has much to offer for your *après*-meeting experience, including a beautiful waterfront region with world class dining and an endless supply of coffee bars. We look forward to

ASP Business Meeting

Lanie Hill, ASP Secretary, has announced that the minutes of the 30th ASP Business Meeting (July 15, 2002, Quebec City) are now available on the ASP web site, www.kumc. edu/POL/ASP_Home/asp_meet.html. Following approval by the Executive Committee, the minutes of the 31st Business meeting (July 30, 2003) will also be available at this web site.

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specified on an annual basis, we would need to look carefully at the bylaws and bring appropriate changes to vote at the 2004 meeting. If your response is positive, I will work with the Council to outline necessary changes and try to get them in the next issue of the newsletter. In the meantime, we will be signing a contract for the 2005 meeting site with a provision that it could be shifted to 2006. One possibility for the transition is that President-Elect **Frances Noonan** and I could co-host the 2006 meeting and thereafter the President would serve a 2-year term.

In my view, the journal, the annual meeting and our outreach programs make up the heart, soul and intellectual property of the Society. The budget is just a detail to make it all happen. But, as they say, the devil is in the details.

- Tom Moore, ASP President



Seattle, site of the 32nd ASP Annual Meeting, July 10-14, 2004.

The PAS of PYP

PAS (Per/Arnt/Sim) domains are regions of sensor proteins that contain an a/b fold and are important in the transduction reactions of many different photoreceptors, including photoactive yellow protein (PYP), phytochrome, cryptochrome, and phototropin. In the May 16 issue of Journal of Biological Chemistry, ASP member **Klaas Hellingwerf** (E.C. Slater Institute, Amsterdam) and colleagues report their studies of the structure of the PAS domain of PYP, a bacterial blue light photoreceptor. They show that a PYP deletion mutant lacking its N-terminal helix-turn-helix motif is still able to fold properly. Simulations of the PAS domains of other proteins show that they are structurally conserved but have similar conformational flexibility.

(from "Photobiology News" (4/25/03) on the ASP web site, www.photobiology.org.)



Tom Vogelmann (left) congratulates 2003 ASP New Investigator awardee John Christie. John is currently a research fellow at the University of Glasgow, UK. His award lecture was entitled "Structure and Function of Plant Phototropins."



Oded Béjä, 2002 ASP New Investigator awardee. Oded accepted his award in Baltimore because he was unable to attend the 2002 meeting in Quebec City. He is currently a senior lecturer at the Technion in Haifa, Israel. His award lecture was entitled "Light-driven Genomics".



Tito Scaiano accepts the ASP Photon Award, a statue of Ra, the Egyptian sun god. The Photon Award is presented to honor outstanding service to the ASP. Tito has been the editor of Photochemistry & Photobiology since 1998. John Simon begins his term as editor in January, 2004.

Microarray Detection of High Light-Stress Plant Genes

DNA microarray analysis is a powerful new technology that allows researchers to simultaneously monitor changes in the expression of thousands of genes. In a recent issue of *Photochemistry and Photobiology*, ASP member **Katsushi Manabe** (Yokohama City University, Japan) and colleagues describe their use of cDNA microarrays to detect gene expression changes following high light-stress (HL) in the model plant *Arabidopsis thaliana*. They show that HL induces genes with roles in the scavenging of reactive oxygen species and in the biosynthesis of lignins and flavonoids. Seventy-two of the HL-induced genes are induced by drought and ten of the HL-induced genes are induced by drought, cold stress, and salt stress.

(from "Photobiology News" (6/20/03) on the ASP web site, www.photobiology.org)

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ASP Officers and Councilors



Attention Associate Members!

The future of any society depends upon the growth and activity of its younger members. Accordingly, the ASP Council recognizes the

importance of promoting and encouraging the participation of its associate members. At the 2002 annual meeting in Quebec City the Council appointed me as an associate member to the Council for a three year term.

I had the opportunity to meet and talk with many of our associate members at the recent annual meeting in Baltimore and received many suggestions for improving the experience of associate members at the annual meeting. These include holding a social gathering of associate members, moving the mentoring lunch to earlier in the meeting, and holding a scientific session that features the work of associate members. I hope that the Council will consider these ideas while planning for the 2004 annual meeting in Seattle. Many associate members also expressed concerns about the cost of accommodations at our annual meeting. The Council is well aware of this issue and this will be an important consideration as sites for future meetings are chosen.

I welcome the opportunity to hear from any member who has suggestions or comments about how to improve the experience of associate members of the ASP. Please contact me by e-mail at LELamb@chem.duke.edu or by phone at (919) 660-1630.

Laura E. Lamb

Associate Member Council Representative

Corporate Exhibitors at 31st ASP Meeting

Biophotonics International: www.Photonics.com *Biophotonics International* is a magazine dedicated to photonic technology.

QuantumUVR: www.quantumuvr.com

Quantum UVR provides real-time UVR measurement systems and other systems and services.

Royal Society of Chemistry: www.rsc.com The Royal Society of Chemistry publishes *Journal of Photochemical & Photobiological Sciences*.

Solar Light: www.solar.com

Solar Light manufactures precision UV light sources, solar simulators, and radiometers.

Spectra Physics: www.spectraphysics.com Spectra Physics manufactures solid state, ultrafast, semiconductor, fiber, dye, and gas lasers.

14th International Congress of Photobiology: www.photos.or.kr/ICP2004/ The International Congress on Photobiology is June 10-15, 2004 in Jeju, Korea.

Corporate Sponsors for 31st ASP Meeting

The ASP would like to thank the Gold, Silver, and General contributors for their support of our 2003 annual meeting in Baltimore. We look forward to their continued support in the coming years.

Gold

Ferndale Laboratories Fujisawa Healthcare Roswell Park Cancer Institute

Silver

University of Maryland Foundation Ciba Specialty Chemicals Johnson & Johnson

General

AGI Dermatics American Laboratory Products Avanti Polar Lipids Beirsdorf Corporation Boston Electronics Corporation Brigham and Women's Hospital Bruker Biospin Corporation Cephalon Inc. DUSA Galderma Opotek Pfizer Positive Light Spectra-Physics Toyo B-Net Ultrafast Systems Unilever University of Houston USDA-ARS Zeiss

ASP 2003 Annual Meeting Travel Award Recipients

Name	Institution	Abstract	Mentor	City
Bindu Abraham	University of Maryland	Amino acid derivatives of naphthalimides as potential agents for protein cleavage and crosslinking	Lisa Kelly	Baltimore, MD
Farrukh Afaq	University of Wisconsin	Suppression of ultraviolet B-induced phosphorylation of mitogen activated protein kinase and activation of nuclear factor kappa B by green tea polyphenol in mouse skin	Hasan Mukhtar	Madison, WI
Nicole Cauchon	University of Sherbrooke	Phototoxic and lethal effects of phthalocyanines	Johan E Van Lier	Sherbrooke, QC Canada
Nirmala Chandrasekharan	University of Maryland	Fluorescent polymeric surface-oriented sensors for engineering and biological applications	Lisa Kelly	Baltimore, MD
Kathleen Daugherty	University of Maryland	Photo-oxidation methods	Lisa Kelly	Baltimore, MD
Rebecca Goyan	Royal Military College of Canada	Protease mediated drug delivery	Roy Pottier	Kingston, ON Canada
Yu-Ying He	NIEHS/NIH	Expression profiling of human keratinocyte response to Ultraviolet A: implications in apoptosis	Colin Chignell	Research Triangle Park, NC
Edith Kabingu	Roswell Park Cancer Institute	Immune control of distant tumors by photodynamic therapy	Sandra Gollnick	Buffalo, NY
Philaretos Kousis	Roswell Park Cancer Institute	Indications of immune system involvement in fluence rate dependent tumor growth control	Sandra Gollnick	Buffalo, NY
David Lee	McMaster University	The role of the mismatch repair genes hMLH1 and hMSH2 in transcription- coupled nucleotide excision repair	Andrew Rainbow	Hamilton, ON Canada

Name	Institution	Abstract	Mentor	City
Sun McMasters	University of Maryland	Site-selective DNA cleavage induced by naphthalene imide derived photosensitizers containing functionalized substituents	Lisa Kelly	Baltimore, MD
Soumya Mitra	University of Rochester	Increased oxygenation improves light penetration at 630 and 650 nm in murine tumors <i>in vivo</i>	Thomas Foster	Rochester, NY
Mark Niedre	University of Toronto	Is PDT generated singlet oxygen luminescence a predictor of treatment response in vitro and in vivo?	Brian Wilson	Toronto, ON Canada
Maria Ntefidou	Friedrich-Alexander Universitat	Phototaxis mutants of the flagellate <i>Euglena gracilis</i>	Donat Häder	Erlangen Germany
Inga Sliskovic	University of Windsor	Fluorescent probes for characterizing the denitrosation activity of cell surface protein- disulfied isomerase	Bulent Mutus	Windsor, ON Canada
Hsing-Wen Wang	University of Pennsylvania	Noninvasive optical measurement of RIF tumor oxygenation after photodynamic therapy and correlation with tumor response	Theresa Busch and Arjun Yodh	Philadelphia, PA
Albert Wielgus	NIEHS/NIH	Photochemical investigations of novel conjugates of synthetic melanin with natural proteins	Colin Chignell	Research Triangle Park, NC
Elsa Yan	University of California, Berkeley	Counterion switch in the photoactivation of the G protein-coupled receptor rhodopsin	Richard Mathies and Thomas Sakmar	Berkeley, CA

Upcoming Events

August 30 - September 4, 2003

10th European Conference on the Spectroscopy of Biological Molecules Szeged, Hungary Web site: www.ecsbm2003.hu/ ecsbm2003.html

September 2-6, 2003

Plant Photobiology Meeting Philipps-University Marburg Marburg, Germany Contacts: Prof. Alfred Batschauer, Chair of the Scientific Program Tel: +49-6421-28-27064 Fax: +49-6421-28-21545 E-mail: batschau@mailer.unimarburg.de Birte Dohle, Secretary Tel: +49-6421-28 22073 Fax: +49-6421-28 21545 E-mail: dohle@mailer.uni-marburg. de Web site: https://cgi-host.unimarburg.de/~ppmm2003/

September 6-11, 2003

10th Congress of the European Society for Photobiology Vienna, Austria E-mail: office@esp2003.org Web site: www.esp2003.org

September 18-21, 2003

International Conference on Oxidative Stress in Skin Biology and Medicine Andros, Greece E-mail: rallis@pharm.uoa.gr Web site: www.pharm.uoa.gr/ oxstress/

October 3-4, 2003

Photodynamic Therapy in a New Light Roswell Park Cancer Institute Buffalo, NY Contact: Thomas Dougherty, PhD Tel: 716-845-4426 E-mail: thomas. dougherty@roswellpark.org Web site: http://www.roswellpark. org/Document.asp?lid=3035

October 7-11, 2003

5th International Symposium on Photodynamic Diagnosis and therapy in Clinical Practice Brixen/Bressanone, Italy Contacts: Prof. Herwig Kostron Tel: +43-512-5042621 Fax: +43-512-5042641 E-mail: Herwig.Kostron@uibk.ac.at Prof. Giulio Jori Tel: +39-049-8276333 Fax: +39-049-8276344 E-mail: jori@bio.unipd.it Web site: neurosurgery.uibk.ac.at/ PDT2003.html

October 20-22, 2003

Excited State Processes of Carotenoids in Photosynthesis (311. WE-Heraeus-Seminar) Bad Honnef, Germany Contact: Dr. D. Leupold E-mail: leupold@mbi-berlin.de Web site: www.biologie.hu-berlin. de/~SFB429/honnef.html

November 24-27

First Biophotonics Primer and Workshop Montebello, Quebec Contact: R.I. McDonald E-mail: ianmac@lincsat.com Web site: www.cipi.ulaval.ca/

Jan 11-16, 2004; March 14-19, 2004

Protein Purification: Isolation, Analysis, and Characterization of GFP Cook College, Rutgers University, New Brunswick, NJ Contact: Prof. William W. Ward Tel: 732-932-9562 ext. 216 or 212 E-mail: crebb@rci.rutgers.edu Web site: www.rci.rutgers.edu/

~meton/protein.html

June 10-15, 2004

14th International Congress on Photobiology International Convention Center Jungmoon, Jeju (Cheju), Korea Web site: photos.or.kr/ICP2004/

July 10-14, 2004

32nd Annual Meeting of the American Society for Photobiology Westin Seattle Seattle, WA.

August 2-6, 2004

13th International Symposium on Bioluminescence and Chemiluminescence Conference Center of Pacific Yokohama Yokohama, Japan Contact: Prof. Akio Tsuji Tel: +81-3-3784-8194 Fax: +81-3-3784-8247 E-mail: BXP02045@nifty.ne.jp Web site: www2.unibo.it/isbc/Files/ BC Symnf.htm

August 29-September 3, 2004

13th International Congress on Photosynthesis Montreal, Canada E-mail: ps2004@uqtr.ca Web site: www.uqtr.ca/ps2004/

2005

33rd Annual Meeting of the American Society for Photobiology Quebec City, Canada