ASP Presidential Address

As your new ASP President for 2009-2010, I am excited to share my thoughts about this year and beyond, the American Society of Pharmacognosy, in particular, and natural products research, in general. First, I extend an open welcome to our new members of the ASP. Some of you were inspired to join the ASP this year, driven not only by your passion for natural products, but perhaps galvanized by the activities revolving around the 50th Anniversary of the Society. I also welcome your two newly elected officers - Vice President, Dr. John Beutler, and Executive Committee member, Dr. Amy Wright.

ASP arose in 1959 from humble beginnings in Chicago, and was organized and led by a handful of founding members. For the history of the ASP, see the monograph commissioned for the occasion of the 50th Anniversary. The ASP is now a world-recognized body, co-publisher with the American Chemical Society of the Journal of Natural Products, and a guild for the promotion of natural products in all of its multidisciplinary facets. The 50th Anniversary ASP meeting, held in Waikiki, Hawai‘i, from June 27 – July 1, 2009, with the spectacular backdrop of Diamond Head, was a great success. Our Golden Anniversary was mentioned by Chemical and Engineering

Record Breaking Anniversary Meeting

by Drs. Roy Okuda and John Cardellina

The 50th Anniversary Meeting of the American Society of Pharmacognosy was held at the Sheraton Waikiki Hotel from June 27 to July 1, 2009. The final registrant count was 681, a record attendance for an ASP meeting. Although the 2009 meeting was not a designated International Congress, attendance from other countries was very high with a total of 33 countries represented. There were over 200 delegates from Asia, most notably from South Korea, Japan, China, and Taiwan. Despite the distance, Europe, South America, South Africa, and Australia/New Zealand were also well represented. The participation of graduate students and postdocs was very high, 203 and 53, respectively, and we were glad to see such interest from our younger colleagues.

Among the many who attended were two Founding members: Drs. Norman Farnsworth and John Staba. To everyone’s great disappointment, Dr. David Carew was unable to attend at the last minute, but he and his wife were certainly on our minds, and we hope to see them in Tampa/St Petersburg in 2010.

The meeting began on Saturday, June 27th, with a special program on the 50 Years of History of the ASP. Organized by Dr. Barry O’Keefe, the multimedia presentation included five sections, each covering a decade of the Society, presented by Drs. Norman Farnsworth, Jack Rosazza, Chris Ireland, Cindy Angerhofer and George Constantine. Dr. Douglas Kinghorn then described the evolution of the Journal of Natural Products, and Dr. Guy Carter added some thoughts on the future of pharmacognosy and the ASP. This was an informative and highly entertaining presentation, and anyone who continued on page 4
Editor’s Corner

Along with about 600 ASP members, I recently celebrated ASP’s 50th Anniversary at the Annual Meeting in Hawai’i. An amazing and enlightening time was had by all who attended, and members relished the chance to recognize this seminal milestone of our Society’s history and beginnings alongside founding members.

In this issue of the ASP Newsletter we continue to celebrate our 50th Anniversary. The Newsletter takes time to look back at the events from our 50th Annual Meeting in Hawai’i, and also forward to the future of our Society, as detailed in incoming President Ted Molinski’s address, one of our lead articles.

Drs. Roy Okuda and John Cardellina provide a lead article that details the activities of the highly successful 50th Anniversary Meeting. With 681 participants, the meeting broke records for our largest solo-hosted ASP meeting. From the outstanding invited speakers, to the lovely backdrop of social events on Waikiki beach, the meeting was truly an unforgettable event. Drs. Okuda and Cardellina note the many people involved in organizing this conference, truly an impressive group representing many universities and other institutions in Hawai’i.

The awards committee was able to give out an unprecedented number of prizes this year, thanks in part to the financial success of the 2006 Annual Meeting in Arlington, Virginia. The prize winners are listed in this Newsletter, and we extend each of them a sincere congratulations!

We are happy to report that a number of ASP members have been recently honored. Former ASP Newsletter Editor-in-Chief, Dr. Renuka Misra received the Achievers Excellence Award 2009 Mauritius. Dr. Marc Slattery’s research was featured in United Airlines’ Hemispheres Inflight Magazine, and two late ASP members have also been honored in special ways. At the 50th Anniversary Meeting, the late Dr. John Daly was honored in a memorial session, featuring former coworkers. Also, the University of West Florida is honoring the late Dr. Clifford Chang through a named fund that will support students.

We continue to provide you with our regular columns. Dr. Georgia Perdue is diligently providing us with her column “Brief News from Washington”. She recently told me that, although she has had to cut back on many of her professional duties, the one thing she truly wished to continue was writing this column. As Editor, I feel very privileged to have such a dedicated columnist. Thank you, Georgia, for sticking in there for the Newsletter.

Other regular columns include “Meet a New ASP Member,” featuring Dr. Tim Motley of Old Dominion, a good friend of mine. Welcome Tim! This issue’s “Behind the Scenes in Pharmacognosy” features the work of ASP member Dr. Hendrik Luesch.

I appreciate the many kind words I heard about the Newsletter this summer, and am looking forward to a bright future of continuing to serve the Society. If you wish to contribute columns or ideas, please feel free to contact me at asp.newsletter@lehman.cuny.edu.

EMPLOYMENT SERVICE

The Society offers a placement service to aid our members in seeking positions or employees. This service is available only to ASP members and is free to both the applicant and the employer. For more information see the services website.

www.phcog.org/employment.html

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Looking ahead, 2011 has been designated by the United Nations as the International Year of Chemistry (www.iupac.org/web/nt/2008-12-30_IYC) with the United Nations Educational Scientific and Cultural Organization (UNESCO) and the International Union of Pure and Applied Chemistry (IUPAC) at, “the helm of the event”. Like the United Nations International Geophysical Year of 1957-58 – close to the birth of the ASP – that generated milestones in exploration of the earth and space, the United Nations’ designation of 2011 is a remarkable opportunity to promote natural products chemistry in the public eye with expositions, demonstrations and research projects. Clearly, the ASP is a society for the chemistry of natural products, among the scientific disciplines it embraces. I challenge our members (including the standing committees) to think of ways that the ASP can participate in 2011 by promotion of natural products chemistry that reflect well on our science and Society. Please contact any member of the Publicity Committee with your suggestions.

Finally, I encourage you to be volunteers and agents for progress in the Society. Your input is valuable – and valued - and you can make a difference. In this way, you can be the agents of change. And, when you are asked by your peers and colleagues, ‘What is pharmacognosy?’, you can reply confidently.

Not only were attendance records broken at this conference, with over 650 registrants, but the high-quality of the scientific program was enhanced by a strong international presence. The Presidents and members of the natural products societies from around the world, seven in all, were in attendance, including about 100 attendees from South Korea alone.

There are many people to thank for the success of the Waikiki meeting, but I would like to highlight the tireless efforts of the general chair Dr. Roy Okuda, San Jose University, his co-chair Dr. John Cardellina, ReevesGroup and the local committee Dr. David Horgen, Hawai’i Pacific University, Dr. Namthip Sitachitta Mililana High School, Dr. Bulent Terem, Chaminade University, Dr. Philip Williams and Mr. Wesley Yoshida, both of University of Hawai’i, the Scientific Committee who assembled the scientific program and abstract-program book, and all their volunteers for their efforts in local logistics and details too numerous to mention here. Congratulations on a job well done!

I would also like to congratulate this year’s award winners, Drs. K. H. Lee, University of North Carolina (2009 ASP Norman Farnsworth Research Achievement Award), Adolf Nahrstedt, University of Münster, (2009 ASP Varro E. Tyler Prize for Research in Botanicals), Shengmin Sang, North Carolina Central University (2009 Matthew Suffness Young Investigator Award), as well as full members and associate members who were supported to attend the meeting by ASP travel awards. A special thanks goes to the Scheuer family and Ms. Marilyn Moore for their gracious participation in the 50th Anniversary Meeting. The late Dr. Paul Scheuer, the ‘grandfather’ of marine natural products in the USA, and the late ASP member Dr. Richard Moore, both of whom made their careers in natural products at the University of Hawai’i, would have surely approved. Finally, I want to thank all the conferees for getting the ASP 50th Anniversary off to a memorable start.

Now is the time to plan for 2010. Remember, the respective committees are accepting nominations for the Norman R. Farnsworth ASP Research Achievement Award, The Varro Tyler Prize, the Kilmer Prize, Research Starter Grants, and various travel awards for the 2010 ASP meeting in St. Petersburg, Florida, August 10-14, 2010. Submit your nominations and applications, now!

The year ahead will offer new frontiers for the ASP and the chance to participate in truly global connections. It is my goal that ASP and its members should broaden its community outreach in 2009-2010 to potential new members and lapsed members, alike. Do you know someone who would benefit by joining (or re-joining) the ASP as a member? Reach out to them! Through activities of the ASP Committees, promotion of the ASP will be advanced in 2009 by exploring ways to enhance our presence through social and professional networking sites, such as Facebook and LinkedIn. I encourage volunteerism, can you offer your help in ways to make this happen? These Internet tools, perhaps more familiar to our younger members, are designed to bring people together with common interests. And what is the Society, if not people with common interests? These and other rapid communication, peer-to-peer internet tools will provide pipelines to disseminate information about ASP to many others, not the least our professional contacts and lawmakers. I will be keeping the membership informed about these and other developments. The Internet is the engine that can propel the Society forward into its second half-century!

Finally, our Society needs to embrace interdisciplinary contacts with other professional societies that have common interests. For example, Dr. John Cassady, Chair of the ASP Foundation, pointed out to the Executive Committee that 2009 is the 50th Anniversary of the discovery of vinblastine, one of the vinca alkaloids from the Madagascan periwinkle, Catharanthus roseus (formerly, Vinca rosea). The discovery of this antitumor compound by Dr. Gordon Svoboda and others, and their subsequent development, were singularly transformative; their use in clinic as anticancer agents reversed the outcome of childhood leukemia from a 70% mortality rate to 70% remission. It is important to share such timely reminders with your colleagues in cancer research and clinical oncology.

Looking ahead, 2011 has been designated by the United Nations as the International Year of Chemistry (www.iupac.org/web/nt/2008-12-30_IYC) with the United Nations Educational Scientific and Cultural Organization (UNESCO) and the International Union of Pure and Applied Chemistry (IUPAC) at, “the helm of the event”. Like the United Nations International Geophysical Year of 1957-58 – close to the birth of the ASP – that generated milestones in exploration of the earth and space, the United Nations’ designation of 2011 is a remarkable opportunity to promote natural products chemistry in the public eye with expositions, demonstrations and research projects. Clearly, the ASP is a society for the chemistry of natural products, among the scientific disciplines it embraces. I challenge our members (including the standing committees) to think of ways that the ASP can participate in 2011 by promotion of natural products chemistry that reflect well on our science and Society. Please contact any member of the Publicity Committee with your suggestions.

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attended likely learned a great deal about the ASP!

The Scientific Program was one of the most expansive for an ASP meeting for many years. The invited talks involved 10 speakers who represented the broad spectrum of pharmacognosy research from a global perspective. The invited speakers were ASP members and Drs. Brad Moore, Cindy Angerhofer, Tomas Hudlicky, Hye Sook Yun-Choi, Valerie Paul, Dai-su Ke Uemura and Drs. Justin DuBois, Franz-Josef Marner, and Pei-Yuan Qian. The Norman Farnsworth ASP Research Achievement Award was presented to ASP member Dr. K.H. Lee of University of North Carolina, Chapel Hill, North Carolina. The Varro Tyler Prize for Botanical Research was awarded to ASP member Dr. Adolf Nahristedt of the University of Munster, Germany. ASP member Dr. Shengmin Sang of North Carolina State University, Raleigh, North Carolina, was the recipient of the Matt Suffness Young Investigator Award.

In addition to a strong program of invited and award talks, the contributed oral program was one of the largest ever for an ASP Meeting, with a total of 72 short oral presentations, and over 540 posters! To deal with the very large number of abstracts and to avoid printing an unmanageably heavy abstract book, most of the abstracts were provided on a USB drive, sponsored by Kemin Healthcare.

The social program included an outdoor reception on Saturday evening at the new Helumoa Water Playground of the Sheraton Waikiki. This was a memorable location, right on Waikiki Beach and in the shadow of Diamond Head at sunset. The special event for Monday was a traditional Hawaiian Luau, also held at the Helumoa Playground. Besides good food and drink, the highlight of the evening was entertainment provided by the Legends of Polynesia revue, featuring live music and a troop of more than 12 dancers who wore traditional costumes as they traveled through the Pacific in song and dance. Perhaps the most memorable moment of the evening came when Drs. Norman Farnsworth, Koji Nakanishi and Ms. Susie Rose Tempesta were called to the stage to join the troop’s dancers! The closing banquet was held on Wednesday evening, and involved the recognition of many key members of the Society who were present. Representatives of five of the seven participating societies presented congratulations for the ASP.

Many colleagues contributed to the success of this meeting in different ways. The Local Committee all put in many hours in advance and during the meeting, and deserve a great deal of appreciation. Thanks to Drs. David Horgen, Hawai‘i Pacific University (HPU), Namthip Sitachitta, Mililani High School, Bulent Terem, Chaminade University (CU), Phil Williams and Mr. Wesley Yoshida, both University of Hawai‘i (UH). About 15 students were involved throughout the meeting, and came from HPU, UH, and CU. The Scientific Program Committee, chaired by Dr. John Cardellina, labored through a massive number of abstracts (over 650) and organized a first-rate program. Committee members are Drs. Leonard McDonald, John Cronan, Coran Watanabe, JoAnn McCoy, Stefan Gafner, Phil Williams, and Mr. Wes Yoshida. The Scientific Advisory Committee provided helpful advice in shaping the Scientific Program. Ms. Yvonne Yamashita of the UH Conference Center managed our meeting registration, with the assistance of Mr. Lawrence So. Ms. Heidi Harakuni from Chaminade University also helped with registration and the Tuesday tours. Drs. Murray Munro and ASP member John Blunt presented a workshop on dereplication, which was appreciated by many.

We wish to thank the many Sponsors and Exhibitors who supported our Anniversary Meeting. Their support allowed us to put on a first-class scientific and social program. In particular, Bruker BioSpin added significant elements to the program with their “coffee challenge” and a popular workshop. The list of all Sponsors and Exhibitors appears on page 9 of this Newsletter.

The list of people who helped make our 50th Anniversary Meeting a success includes many who are not mentioned here and we are very grateful for their dedicated efforts. Mahalo nui loa!
Dr. Lee Wins Research Achievement Award

At the 50th Annual ASP Meeting in Hawai‘i, Dr. Kuo-Hsiung Lee was awarded the society's highest honor, the Norman R. Farnsworth Research Achievement Award. Dr. Lee is the Kenan Professor of Medicinal Chemistry at the University of North Carolina School of Pharmacy, Chapel Hill, North Carolina, where he has isolated or synthesized over 3,000 bioactive compounds. Dr. Lee's award lecture entitled, “Discovery and Development of Natural Product-Derived Chemotherapeutic Agents Based on a Medicinal Chemistry Approach” was well attended. The lecture highlighted the discovery and development of bioactive natural products and their analogues as clinical trial candidates, and focused not only on mechanism of action-directed isolation, but exploring rational drug design based on bioactive compounds.

The award is named after past ASP President Dr. Norman R. Farnsworth and recognizes a body of work with significant impact in natural products. The award consists of an honorarium and crystal plaque presented by the ASP President and Treasurer, Drs. Guy Clark and Robert Krueger, respectively.

Dr. Sang is Honored with Suffness Award

ASP member Dr. Shengmin Sang is the 2009 recipient of the ASP Matt Suffness Young Investigator Award. Dr. Sang was presented with the award at the ASP’s 50th Anniversary Meeting in Hawai‘i. His award lecture was entitled, “Stability and Bioavailability Issues in Understanding the Cancer Preventative Effects of Tea Polyphenols” and explored the bioavailability of tea polyphenols as a part of studying preventative effects from functional foods and herbal medicines for chronic diseases. Dr. Sang is currently an assistant professor at the Human Nutrition Research Program and North Carolina Central University.

The award is named after past ASP President Dr. Matt Suffness and is intended to recognize the contributions of younger natural product scientists. Nominations of ASP members come from other members of the Society. The award consists of an honorary, desktop clock, and pen set presented by Drs. Guy Clark and Robert Krueger on behalf of the ASP.

Young Member Committee Workshop

The Young Members Committee, consisting of ASP members Drs. Philip Williams, Wendy Kelly, and Young Park, organized an employment and career workshop at the 50th Anniversary Meeting. About 40 young members met to network over refreshments and, of course, drinks.

The formal program consisted of ASP members Drs. John Cardellina, Shichang Miao, and Coran Watanabe, and Dr. Nam-Cheol Kim, discussing current employment prospects and their personal career paths. Overall, the speakers were optimistic about employment prospects for natural products chemists, despite the current state of the economy.
2009 ASP Award and Grant Recipients

Congratulations to all American Society of Pharmacognosy award and grant recipients!

Norman R. Farnsworth Research Achievement Award
Dr. Kuo-Hsiung Lee
University of North Carolina

Varro Tyler Prize for Research on Botanicals
Dr. Adolf Nahrstedt
University of Münster

Matt Suffness
Dr. Shengmin Sang
North Carolina Central University

Research Starter Grant
Dr. Angela Calderón
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Dr. Glenroy (Dean) Martin,
University of West Florida

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2009 ASP Award and Grant Recipients

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Mr. Jielu Zhao, Virginia Polytechnic Institute and State University

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City University of New York
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University of California Santa Cruz

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University of California, Los Angeles
Mr. Chaz Barit
University of Hawai‘i Hilo
Dr. John W. Daly Honored at Memorial Session

by Dr. Richard Fitch

At the ASP 50th Anniversary Meeting in Honolulu, Hawai‘i, a session was held in memory of ASP member Dr. John W. Daly, who passed away last year from pancreatic cancer. Dr. Daly was a brilliant scientist and recognized leader in natural product chemistry, chemical ecology, and molecular pharmacology, having made seminal discoveries and publishing over 700 papers. Dr. Daly also received the Arthur E. Schwarting and Research Achievement Awards from the ASP as well as the Ernest Guenther Award in Natural Products from the American Chemical Society. There was virtually nothing in which Dr. Daly was not interested, and his interest was infectious.

The session was chaired by ASP member Dr. John Beutler of the National Cancer Institute, a colleague of Dr. Daly, who noted his prominence in the field and his dedication to the ASP, serving on committees and as an editorial advisor for the Journal of Natural Products. Dr. Beutler and each of the contributors to the symposium remembered Dr. Daly’s equal dedication to science and to mentorship. Three of the four speakers were former members of the Daly Group at the National Institutes of Health (NIH).

As a former postdoctoral fellow in Dr. Daly’s laboratory and an associate professor at Indiana State University, I gave a brief memorial to Dr. Daly, followed by a discussion of dioicine, a purine alkaloid related to caffeine in the Kentucky coffee tree, Gymnocladus dioicus. Dr. Daly was the world authority on the pharmacology of caffeine and I worked his group on the structure elucidation of dioicine. The pharmacology and toxicology of dioicine is still under investigation with colleagues at NIH and United States Department of Agriculture.

Dr. Jacquie Harper, another former postdoc of Dr. Daly and researcher at the Malaghan Institute in New Zealand gave a discussion of the anti-inflammatory properties of bacterial lipoglycans, specifically, phosphotidlyinositolmannans. Dr. Harper discussed the anti-inflammatory role of these lipoglycans in the context of their ability to suppress T cell proliferation.

ASP member Dr. Carole Bewley, a principal investigator at the National Institute of Diabetes and Digestive and Kidney Diseases and former colleague of Dr. Daly, gave a perspective on his career. Dr. Bewley discussed Dr. Daly’s work with Dr. Julius Axelrod and Sidney Udenfreund elucidating the mechanism of arene hydroxylation and the NIH shift. She continued with Dr. Daly’s frog program and the many biologically important alkaloids that resulted. These included batrachotoxins (initially with Dr. Bernard Witkop), histrionicotoxins, pumiliotoxins and epibatidine, all of which became important pharmacologic probes for ion channels. Also noted was Dr. Daly’s work with the plant diterpene forskolin and the identification of its biological target, protein kinase A, leading to enhanced adenyl cyclase activity and cAMP production. Dr. Bewley also wrote an excellent memorial to Dr. Daly in the recent spring issue of the ASP Newsletter, which includes a broader recounting of his extensive work.

The last speaker of the morning was Dr. Ralph Saporito, an National Science Foundation (NSF) postdoctoral fellow at Old Dominion University, who did his graduate work jointly with Dr. Daly and Dr. Maureen Donnelly at Florida International University. Dr. Saporito provided a brief review on the chemical ecology of poison frogs, in particular the link between dietary arthropods, including mites, ants, beetles, and millipedes, and poison frog alkaloids. Dr. Saporito continues research in this field, investigating the chemical ecology of poison frogs in Central and South America and Madagascar.

Dr. Daly was a consummate scientist and mentor. Each of the speakers noted not only his scientific contributions, but that he was a great colleague and genuine friend. His dedication and example have inspired his students, postdocs, and collaborators, and will continue to inspire those who follow in his footsteps for many years to come.

The honorary session Chair and speakers (left to right): Drs. John Beutler, Jacquie Harper, Carole Bewley, Ralph Saporito, and Richard Fitch.
Pacifichem 2010, The International Chemical Congress of Pacific Basin Societies, will be held in Honolulu, Hawai‘i, December 15-20, 2010. The meeting will host several symposia of interest to the natural products community, including the following:

- **Marine Natural Products: Isolation, Biology, Ecology, and Synthesis** [Dr. Jon Rainier (United States) rainier@chem.utah.edu]
- **Recent Advances in Natural Products as Anticancer Agents** [Dr. David G. I. Kingston (United States) dkingston@vt.edu]
- **Novel Synthetic Methodology and Its Application to Natural Product Synthesis** [Dr. Frederick West (Canada) frederick.west@ualberta.ca]
- **Total Synthesis of Natural Products and Related Compounds** [Dr. Keiji Tanino (Japan) ktanino@sci.hokudai.ac.jp]
- **Design and Synthesis of Biologically Active Compounds and Natural Products** [Dr. Tohru Oishi (Japan) oishi@ch.wani.osaka-u.ac.jp]
- **Biosynthesis of Natural Products** [Dr. John Vederas (Canada) john.vederas@ualberta.ca]

All symposia will include both invited and contributed papers, and there will also be a poster session associated with each symposium. Abstract submission will open on January 1, 2010 through March 15, 2010. General information can be obtained from the website [www.pacifichem.org](http://www.pacifichem.org), and specific information about the symposia listed above can be obtained by contacting the organizer listed.
The officers and members of the Board of Directors of the ASP Foundation would like to thank each of our donors to the past 2009 campaign. It is through the generosity of these individuals as well as the support of the Society that the Foundation is able to fund the awards and grants of the ASP and to support the goals of the Society and its educational and research mission. To that end, at this past 50th Anniversary Meeting in Honolulu, Hawai’i, the Foundation funded the largest monetary total given out in the history of the Society, over $80,000. The majority of this went to travel grants that enabled graduate and active member scientists to attend and present their research.

Please consider donating to the Foundation. You have received a letter and donation form with your registration if you attended the meeting, or you may access a donor’s form on the ASP website. Our next annual campaign will begin this fall with a solicitation letter from Chairman John Cassady. Take a moment’s time to avail yourself of one of these opportunities to contribute.

If you have been one of our many recipients of support in the past and you are able, please help someone else by continuing the chain of support and donate to one of our many funds. If you have a question about your donation, please contact Dr. Krueger, ASPF Treasurer, at kruegerr@ferris.edu.

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ASP Foundation Donors 2009: Thank You

by Dr. Robert Krueger

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2009 ASP Election and Nomination Results

by Ms. Amy Keller

The ASP Tellers Committee has reported the results of the 2008 election. Dr. John Beutler will serve as Vice President from 2009-2010, and Dr. Amy Wright will serve as Executive Committee member from 2009-2010. Of the 1,080 ballots mailed out in February, 207 were returned, resulting in 20% voter turnout.

The ASP Nominating Committee has recommended Drs. Barbara Timmermann and Cindy Angerhofer for Vice President, and Drs. Cedric Pearce and Nick Oberlies for Executive Committee members on the ballot for Spring, 2010.

C&EN Article on ASP’s Golden Anniversary

by Dr. David Slatkin

The August 10, 2009 issue of Chemical & Engineering News, the weekly magazine of the American Chemical Society, is featuring a four-page article about the ASP and our 50th Anniversary!

It can be found on pages 32 to 35 of the paper version. For those who are not ACS members, Dr. Doug Kinghorn has arranged for anyone to view the article via the Journal of Natural Products portal: http://pubs.acs.org/journal/jnprdf

ASP Jobs News

by Dr. Scott Baggett

From August, 2008 to June, 2009, the ASP Jobs website has received approximately 50 jobs. These jobs have included undergraduate internships, post-doctoral and academic professorships, as well as pharmaceutical and government jobs.

With the new ASP website, jobs can be posted as PDFs. Although this is now the preferred format, a Microsoft Word template for posting a job is also available. If you send the committee a job as a word file, please use this template. Jobs sent to the ASP Jobs website will be posted as is without editing or formatting, and will be posted for six months.

Please note that the new e-mail address to post a job is phcogjobs@gmail.com.
Foundation Established for Dr. Clifford W. J. Chang

A foundation has been started at the University of West Florida, Pensacola, Florida, in honor of the late ASP Member Dr. Clifford W. J. Chang. The fund will support students of biology, chemistry, computer science, environmental studies, mathematics, physics, nursing or clinical lab sciences, among other fields.

Dr. Chang came to the mainland from Hawai‘i and received his B.S. from the University of Southern California in 1960. He returned to Hawai‘i and earned a Ph.D. in 1964 from the University of Hawai‘i under the late Dr. Paul J. Scheuer, an ASP member and ASP Achievement Award recipient. From 1964 through 1968, he was a post-doctoral research fellow at the University of Georgia, Athens, Georgia.

Dr. Chang accepted an academic appointment at the University of West Florida in 1968 as an assistant professor and worked his way through the ranks to full professor. During his tenure at the University of West Florida, he conducted research in organic chemistry, particularly marine natural products chemistry.

Dr. Clifford Chang died on Monday, October 15, 2007 in Honolulu, Hawai‘i, following complications from heart surgery.

Drs. Jerome Gurst and Peter Tanner contributed to this article.

Journal of Natural Products: New Impact Factor!

The Journal of Natural Products’ impact factor for 2008 has increased to 2.843 from 2.551 in 2007. This is the highest impact factor in the Journal’s history!

The impact factor measures the amount of citations of an average article in a year by dividing the amount of citations from the Journal published in scientific literature in the previous two years by the total number of source items published in the Journal in those two years.

An increased impact factor represents an increase in the Journal’s prevalence in the scientific community.

Dr. Slattery Featured In United Airlines’ Hemispheres Magazine

ASP member Dr. Marc Slattery, Professor of Pharmacognosy at the School of Pharmacy at The University of Mississippi, is featured in a recent issue of United Airlines’ Hemispheres Inflight Magazine.

The article opens describing one of Dr. Slattery’s underwater field expeditions, and transitions to his laboratory work on natural products of marine origin. The article shows beautiful underwater pictures and details Dr. Slattery’s research in an accessible format. To read the original article, please visit: www.hemispheresmagazine.com/2009/08/01/the-treasure-hunter/.
ASP member Dr. Renuka Misra received the NRI Institute Achievers Excellence Award 2009 Mauritius for achievement and excellence in the chosen field by the President, Republic of Mauritius H.E. RT. Honorable Sir Anerood Jugnauth on April 17, 2009. The award was given to Dr. Misra for her outstanding research and contributions in the field of drug discovery from natural products and clinical trials for last several years, especially cancer research, AIDS, Alzheimer’s, cardiovascular disease and herbal products and dietary supplements.

Dr. Renuka Misra is a nationally and internationally known distinguished scientist in the field of natural medicinal products and a well-known community leader in the Washington, D.C. area. She is the daughter of the late Professor R.A. Misra, Dean Faculty of Arts and Professor of English, Agra University, and is professionally affiliated with the National Institutes of Health (NIH) for two decades in various positions at different Institutes (NCI-FCRF; NIA; NIMH & NHLBI) and recently with GDP Ayurvedic University (GDPAU) as Adjunct Professor of Medicinal Chemistry.

She has several honors, awards, publications, and patents to her credit right from her university days. She received the Gold Medal of the Agra University for the Outstanding Best Student and Prassano Mai Gold Medal in Chemistry. In 1988, she was honored with Sir C.V Raman Science Research Award for her work in the field of cancer drug research. She was honored with the prestigious “Dhanvantari Award and a Gold Medal” in 2001 for her outstanding collaborating research project with India on “Validation and Development of Active Compounds from Ayurvedic Crude Drugs for Central Nervous System.”

From 1992-1997 she was also an overseas advisory panel member of TOKTEN-INDIA Program with the United Nations Development Programme (UNDP). She received the American Society of Pharmacognosy (ASP) award in 2005 for her outstanding services to ASP Newsletter as Editor, Publicity Chair, and Website Committee member. She has written four definitive volumes entitled, “Handbook of Terpenoids: Diterpenoids” published by CRC Press, Boca Raton, Florida, USA. She is the author or coauthor of over 85 peer reviewed original publications and has presented her work at several national and international meetings. She has also chaired several national and international conferences, and is member of several scientific organizations.

(Left to right): Dr. Renuka Misra receiving the Award from Honorable Sir Anerood Jugnauth President, Republic of Mauritius, and Ylias Akbaraly.
The Newsletter is pleased to announce the following upcoming conferences and meetings. The events portrayed here reflect what listings and notices the Newsletter has specifically received. For a more extensive calendar, please visit the ASP website at www.phcog.org. If you have a conference or event you would like mentioned, please send us relevant information, including any graphics or appropriate fliers, at asp.newsletter@lehman.cuny.edu.

**Dietary Supplement Research: Interpreting the Past and Planning for the Future**
Terranea Resort, Palos Verdes, California
October 21, 2009
www.crnusa.org/TheWorkshop

**Banff Conference on Plant Metabolism 2010**
Banff Centre, Banff, Alberta, Canada
June 24-28, 2010
www.ucalgary.ca/plantmetabolism2010

**The Role of Natural Products in Drug Discovery and Development in the New Millennium**
Royal Pharmaceutical Society of Great Britain, London, United Kingdom
December 4, 2009
www.rpsgb.org.uk

**51st Annual Meeting of American Society of Pharmacognosy**
Trade Winds Island Resort, St. Petersburg Beach, Florida
July 10-14, 2010
www.phcog.org/FutureASP.html

**6th Conference on Medicinal and Aromatic Plants of Southeast European Countries**
Hotel Kervansaray Lara Convention Center, Antalya, Turkey
April 18-22, 2010
www.6thcmapseec.org
Meet a New ASP Member
by Dr. Diane S. Swaffar

ASP welcomes many new members to the Society this year. We are pleased to feature our new member, Dr. Tim Motley. He is Associate Professor and Stiffler Chair of Botany in the Department of Biological Sciences at Old Dominion University in Norfolk, Virginia. Dr. Motley is also Director of Science at Norfolk Botanical Garden, Norfolk, Virginia. We are grateful to Dr. Motley for taking time from his busy schedule to give us the opportunity to get more acquainted with him.

How did you hear about the ASP?
I first heard about the society through my collaborator and friend Dr. Edward Kennelly. We have been working on projects together, such as black cohosh and Chinese traditional herbal medicines, for several years.

Why did you join the ASP?
I was interested in keeping more in touch with the field of natural products and building collaborations.

Do you belong to any other scientific societies?
Yes, I am a member of the Botanical Society of America, American Society of Plant Taxonomy, Pacific Science, Hawaiian Botanical Society, Society of Economic Botany, and the American Association for the Advancement of Science.

What are your current research interests in pharmacognosy?
I am an ethnobotanist and plant systematist, so I approach natural products research from the plant side by using molecular techniques for assessing product identity, genetic variability, and historical use of plants. I am especially interested in the systematics of the coffee and strychnine families, biogeography of the Pacific floras, and crop plant origins and evolution.

Can you describe what you do in your current position?
Since 2006, I have held an endowed professorship at Old Dominion University (ODU) in Norfolk, Virginia. I am building an active botanical sciences program at ODU, and we have recently completed a research greenhouse and orchid conservatory on campus. We also have an active collaboration with the 150-acre Norfolk Botanical Garden where I serve as Director of Science.

What is your scientific background?
I obtained Bachelors and Masters Degrees in Botany at Eastern Illinois University in Charleston, Illinois. While researching sweet flag, *Acorus calamus*, I developed an interest in tropical ethnobotany. I completed by Ph.D. at the University of Hawai‘i in molecular systematics of an endemic member of the strychnine family. I then spent a short period working for the Center for Plant Conservation in Hawai‘i setting up a “Genetic Safety Net” program that was designed to preserve the rare plant species of Hawai‘i. I later took a postdoctoral position at the New York Botanical Garden (NYBG) in their new molecular systematic program and less than a year later was promoted into a permanent position as an assistant curator (research scientist). At that time I was one of the only researchers at NYBG studying plants of the Pacific basin and served as Acting Chair of the Molecular Program for three of my seven years there.

What would you like to achieve through your membership?
I would hope to broaden my botanical perspectives and meet scientists with similar or parallel interests in plant science.

What do you like doing in your spare time?
I enjoy movies, hiking, photography, fantasy football, good food, time with friends and family, and wine.

What are you currently reading?
This summer I read “Getting Stoned with Savages” (about kava, Fiji, and Vanuatu) and “Lost on Planet China” both by J. Maarten Troost. I am also reading Charles Darwin’s “Voyage of the Beagle” and “Wicked Plants: the Weed that Killed Lincoln’s Mother and other Botanical Atrocities”. 
In the 2008, the Journal of the American Chemical Society published the article entitled, “Structure and activity of largazole, a potent antiproliferative agent from the Floridian marine cyanobacterium Symploca sp.” by Ms. Kanchan Taori, Dr. Valerie Paul, and Dr. Hendrik Luesch. The Newsletter interviewed author and ASP member Dr. Hendrik Luesch, who shared his discoveries of the Symploca.

How did you become interested in natural products of marine origin?
As a chemistry student in Germany I became intrigued by the complex structures of marine natural products and that oceans were largely unexplored for drug discovery. I chose the University of Hawai‘i for my Ph.D. research under ASP member Dr. Richard Moore on the chemistry of marine cyanobacteria. I have been hooked ever since.

Who in your laboratory carried out the research?
Ms. Kanchan Taori, my graduate student at the time (she recently graduated with a M.S. degree) isolated largazole (J. Am. Chem. Soc. 2008, 130, 1806) and carried out initial mechanistic studies described in a follow up paper on the synthesis and molecular target (J. Am. Chem. Soc. 2008, 130, 8455). We teamed up with Dr. Jiyong Hong at Duke University, Durham, North Carolina, for the total synthesis to allow rigorous biological evaluation and to start establishing the SAR (Org. Lett. 2008, 10, 4021). My postdoc Dr.

Could you provide a brief explanation of the work and results in your own words? In what way are the data in your paper new?
Largazole has an unprecedented structure and potent antiproliferative activity against a variety of cancer cell types. It is also one of only relatively few marine secondary metabolites with a thioester moiety. We later described that this labile unit serves as a protecting group and upon hydrolysis liberates the corresponding thiol, one of the most potent known histone deacetylase (HDAC) inhibitors of class I isoforms.

What impact does this have on natural product and cancer research?
The discovery of largazole is another encouraging example of the value of marine natural products, in particular marine cyanobacteria, for drug discovery. HDACs are validated targets for anticancer therapy and already targeted by the Merck drug SAHA (approved for cutaneous T-cell lymphoma) that does not discriminate well among HDAC isoforms. The largazole structure may provide a template for the rational design of HDAC isoform selective inhibitors and drugs. As a result of our publications, several groups around the world have now already also engaged in this area of research.

What is a favorite nonscientific activity of your lab?
Group parties at my house.

What is your greatest extravagance in the lab?
New technology.

Behind the Scenes in Pharmacognosy

Cyanobacteria: Stopping Cancer in its Tracks
by Amy Keller

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• Dr. Francis S. Collins was confirmed on August 7 by the Senate and sworn in on August 16 as the next Director of the National Institutes of Health (NIH). Dr. Collins was director of the National Human Genome Research Institute before stepping down last year. He is well liked by the NIH institute and center directors. Dr. Mark Lively, President of the Federation of American Societies for Experimental Biology, Rockville, Maryland, said, “[he] is an outstanding scientist and an eloquent spokesperson for the benefits of biomedical research.” Some eyebrows have been raised because of Dr. Collins Christian faith.

• The big news in Washington is the enormous amount of money from the American Recovery and Reinvestment Act of 2009 (ARRA), or “Stimulus Bill” which infused the NIH with $10.4 billion. The money must be spent by the end of 2010. Its mandate to NIH is, “fund the best and newest science ... that will make the difference for people as a result of the research,” said acting NIH director Dr. Raynard Kington, who also told his Advisory Committee “we are confident we can spend the money in two years. It is quite a dance. The public will expect to get something for the 10 billion. We are allowing the institutes and centers to focus on their signature themes for research.” Even by June, everyone at NIH was scrambling to figure out how to get the money quickly “out of the door.” Of this, $7.4 billion went to the institutes and centers for research and $800 million to the Office of the Director, which includes $200 million for Challenge Grants. These grants are intended to support new research in areas that address specific challenges in biomedical and behavioral research and which would benefit greatly from this two year infusion of funds; they will be capped at $500 thousand. Another opportunity is the Grand Opportunities or “Go Grants” to support large scale research projects and also accelerate critical breakthroughs and new approaches dealing with multidisciplinary and interdisciplinary teams. Funds have also been included to recruit faculty whose focus is on research areas relevant to NIH. And, there is increased support for the Academic Research Enhancement Awards (AREA) (R15).

• The National Center for Research Resources received $1 billion ARRA funds to be spent on construction, repairs and alterations, and support for shared instrumentation and capital research equipment.

• National Institute for Allergies and Infectious Diseases received $1.1 billion ARRA funds. Its Director, Dr. Anthony Fauci, told his Advisory Council that 75% of the funds will be used to support: outstanding research project grants which are between the 12th and 25th percentile and were not funded in either FY 2008 or FY 2009, R21 and R03 grants with a priority score of 200, and projects for bold research. The institute will also infuse funds into its Bridge Awards. “Any grant score that falls within the 25th percentile” will be funded with ARRA funds for two years.”

• The National Cancer Institute (NCI) received $1.267 billion of ARRA money as well as a 2.9% increase in the 2009 appropriation. Dr. John Niederhuber told the National Cancer Advisory Board (NCAB) that NCI will now increase the payline for grants to the 16th percentile for monies from appropriated funds. Instead of giving just two year grants, NCI will fund four year grants, i.e. “two years with ARRA funds, in the 16th to 18th percentile, followed by two years of promised appropriated dollars for 2011 and 2012, in the 18th to 25th percentile. Grantees who receive ARRA funds must keep them separate from all of the funds received from the institute. “They are separate cans of dollars,” said Dr. Niederhuber. For new investigators who really need five years, NCI will guarantee them a five year grant with appropriated dollars for the third 4th and 5th years.

• Dr. Niederhuber also told the NCAB “we have a lot of opportunities with small molecules that are out there ready to start in Phase 0/Phase 1 trials and we felt that this is a good use of the [ARRA] money... because institutions have not had the resources to start these trials; we’re going to try to stimulate that with these dollars.” NCI’s drug development will get 4% of the ARRA pie.

• For FY 2010 the President’s proposed budget includes a 3.5% increase for NCI. But, it is not a done deal by any means. The administration wants to double the cancer research budget by the year 2017 to $11 billion. The National Center for Complementary and Alternative Medicine (NCCAM ) received $32 million in ARRA funds and 2009 appropriations of $126 million.

• Congress gave NIH $24 million/year for five years to start the Therapeutics and Rare and Neglected Diseases Program (TRND). Rare diseases are those which afflict less than 200,000 Americans.

continued on page 18
• The Food and Drug Administration’s budget for 2010 will increase by $295 million. The administration is counting on an additional $215 million from industry user fees.

• NCI reported recently that ginger, when taken with anti-nausea drugs by cancer patients, either prevented or reduced chemotherapy-induced nausea. NCI also reported that a recent outside study shows that ‘drinking green tea remains unproven in cancer prevention ....’

• A new cancer drug Trabectedin (Yondelis, ET-743) will be used in a Phase I study in pediatric patients with relapsed or refractory solid tumors that have either recurred or have not responded to previous treatment. The drug is also known asecteinascidin 743 (ET-743). The source is an extract of the sea squirt, Ecteinascidia turbinata, tested by NCI in 1969 and found to have anticancer activity. The late Dr. Kenneth Reinhart isolated the active compound and determined its structure, but the amounts were minute. Subsequently, Harvard’s Dr. E.J. Corey synthesized the compound, and then licensed it to PhamaMar. Currently, this company makes the compound semisynthetically. The drug is sold by Zeltia and Johnson & Johnson. It has been approved in Europe, Russia, and South Korea for the treatment of advanced soft tissue sarcoma.

• NCI’s Dr. James Doroshow, told both the NCAB and the Board of Scientific Advisers that “after about three years, the Rapid Access to Interventional Development (RAID) program has been reorganized. An outstanding panel, the Chemical and Biology Consortium, consisting of members from the pharmaceutical industry and academia, now help NCI make decisions. The first thing [the panel did] was to eliminate about one third [of the molecules] in our pipeline.... Every few months [there is] a reprioritization... around the development of new cancer drugs and biologics....” This is the result of the review of the program which showed that it would be most effective for the investigators to bring a late stage molecule to NCI because they did not have the resources or expertise to do any research to bring the molecule up to that point.

• NCCAM released a report in early August which shows that Americans spend $33.9 billion on Complementary and Alternative Medicine (CAM) medicine. That includes medical and health care systems, products, herbal supplements, acupuncture, and chiropractic methods. This all translates into about 38% of adults using some form of CAM as medical treatments. In a statement, NCCAM Director, Dr. Josephine Briggs said, “ ...it is extremely important to know whether the products and practices [so many Americans] use are safe and effective. This underscores the importance of conducting rigorous research and providing evidence-based information on CAM so that health care providers and the public can make well-informed decisions.”

• Dr. Margaret Hamburg, the new FDA Commissioner, was special assistant and AIDS coordinator at NIAID from 1988-1990. Her experience includes service as New York City Health Commissioner and advisor to former Health and Human Services Secretary Donna Shalala on issues dealing with bioterrorist attacks.
ASP Membership

Full Membership
Full membership is open to any scientist interested in the study of natural products. Current membership dues and Journal of Natural Products subscription rates can be found at www.phcog.org/meminfo.html.

Associate Membership
Associate membership is open to students of pharmacognosy and allied fields only. These members are not accorded voting privileges. Current membership dues and Journal of Natural Products subscription rates can be found at www.phcog.org/meminfo.html.

Emeritus Membership
Emeritus membership is open to retired members of the Society who maintained membership in the Society for at least five years. Current membership dues and Journal of Natural Products subscription rates can be found at www.phcog.org/meminfo.html.

Honorary Membership
Honorary members are selected by the Executive Committee of the American Society of Pharmacognosy on the basis of meritorious service to pharmacognosy.

Present Honorary Members are:

• Dr. Arnold R. Brossi, National Institutes of Health • Dr. David P. Carew, University of Iowa
• Dr. John M. Cassady, Oregon State University • Dr. Geoffrey A. Cordell, Natural Products, Inc.
• Dr. Gordon C. Cragg, National Institutes of Health • Dr. Norman R. Farnsworth, University of Illinois at Chicago
• Dr. Harry H.S. Fong, University of Illinois at Chicago • Dr. A. Douglas Kinghorn, Ohio State University
• Dr. James E. Robbers, Purdue University • Dr. Yuzuru Shimizu, University of Rhode Island
• Dr. David J. Slatkin, Chicago State University • Dr. E. John Staba, University of Minnesota
• Dr. Otto Sticher, Swiss Federal Institute of Technology • Dr. Hildebert Wagner, University of Munich
• Dr. Mansukh Wani, Research Triangle Institute

Additional information about membership may be obtained by writing to the Treasurer of the Society:
David J. Slatkin, Ph.D, Treasurer, The American Society of Pharmacognosy,
3149 Dundee Road, #260, Northbrook, Illinois 60062. Email: asphcog@aol.com