



THE AMERICAN SOCIETY OF PHARMACOGNOSY

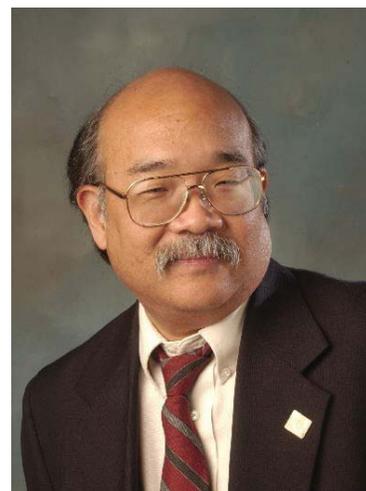
THE ASP NEWSLETTER VOLUME 42 ISSUE 3

ASP President Okuda Addresses Members

by Dr. Roy Okuda

It is my pleasure - and privilege - to write you as President of the American Society of Pharmacognosy for 2006-2007. We have just concluded our 47th Annual Meeting in Crystal City, Virginia, which by all accounts was a resounding success. Congratulations and appreciation go to Drs. Tawnya McKee and Gordon Cragg (Organizing Co-Chairs) and to Drs. John Beutler and Kirk Gustafson (Scientific Co-Chairs) and the other hard-working members of the meeting committee for hosting and putting on an excellent scientific and social program! Held in the shadow of our nation's capital, the meeting attracted over 450 registrants from 27 countries. A special surprise was a deck of cards featuring photos of notable and notorious figures from ASP's history!

Congratulations are due to Dr. William Fenical, immediate past president, for a job well done as leader of our Society. Dr. Fenical also received the Norman R. Farnsworth ASP Research Achievement Award, the *continued on page 3*



President Roy Okuda

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Fall 2006

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47th Annual Meeting Summary

by Dr. Tawnya McKee

The 47th Annual Meeting of the American Society of Pharmacognosy took place August 5-9 at the Crystal Gateway Marriott in Arlington, Virginia with 464 registrants. The meeting consisted of 16 invited symposia speakers, 46 oral contributions, and 287 posters.

The theme for this year was "Natural Products on Target", underscoring the current interest in targeted drug discovery as well as the historical utility of natural products in both revealing and elucidating the molecular processes that occur in normal functioning and diseased states of living organisms. The symposia included: "Synthetic and Biosynthetic Paths to Natural Products"; "Clinical Evaluation of Herbs and Supplements: Trials, Toxicology and Drug Interactions"; and "Chemical Biology of Natural Products: Molecular Targets and Molecular Methods". These symposia highlighted the work of 12 renowned scientists from the United States, Canada, and Australia. Finally, we heard award presentations from Dr. William Fenical, this year's ASP President and the recipient of the American Society of Pharmacognosy Norman R. Farnsworth Research Achievement Award, Dr. John Blunt, recipient of the Royal Society of Chemistry, Natural Products Reports Award, and Dr. Taifo Mahmud, recipient of the Matt Suffness Young Investigator's Award.

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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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Editor's Corner

This issue of the *Newsletter* highlights the many activities associated with the 2006 Annual Meeting in early August. The meeting was a great success, with over 450 participants. The organizers did a tremendous job, both on the scientific and social fronts. Articles on the Annual Meeting range from the poignant acceptance speech by Honorary Member recipient John Cassady to a lighthearted look at this year's unique keepsake, a deck of playing cards with pictures of ASP past Presidents and other notable figures in ASP history.



In addition to looking back at this year's Annual Meeting, we also look forward to next year's meeting in the bucolic state of Maine. The organizers for the 2007 Annual Meeting offer a preview of the planned scientific and social activities. In addition, the *Newsletter* provides information on the 2009 Annual Meeting in Hawaii which will mark the ASP's 50th anniversary. In preparation for the anniversary, we are beginning a new series entitled "From the Archives", in this issue featuring the infamous vincatini.

This issue is our largest since I have been editor. With electronic publishing, there are fewer page constraints on the *Newsletter*. I hope everyone involved in the Society will take advantage of the *Newsletter* to published articles relevant to ASP members.

I want to thank outgoing ASP President Bill Fenical for his support of the *Newsletter*, and for encouraging me to take on the interesting job of *Newsletter* Editor this year. I have been working with our new ASP President, Roy Okuda, on a number of articles for the current issue. I appreciate Roy's hard work and enthusiasm for the Society, and I look forward to working with him in the coming year.

Symposium on Marine Natural Products

12th International Symposium on Marine Natural Products

Queenstown, New Zealand
February 4-9, 2007
www.manapro12.co.nz
Contact Brent Copp at b.copp@auc

ASP President Okuda Addresses Members

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Society's highest recognition of scholarly contributions to our field. Kudos are also due to Dr. John Cassady, a long-time member and former president of ASP, who was named an Honorary Member. I also would like to recognize Dr. Taifo Mahmud, recipient of the Matt Suffness Young Investigator Award, and all the other young faculty and students who received one of the many awards and grants presented in Crystal City. Congratulations to you all! (See this issue of the *Newsletter* and www.phcog.org for a list of award winners).

We have much to be proud of in the ASP. Our membership numbers have held almost steady after our recent dues increase, and we are attracting a broad range of new members from a multitude of organizations and countries. Our flagship journal, the *Journal of Natural Products*, under the able guidance of Dr. A. Douglas Kinghorn and his associate editors, has reported another record year of submissions, and continues to improve in quality. Perhaps as significant, the impact factor and the total number of citations per annum, measures of the importance of this journal to the scientific community, have approximately doubled in the last few years. One of the most impressive facts to be mentioned at the meeting is that in the past 10 years, the ASP Foundation has given out a total of over \$289,000 to students and younger faculty in our awards and grants programs. This is an amazing amount for a relatively small Society such as ours, and is a solid indication of our commitment to nurture the next generation of colleagues in our field.

In 2009, the Society will celebrate the 50th anniversary of its founding. A number of activities are being planned to commemorate this significant milestone, and I hope that all members will find a way get involved! The Annual Meeting of the ASP for 2009 will be held in Honolulu, Hawaii. Included in this meeting will be a program to recognize the Society's half century, as well as other special activities. By holding the meeting in the middle of the Pacific Ocean, we hope to attract many colleagues from the Pacific Rim countries, exchange ideas, and promote interactions. But the meeting is not the only way ASP members can help us with our celebration; look on [page 14](#) of the *Newsletter* for a list of other 50th Anniversary activities.

The ASP has done very well over the years, in large part to a group of dedicated members who have volunteered their time and expertise to ensure that our business is done. I want to express my sincere appreciation to all of those who have served (and continue to serve) the ASP in many capacities. If you are not currently involved, we always have room for others to join us. Among the many ways you can get involved in the governance is by serving on a Standing or Ad Hoc Committee. Each president has positions to fill in various committees, so if you are interested, you should contact me now. As I mentioned, for the 50th Anniversary, there will be many ways for members to participate in our celebration. Please check the *Newsletter* for information. You could also assist in the planning of one of the Society's meetings (contact the Meetings Planning Committee). The *Journal of Natural Products* is always in need of reviewers for articles. Finally, it helps the Society to let others know about ASP, and encourage them to become members and to attend our meetings.

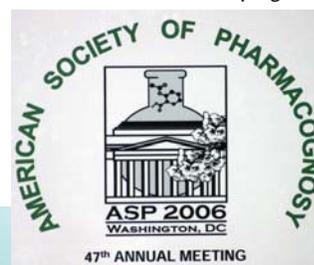
I joined the ASP in 1985, as a brand new Assistant Professor. My first meeting was in Chapel Hill, North Carolina, and it was an eye-opening experience, *especially* the banquet program! My postdoctoral advisor, Dr. Koji Nakanishi, had received the first Norman R. Farnsworth ASP Research Achievement Award at that meeting. At the end of it, he told me "this is a good Society, you should get involved in it". It was excellent advice, and I am very glad I listened to him. I will close by passing along his same message to all ASP members. I especially want to encourage our younger members to actively participate in the ASP, this is a Society where you CAN contribute and make a difference!

I welcome any comments or suggestions at any time. Feel free to send me an e-mail, okuda@sjsu.edu!

47th Annual Meeting Summary

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On Saturday, August 5, there were two workshops. The first was entitled, "Developing Botanicals as 'New' Drugs", and was officially co-sponsored by the Food and Drug Administration. The accompanying luncheon for the 130 registrants, 26 of which only attended this event, was graciously sponsored by Flora Manufacturing and Indena. The second Saturday workshop entitled, "Bucking the System: Non-Academic jobs for Natural Product Scientists", was attended by 25 students and postdoctoral researchers attended. The two additional workshops following the meeting were "Countercurrent Chromatography in Natural Products Analysis", held as part of the meeting CCC2006 with natural products chemists and also "AOAC Dietary Supplements Methods Validation".



The social program of the meeting began Saturday night with a reception in the Arlington Ballroom at the Crystal Gateway Marriott. The highlight of the social program was a dinner cruise down the Potomac River and a private tour of Mount Vernon, the colonial estate of George Washington. The gardens and main house were open with knowledgeable docents to answer questions and provide historical perspective on Washington's home and life. After the tour, participants returned to the ship for dessert and a lively party on the cruise back to the District of Columbia.



The organizing committee for the 2006 ASP Annual Meeting.

Tuesday afternoon and evening were open to allow attendees time to explore the District of Columbia. A Chesapeake Bay crab feast and the traditional ASP golf outing were optional activities for that day. The program concluded on Wednesday night with the banquet and awards ceremony. Throughout dinner, pictures collected from attendees chronicled the science, conversations, social events, and adventures that had taken place

throughout the week. The awards presented included a special recognition to Dr. A. Maureen Rouhi, Managing Editor of *Chemical and Engineering News*, for her sustained efforts in reporting on natural products research over the years. The Society also recognized and inducted Dr. John Cassady as the newest Honorary Member. The banquet festivities concluded with the annual Roast of President Dr. William Fenical, presented by Dr. Barry O'Keefe and remarks from both outgoing President Fenical and our current President, Dr. Roy Okuda.

The meeting registrants included 202 members, 66 non-members, 58 postdocs, 112 students, and 26 one day registrants, from both the United States and 27 other countries. Every registered attendee received the traditional bag, a searchable CD containing the abstracts from the meeting, and ASP playing cards. The organizing committee would like to thank everyone who attended, presented a poster, or gave an oral presentation and especially our plenary speakers for making the meeting a success. In addition, the organizers also would like to thank the sponsors and vendors who supported the meeting, Mr. Kelly O'Keefe who graciously designed the meeting logo, and everyone who contributed pictures for the commemorative decks of ASP playing cards.



ASP Business Update

The March issue of the *Newsletter* contained a summary of the proposed amendments to the Constitution and By-Laws of ASP. Of the 942 ballots sent out in June, 156 ballots were reported received by the Tellers Committee, representing 17% of voting members. The approval of all proposed changes got 133 votes, thus exceeding the two-thirds majority needed to accept the changes.

The Tellers Committee also reports that of the 936 ballots sent out for the 2005 election, 411 were returned representing 44% of voting members. The results are as follows:

Vice President 2006-2007 -- Dr. Bill Baker

Executive Committee Member 2006-2009 -- Dr. Cindy Angerhofer

Secretary 2006-2009 -- Dr. William Keller

ASP congratulates Drs. Baker, Angerhofer and Keller on their positions and welcomes Dr. Roy Okuda as the incoming ASP President. ASP looks forward to a successful and productive year.

ASP Approves New Fellows Distinction

by Amy Keller

The Society is pleased to announce the new distinction of ASP Fellow. This honor is designed to recognize those that have made substantial achievements and contributions to natural products science. The role of Fellows is to advise ASP about both scientific or professional aspects of natural product research for a lifetime.

According to the head of ASP Fellows, Dr. Norman Farnsworth, "The new addition of 'Fellow' within the membership of ASP is designed to acknowledge outstanding scientists in the field of natural products whose role is to advise the Society on maintaining and improving the highest quality of science possible. It is surely a great honor that I am one of the charter members carrying the title of 'Fellow of the ASP'."

Selection of Fellows will be from previous recipients of the Norman R. Farnsworth Research Achievement Award that continue to be in good standing with ASP. Current ASP Fellows will nominate potential candidates and ratification will take place at the Annual Meeting by the Executive Committee. Although nominated Fellows do not necessarily have to be ASP members, to receive the Fellow designation, they must join the society within a year of being ratified.

Removal of Fellows can occur upon written request by the Fellow, or in the instance of misconduct.

ASP looks forward to recognizing the esteemed Fellows among the many Society awards and honors.



Newly designated head of the ASP Fellows, Dr. Norman Farnsworth, enjoying crab at the 2006 Annual Meeting.

Dr. Fenical Receives ASP Research Achievement Award

by Dr. Bill Gerwick

Dr. William Fenical received the ASP Research Achievement Award, the highest research award given by the American Society of Pharmacognosy, during the August 2006 Annual Meeting. His award address was entitled "Molecules in the Mud: the Deep Oceans as a New Resource for Drug Discovery". Dr. Fenical evinces the qualities, leadership, and accomplishments that have come to be associated with this award. Previous awardees span between our first recipient in 1987, Dr. Koji Nakanishi, to our most recent, Dr. Norman Farnsworth in 2005, and in whose name the award has been re-titled.

Dr. Fenical's scholarly contributions are extensive and are widely viewed as examples of sophisticated, innovative, and biomedically valuable scientific investigations. Overall, his record of achievement in research is spectacular, including 16 patents and 345 publications. Since 1977, he has averaged between 10-15 papers per year in the highest quality scientific journals for research on the organic chemistry of natural products, prominently including *Journal of the American Chemical Society*, *Journal of Organic Chemistry*, *Phytochemistry*, *Tetrahedron Letters*, *Tetrahedron*, and, most importantly, the *Journal of Natural Products*.

His role in developing the field of marine natural products chemistry through his mentorship at various levels has been profound, having trained 43 Ph.D. students and 70 postdoctoral associates as well as numerous visiting scientists and scholars. Many of these former Fenical Lab members were present at the award ceremony as they have continued their careers in the field of natural products chemistry, a testimony to his ability to communicate passion and enthusiasm for the natural products sciences.

Dr. Fenical has been a pioneer of various frontiers of the field, from his earliest work on the unique natural products of temperate and tropical seaweeds in the 1970's to his highly noteworthy investigations of gorgonian corals in the 1980's and 90's, and finally to his pioneering investigations of marine microorganisms over the past 15 years. Uniquely, he often combines these exciting chemical studies with explorations of chemical ecology, marine science, and drug discovery to produce work of the highest quality and significance. Notable compounds from the Fenical Lab include the anti-inflammatory pseudopterosins from *Pseudoptero-gorgia elisabethae*, the antitumor eleutherobins, the anti-inflammatory salinamides, the antitumor halimide A, and most recently, the very exciting antitumor drug salinsporamide A.

Dr. Fenical has taken a lead role in articulating and advocating the search for novel biomedical agents from the marine environment. He has played a pivotal role in stimulating natural products chemistry to stay at the forefront of modern science through the example of his work as well as through his provocative and stimulating discourse as spokesman for the field. This spokesman role is reflected in a recent Google search of "Bill Fenical" which turned up close to 15,000 hits!

Dr. Fenical has long performed valuable services to the profession of natural products chemistry



Dr. William Fenical (left) receives the ASP Research Achievement Award from Dr. William Gerwick.

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Dr. Fenical Receives ASP Research Achievement Award

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and the ASP. He is an active member of the discipline through his service on numerous editorial boards, including the *Journal of Natural Products* since 1989. He has attended and presented at many of the annual meetings of the ASP, and was the organizer and conference chair of the superb 1995 Annual Meeting of the ASP in San Diego, California. This year he has served as our elected President of the ASP.

Dr. Fenical has been previously recognized for his contributions to natural products sciences through the Paul Scheuer Award at the 1996 Marine Natural Products Gordon Research Conference, an NCI Merit Award, and earlier this year, the ACS's Ernest Guenther Award in Natural Products Chemistry. He superbly exemplifies those qualities and attributes that the ASP Research Achievement Award has come to signify: an individual with an extensive history of the highest level achievements in the field of natural products chemistry, a major impact on the focus, quality, and character of this research discipline, an inspiration to students and colleagues alike, and a long history of service and contribution to the field of natural products and the ASP.

Future Trends in Phytochemistry, a Young Scientists Symposium



The Phytochemical Society of Europe and Società Italiana di Fitochimica will hold the meeting, "Future Trends in Phytochemistry, a Young Scientists Symposium", in Gargnano, Garda Lake, Italy, from June 6-9, 2007.

Invited speakers include, amongst others, Drs. Gordon Cragg (natural anticancer agents), Barry V. Charlwood (plant cell biotechnology), Paola Dugo (analysis of natural products), Adri Minnaard (natural product synthesis), Nicole van Dam (chemical ecology), Guido Cimino (recent results on marine organisms and their pharmacological potential), Peter Facchini (biochemistry, molecular and cell biology of alkaloid biosynthesis in opium poppy), Ezio Bombardelli (future prospects from industrial point of view), and Georges Massiot (high throughput screening of plants).

During the Symposium there will be ample opportunity for participants to present and discuss their own work in short lectures and posters. Ph.D. students and younger scientists working in the field of secondary metabolism or natural product chemistry and analysis are particularly invited to participate in the Symposium and to present their research results. Funds to cover registration and partial travel costs are available and applications for these would be welcomed.

Further information and registration forms can be obtained from:

<http://users.unimi.it/ftpsymp>

Professor F. Tomè, e-mail: franca.tome@unimi.it



Garda Lake, Italy

Marcy Balunas Receives Kilmer Prize

by Amy Keller

At the awards banquet of the American Society of Pharmacognosy 2006 Annual Meeting, Ph.D. candidate Ms. Marcy Balunas, a student in the Program for Collaborative Research in the Pharmaceutical Sciences, Department of Pharmacognosy at the University of Illinois at Chicago's College of Pharmacy, received the Kilmer Prize for her work entitled, "Relationships Between Cytotoxicity, Plant Profiles, and Compound Classes Isolated in an Anticancer Drug Discovery Project". The Kilmer Prize, awarded jointly by ASP and the American Pharmacists Association, honors Dr. Frederick Barnett Kilmer and his notable work as a scientist at Johnson & Johnson in antiseptic conditions at hospitals, among other studies. The *Newsletter* caught up with Ms. Balunas after she presented her award-winning study to find out more about her and her work.



Ms. Marcy Balunas, recipient of 2006 Kilmer Award.

Ms. Balunas' strong interest in both cancer and medicinal plant research has led her to a semester abroad in Brazil, studying anticancer medicinal plants in the Amazon in addition to her B.A. degrees in both Chemistry and Biology at the University of Rochester in Rochester, New York. For her M.S. in Plant Ecology at SUNY College of Environmental Science and Forestry at Syracuse, New York, she completed an ecological study of *Coptis trifolia*, a plant used in Iroquois traditional medicine. Ms. Balunas

again found her interests focused on anticancer plants when entering into and pursuing her current project for her Ph.D. thesis with Dr. A. Douglas Kinghorn; she is investigating the relationship between compound structure and bioactivity using both cell-based and enzyme-based aromatase inhibition assays to measure anticancer activity. In addition to her thesis, Ms. Balunas felt herself drawn to a side project involving ecology, leading to the recent work for which she was awarded the Kilmer Prize.

To accomplish the study, Ms. Balunas worked with two large databases containing collection, bioactivity, and chemical information on thousands of plant species going back 15 years. After organizing the databases and selecting pertinent information to work from, Ms. Balunas used statistics to compare bioactivity with the plant part collected, collection location, and plant taxonomy. Her results showed that certain plant families were more bioactive as a group than others, and below-ground plant parts were also more bioactive than other parts. Ms. Balunas' results also reveal certain collection locations contain more bioactive species than others. When asked how her project could influence future studies, Ms. Balunas notes that with the challenges involved in collection permits and international field work, this study can help better target the best locations for field collection in a given project.

Ms. Balunas expects to graduate this autumn, and ASP congratulates her on her award and wishes her the best of luck for the future.



Ms. Marcy Balunas receiving her award.

ASP Honors Dr. A. Maureen Rouhi

by Dr. A. Douglas Kinghorn and Amy Keller

At the 2006 ASP Annual Meeting banquet, Dr. A. Maureen Rouhi was presented a plaque by Dr. A. Douglas Kinghorn, Editor of the *Journal of Natural Products*. The plaque was given on behalf of ASP to show the society's esteem for her outstanding articles on natural products in *Chemical & Engineering News*. ASP was pleased to honor a person working for the weekly society journal of the American Chemical Society, as 2006 marks the 10th anniversary of the co-publication of the *Journal of Natural Products* by the ACS and the American Society of Pharmacognosy. Dr. Kinghorn noted that this arrangement between the two groups has been outstandingly successful.



Dr. A. Maureen Rouhi receives her plaque from Dr. Douglas Kinghorn.

Dr. Rouhi, who is now Managing Editor at *Chemical & Engineering News*, has frequently written papers on natural products, and this has had a major impact on publicizing the work being done by members of the ASP. Perhaps one of her contributions with the most impact was the series of stories entitled, "Rediscovering Natural Products", which appeared in October 2003. This was written, in part, in reaction to the excellent review article by Drs. David Newman, Gordon Cragg, and Ken Snader, of the National Cancer Institute, which appeared in the July 2003 issue of *Journal of Natural Products*, referring to natural products as drugs over the period 1981-2002. Not only have Dr. Rouhi's outstanding contributions in *Chemical & Engineering News* pointed

to the importance and significance of natural products to practicing chemists, but surely these articles have also served to attract young scientists into the field.

Dr. Rouhi's fascination with natural products started during her undergraduate years at the University of the Philippines. She collected *Elephantopus* species from Mount Makiling, in the Philippines and studied their sesquiterpene lactones for bioactivity to earn her B.S. and M.S. degrees. For her Ph.D. at the University of London, Dr. Rouhi studied the phenolic content of agricultural wastes. In 1994, she started at *Chemical & Engineering News* as a Production Editor and after a year worked on the natural products aspect of the publication. Her writing has since included bioactivity, synthesis, structure-reactivity, and natural history. In January of 2006, Dr. Rouhi became Managing Editor of *Chemical & Engineering News* and continues to cultivate reporting and writing on natural products there.

ASP is proud to honor Dr. Rouhi's work at *Chemical & Engineering News* and is glad to recognize the relationship between the ACS and the *Journal of Natural Products*.



Dr. A. Maureen Rouhi

ASP Announces 2007 Award Recipients

Norman R. Farnsworth ASP Research Achievement Award
Dr. Lester A. Mitscher

Tyler Prize
Dr. Jerry McLaughlin

2006 ASP Award And Grant Recipients

Congratulations to all ASP award and grant recipients!

Norman R. Farnsworth Research Achievement Award

Dr. William Fenical
University of California at San Diego



Matt Suffness Young Investigator Award

Dr. Taifo Mahmud
Oregon Sate University

Research Starter Grants

Dr. Samuel X. Qiu
Washington University

Dr. Nikolas Fokialakis
University of Athens, Greece

Kilmer Prize
Ms. Marcy Balunas
Ohio State University

Student Research Awards

Ms. Ranjala Ratnayake
The University of Queensland, Australia

Ms. Mariya Kolesnikova
Rice University

Undergraduate Research Awards

Mr. David Lynch
Rice University

Mr. Adam Foss
University of Minnesota-Duluth

Ms. Emilie Coudiere
University of Winnipeg, Canada

Travel Grants for Active Members

Dr. Denise Simpson
University of Iowa

D. John Faulkner Travel Award
Dr. Leng Chee Chang
University of Minnesota-Duluth



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2006 ASP Award And Grant Recipients

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Lynn Brady Travel Awards

Mr. Sergio Martínez-Luis
Universidad Nacional Autónoma
de México

Mr. Simon Seibert
University of Iowa

Ms. Ping Jiao
University of Bonn, Germany

Student Travel Awards

Ms. Jaime Lynn Frenz
University of Florida

Mr. Wentao Jin
University of Mississippi

Mr. Whocely Victor de Castro
Florida Atlantic University

Ms. Caroline McNeil
Rice University



Nature's Sunshine Travel Award
Mr. Taichi Inui
University of Illinois at Chicago



ASP Younger Members Workshop

by Dr. Scott Baggett and Amy Keller

At the 2006 ASP Annual Meeting, the Younger Members Committee and Bio-Botanical Research Inc., cosponsored a working lunch entitled "Guide to Scientific Writing and Publishing". The workshop was led by Dr. A. Douglas Kinghorn, Editor of the *Journal of Natural Products*. In addition, Ms. Debora Bittaker of the Chemical Abstracts Service, Columbus, Ohio, and Mr. Matthew J. Price of the American Chemical Society, Washington District of Columbia, presented details on how the *Journal of Natural Products* is published and marketed. Young members also had a chance to meet Dr. Youssef Mirhom from Bio-Botanical Research Inc.

The workshop covered topics such as when to publish and how to submit work to journals to the ethics involved with error and fraud. Attendees learned about the proper ways to credit co-authors and things to keep in mind when asked to peer review. The workshop was attended by more than 130 younger members. The full PowerPoint presentation can be found at www.phcog.org/YMC.html.



Mr. Matthew Price, Dr. Scott Baggett, Dr. Youssef Mirhom, Ms. Debora Bittaker, and Dr. A. Douglas Kinghorn (left to right) after the workshop.

Dr. John Cassady Awarded Honorary ASP Membership

At the 2006 ASP Annual Meeting awards banquet, Dr. John Cassady was awarded Honorary Membership in the ASP. The award was bestowed on behalf of the Society by Dr. John Cardellina. Dr. Cassady's moving acceptance speech appears below. Congratulations to Dr. Cassady and best wishes for the years ahead!

I want to thank everyone for this wonderful recognition. John Cardellina has been one of my closest friends and colleagues and so I greatly appreciate his kind words of introduction. Sincere thanks to the selection committee and those individuals that nominated me for Honorary Membership in ASP. I am appreciative of the fact that this distinction comes to *elders* of the Society! To put that in perspective, I am one of the few individuals in the room that personally knew all of the characters in the ASP "deck of cards."



ASP Honorary Member Dr. John Cassady (center) with his wife Nancy and OSU colleague and Young Investigator awardee Dr. Taifo Mahmud.

in the School of Pharmacy at Michigan.

Throughout my career at Wisconsin, Purdue, Ohio State, and now Oregon State, many of my closest friends and colleagues were active in the ASP. I mentioned Matt Suffness, and it was especially meaningful that my new colleague at Oregon State, Taifo Mahmud, received the Matt Suffness Young Investigator Award this year. Taifo was a student of my friend and colleague Heinz Floss. Heinz and I worked together for 20 years at Purdue. The Purdue ASP group included Tip Tyler, Jim Robbers, Jerry McLaughlin, and C.-J. Chang to name a few. At Ohio State, I joined a faculty that included Jack Beal, a Founder of ASP and one of the Editors of the *Journal of Natural Products*. Jack was committed to the ASP and the *Journal*. I was able to create the endowment for the Beal Chair at Ohio State and to recruit an outstanding scientist, ASP leader, and current Editor of the *Journal of Natural Products*, Doug Kinghorn to be the first Beal Professor at Ohio State. What an amazing connection. Now at Oregon State, my ASP colleagues include Taifo and in addition other ASP leaders, Mark Zabriskie and Phil Proteau.

As you know, the ASP was founded in 1959 and we will celebrate our 50th anniversary in 2009. If you will allow me a brief personal moment, I want to introduce my life partner Nancy. Nancy and I will be celebrating our 50th wedding anniversary along with the Society in 2009.

I became aware of the ASP in the mid-1960s when I was an NIH postdoctoral fellow in Morris Kupchan's lab at Wisconsin. One of my lab mates there was a young graduate student named Matt Suffness. I joined the Society 40 years ago when I started my academic career at Purdue University in 1966. My first meeting was at Michigan in 1967. What a difference has occurred over the years. That year, the registrants were able to fit into a small classroom

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2007 ASP Annual Meeting in Portland, ME

The 48th Annual Meeting of the American Society of Pharmacognosy

You are cordially invited to participate in the 48th Annual Meeting of the American Society of Pharmacognosy at the Holiday Inn by the Bay in Portland, Maine from Saturday, July 14 to Wednesday, July 18, 2007. The symposium will focus on scientific advances in all aspects relating to natural products.

Nestled between Maine's forest-covered mountains and spectacular rugged coast, Portland is a rough-hewn gem of New England. Portland offers unspoiled landscapes, beautiful vistas, succulent lobster, stately lighthouses, outdoor adventures, an incredible night scene, a vibrant community of visual and performing artists, and exceptional shopping. Seascapes and cityscapes blend harmoniously in Portland, perched on a peninsula, jutting out into island-studded Casco Bay. With a metro population of 230,000 people, the greater

Portland area is home to almost one quarter of Maine's total population and is also the state's largest business, financial, and retail center.

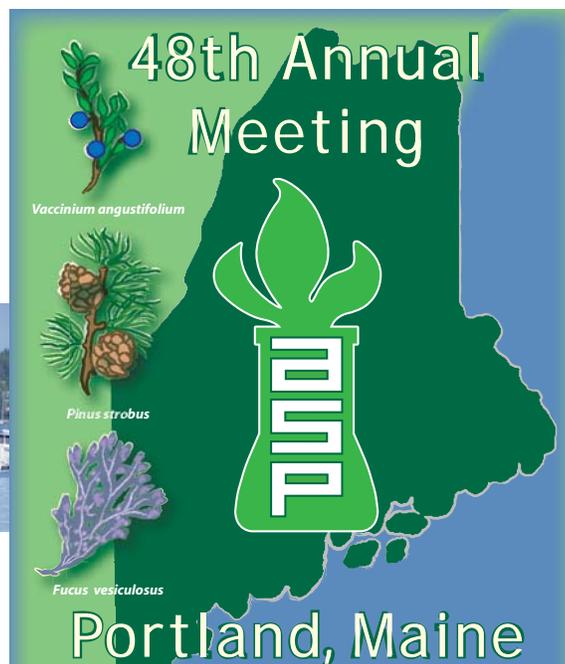
The Holiday Inn by the Bay and the Eastland Park Hotel in downtown Portland offer special rates for participants of the ASP meeting. Please mention your affiliation when booking a room at either of the hotels. For students, some rooms at low rates are available at the Eastland Park hotel or the USM dormitories. Information about other hotels can be obtained through the Convention and Visitors bureau of Greater Portland (Tel: 207-772-5800 or at www.visitportland.com).



The American Society of Pharmacognosy offers a number of travel grants to students who wish to attend the meeting and present a poster or a short lecture. Information on how to apply can be found on the ASP website (www.phcog.org/awards/awardgrant.html).

General questions in regards to the meeting can be addressed to Dr. Stephan Garfner at stefang@tomsofmaine.com.

Questions about registration, travel and accommodation should be addressed to the USM registration service through Ms. Elizabeth A. Morin, Director, Department of Conferences, eamorin@usm.maine.edu.



The 50th Anniversary of the ASP

Call for Participation in the 50th Anniversary of the ASP!

by Dr. Roy Okuda

A range of activities will be conducted to help commemorate the 50th anniversary of ASP. If you see any that are of interest to you, please feel free to contact the lead person and see how you can become involved in helping make that project great. All ASP members are encouraged to get involved to help make our 50th Anniversary Celebration a success!

The lead person follows each project title. Each of these projects is still evolving, so please watch future editions of the *ASP Newsletter* for additional information and updates.

•ASP History Book Project (Dr. Gordon Cragg, Editor)

This project will include chapters to chronicle the beginning of the Society to the present day, articles on notable members, key natural products discovered in the past half century, bios of Presidents, Honorary Members and other notable figures.

•ASP Photo Project (Dr. John Beutler)

Photos are wanted from any ASP-affiliated activity, such as annual or interim meetings or other ASP-sponsored activities, as well as of Society members "in action," especially in the lab or field. These photos will be digitized and archived for future use. Dr. Beutler will accept them as slides, photos, or digitized files.

•Logo and Pin Design Contest (Dr. Roy Okuda)

For our 50th year, we will need a special logo design which will also be used in a special edition pin and for the 50th Anniversary meeting. Members are invited to submit designs. The ASP Foundation will award \$250 or meeting registration to the 50th meeting in Hawaii to the winning design! Watch the next *ASP Newsletter* for details on submission.

•ASP Video / Oral History Project (Dr. Luke Chadwick)

Coupled with the History Book Project above, we will obtain video or audio recollections from among the earlier members of the Society.

•Membership Drive (Dr. Bill Baker)

The occasion of the 50th anniversary is an excellent driving point to get others interested and involved in the Society. Promotional materials, both handout and online, will be developed for distribution.

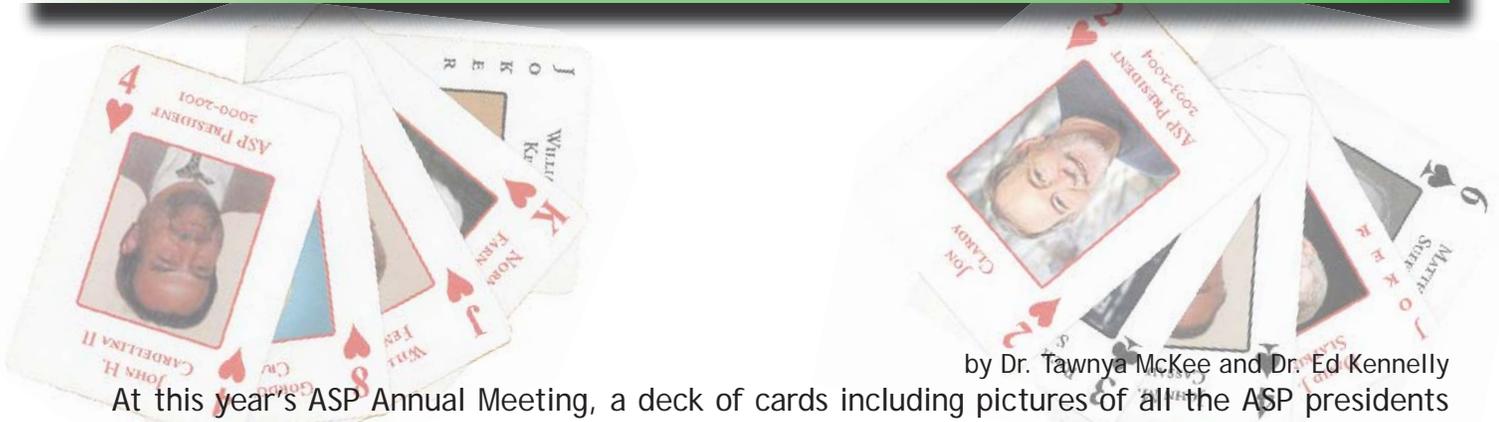
•ASP Records Archive (to be determined)

The official archives of the Society should be cataloged and held in a secure location. We will explore possible ways to accomplish this.

•Annual Meeting Abstract Books and Artifacts

Coupled with the Archive, a collection of these from all 50 years of ASP will be displayed at the 2009 meeting. Early program books will be digitized and put online. If you have any ASP program books from 1959 to 1980, please contact Dr. Okuda.

Commemorative Playing Cards



by Dr. Tawnya McKee and Dr. Ed Kennelly

At this year's ASP Annual Meeting, a deck of cards including pictures of all the ASP presidents through current President Dr. Roy Okuda was given to each attendee. Decks were also hawked throughout the meeting by ASP playing card mastermind, Dr. Barry O'Keefe, and other organizers. Not since Dr. Rogelio Pereda-Miranda sold ASP apparel on the ruins of Monte Alban in Oaxaca has an ASP gift generated such buzz!

In total, there have been 47 different ASP Presidents. In order to complete the deck of 54 cards, several notable natural products scientists, who did not serve as Society president during their lifetimes, were also included. Long-time Society Treasurer, Dr. David Slatkin and Secretary, Dr. Bill Keller were included as the jokers, reportedly with their permission. It took over 18 months to collect all of the images for the deck of cards while keeping it a surprise. Contrary to rumors and speculation, assignment within the deck was, except for the jokers, by random drawing. Efforts to obtain photographs included contacting retired members, schools of pharmacy, founding ASP members and family members of the deceased presidents.

As seen in the surrounding photographs, many excellent and assumingly lucrative ASP Celebrity Poker hands can be dealt when playing five card draw. A flush can be made with cards featuring Drs. Bill Keller, Norman Farnsworth, Bill Fenical, Gordon Cragg, and John Cardellina. A hand of two pairs, ace high, shows Drs. Leonard Worthen, Les Mitscher, Roy Okuda, Jack Beal and Alice Clark. Many tales are circulating involving the use of cards at the Annual Meeting. What confirmed or unconfirmed stories have you heard? Send us an e-mail at asp.newsletter@lehman.cuny.edu to share a story involving the ASP playing cards for potential publication.

Thanks to everyone who contributed material for the cards! There are additional decks still available, and purchase details will be forthcoming.



Herbal Medicine Symposium

The use of herbal medicines in the United States is becoming increasingly popular. Yet, because most American healthcare providers receive little to no formal training in herbal medicine, physicians and nurses are often unprepared to answer questions patients have about the efficacy of herbal medicine, either as a supplement to more traditional treatment methods or as a stand alone therapy to treat or prevent disease.

To address this problem, the University of Pennsylvania's School of Medicine, School of Nursing and Morris Arboretum are jointly sponsoring a symposium on September 19-20, 2006 entitled Herbal Medicine: Perception, Practice and Rational Use. The symposium will bring together world-renowned experts in the field of herbal medicine. The broad range of topics to be addressed will include everything from a look at the history of herbal medicines and their potential role in future healthcare to a discussion of the role that herbal medicines already play in today's pharmaceutical industry. The symposium will focus on: the use of plants in clinical practice; determining benefits or harm; rational approaches for proper use; informing the public; perceptions of herbal medicine by healthcare providers and the public; and botanical research.

Nationally recognized speakers will include: Mr. Mark Blumenthal, Executive Director of the American Botanical Council; Dr. Steven King, Vice President of Ethnobotany and Conservation for Napo Pharmaceuticals; Dr. Robert McCaleb, president of the Herb Research Foundation; Dr. Marc Micozzi, physician-anthropologist; Mr. Simon Mills, Director of the Masters Program in Botanical Healing, Tai Sophia Institute, Dr. John M. Riddle, distinguished author, scholar, and professor at North Carolina State University; and Dr. Chun-Su Yuan, the Cyrus Tang Professor in the Department of Anesthesia and Critical Care at the University of Chicago.

The symposium begins on September 19 at the Morris Arboretum in the Chestnut Hill section of Philadelphia. The evening features herbal medicine tours, dinner, and keynote speaker, Dr. Riddle. The day-long symposium will be held on September 20 at the University of Pennsylvania, Biomedical Research Building II/III: Lobby and Auditorium

For a complete brochure or to register contact Jan McFarlan 215-247-5777, x156, jlm@pobox.upenn.edu. Also consult the website: <http://www.business-services.upenn.edu/arboretum/pressroomherbalmedicine0706.html>.



Dr. John Cassady Awarded Honorary ASP Membership

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The ASP has been important to me because of the friendships I have developed with individuals beyond my home institutions. I mentioned John Cardellina and have to add Gordon Cragg, David Slatkin, and Bill Keller.

The opportunity to serve the Society in various roles has also been invaluable in my career development. Our Society is much different now than it was 40 years ago. It is larger and more diverse, and more inclusive. I know many of you in the audience are beginning your career as I was 40 years ago. My advice to you is to get involved. We need your leadership. I expect, looking around the room, that the ASP deck of cards at the 100th anniversary will look a lot different than our first edition. That diversity will strengthen our Society. Thank you again for this tremendous honor.

New Members of ASP

ASP would like to welcome new members. The Society's main objectives are to provide the opportunity for association among the workers in pharmacognosy and related sciences, to provide opportunities for presentation of research achievements, and to promote the publication of meritorious research. New members include 14 domestic full members, four international full members, and six associate members. We look forward to meeting you and learning more about you and your work.

Full Members

Dr. Sonya Agbessi
Ottawa, Canada

Dr. Tawfeq A. Al-Howiriny
Riyadh, Saudi Arabia

Dr. Maria Elisabete Amaral de
Moraes
Fortaleza-Ceara, Brazil

Dr. Alun Bermingham
Frederick, Maryland

Dr. Andrea J. Bourdelais
Wilmington, North Carolina

Dr. Jannette M. Gavillan-Suarez
Aibonito, Puerto Rico

Mr. Gaurav Kapoor
Redwoodshores, California

Dr. Peizhi Lian
Sharon, Massachusetts

Dr. John K. Mensah,
Nashville, Tennessee

Ms. Yisel A. Rivera Molina
Cayey, Puerto Rico

Mohamad A. Mroueh
Byblos, Lebanon

Dr. Kesava Reddy Muntha
Oxford, Mississippi

Dr. Terry E. O'Reilly
Lacey, Washington

Dr. Richard E. Staub
Emeryville, California

Dr. Douglas Steel
Salt Lake City, Utah

Dr. Adrienne Anne Tymiak
Hopewell, New Jersey

Dr. Qunli Xu
Wilmington, Massachusetts

Mr. Michael R. Zahn
Olympia, Washington

Associate Members

Mr. Frank J. Ankudey
Duluth, Minnesota

Mr. Gerald T. Gourdin
Boulder, Colorado

Jon C. Henrikson
Norman, Oklahoma

Mr. Venkata S. S. N. Kantamreddi
Bradford, United Kingdom

Dr. Mgang Adeyemi Owolabi
Lagos, Nigeria

Ms. Weili Yang
London, Canada

The ASP Newsletter Is Going Online



The Newsletter is moving to an electronic distribution system. If you have received a hard copy of *The Newsletter*, it means that the Society does not have an e-mail address for you. Please let ASP know your email address immediately by contacting David Slatkin at asphcog@aol.com. The leadership of ASP has decided that next year no paper copies of *The Newsletter* will be sent to the membership.

Moments from the 47th Annual Meeting



Meet a New ASP Member

ASP welcomes many new members to the Society this year. Among them is Dr. Richard “Rick” Staub, a new employee of the biopharmaceutical company Bionovo Inc. This company is developing botanical drugs for treating cancer and hot flashes in menopausal women by isolating bioactive compounds and investigating their mechanisms of action, relates Dr. Staub. We are grateful to him for granting us the opportunity to get more acquainted with him and his work.

Why did you join ASP?

At the recent ASP Annual Meeting, I was interested in presentations by FDA officials and other dignified speakers concerning chemistry, manufacturing, and controls guidelines. Further, I wanted to develop contacts and share techniques and knowledge with other members that would assist me and my colleagues to better develop our products at Bionovo Inc.

What are your research interests in pharmacognosy?

My research at Bionovo Inc. involves the activity-guided isolation of compounds from herbs used in Traditional Chinese Medicine. We are developing products for women’s health issues, specifically targeting the estrogen receptor, and also products for the treatment of cancer.

What is your scientific background?

My graduate work and previous employment involved research on the toxicology and metabolism of pesticides. Though there are many similarities between pesticides and drugs, I am a relative



Dr. Rick Staub and his son Derek with a 15 pound king salmon they caught on the Sacramento River in California in September, 2005.

newbie to pharmacognosy having worked for only about three years now as a natural products chemist.

What would you like to achieve through your membership?

Since I am still new to this field, I hope to acquire a much broader understanding of pharmacognosy from other members and through the opportunities offered by ASP.

Behind the Scenes in Pharmacognosy

Absorbing Enlightenment from the Sea Sponge

In July of this year, the *Journal of Natural Products* published "Hexaprenoid Hydroquinones from the Sponge *Haliclona* (aka *Adocia*) sp.", by Drs. Lyndon West and D. John Faulkner. First author, Dr. West, is a native of New Zealand and a third generation Faulkner-ite. He obtained his Ph.D. in Organic Chemistry in 2001 from Victoria University of Wellington, New Zealand with Dr. Peter Northcote, working on the isolation and structural elucidation of secondary metabolites from marine invertebrates. Dr. Northcote obtained his Ph.D. at the University of British Columbia with Dr. Raymond Andersen, who in turn obtained his Ph.D. with Professor D. John Faulkner at Scripps Institution of Oceanography in San Diego, California. Dr. West then worked for two years as a postdoctoral research chemist with Prof. Faulkner. After Prof. Faulkner's sudden death in 2002, he joined Sequoia Sciences, a high throughput drug discovery company in San Diego, where he was carrying out the isolation and structural elucidation of terrestrial natural products.



Drs. John Faulkner, Raymond Andersen, Peter Northcote, and Lyndon West (left to right).

Dr. West was appointed as an Assistant Professor in the Department of Pharmaceutical and Biomedical Sciences in the College of Pharmacy at the University of Georgia in 2005 and is an associate member of the UGA Center for Drug Discovery. Dr. West's research at UGA focuses on the isolation and structural elucidation of biologically active natural products from marine organisms. The West lab is targeting molecules that have both unique structures as well as the potential for biomedical application. Dr. West has a strong interest in the development of novel simple approaches for the separation of marine natural products to accelerate the discovery of drug leads.

How did you become interested in marine natural products?

At the end of my B.S. in Organic Chemistry I was fortunate to work as a summer researcher in Dr. Peter Northcote's Marine Natural Products Laboratory working on the isolation and quantification of a potent cytotoxin from a very interesting marine sponge. The more research I did, the more interested I was in learning about why marine organisms contain these complex chemicals and what the biomedical potential of these compounds was. This curiosity led to me to continue and do my Ph.D. in marine natural products chemistry. During my Ph.D. and postdoctoral research, I have been privileged to have met and worked with many exceptional scientists with a love for marine science and marine natural products chemistry and have been given many opportunities that I could never have dreamed of. In particular, I was able to learn to scuba dive to collect samples, which has allowed me to travel and dive in many unique locations.

Who in your laboratory carried out the research?

The work described in the paper was carried out by me while working as a postdoctoral researcher in Dr. Faulkner's laboratory.

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Behind the Scenes in Pharmacognosy

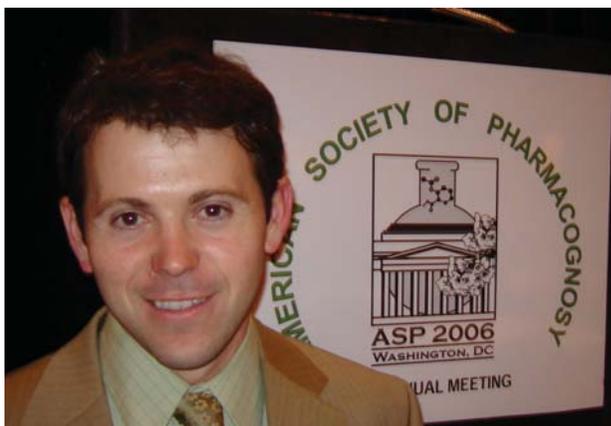
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Could you provide a brief explanation of the work and results in your own words? In what way are the data in your paper new?

The paper describes the isolation and structural determination of three new merotriterpenoids from a marine sponge collected in Palau. The compounds were detected using a strategy developed during my Ph.D. to increase the chances of discovering new potentially biologically active compounds from marine organisms. The approach exploits the amphiphilic nature of biologically active compounds and uses a technique called cyclic loading together with polymeric chromatographic support to separate compounds with a high probability of exhibiting *in vitro* and *in vivo* activity. We have found that by using the polymeric chromatographic support HP-20 instead of traditional silica-based supports (e.g. silica gel and C18) to pre-fractionate the crude organic extracts, bioactive compounds such as peptides, polyketides, alkaloids and terpenoids, can be efficiently separated from the major water-soluble carbohydrates, salts, and non-polar fats and steroids. With HP-20, we can create discrete fractions of intermediate polarity with an increased probability of containing the biological active components, while eliminating the unwanted compounds that represent the majority of the mass of the extract. These pre-fractionated "enriched" materials can then be examined biologically and spectroscopically for the presence of novel compounds using 1D and 2D NMR spectroscopy to prioritize specimens.

What impact does this research have?

The search for new drug leads is a crucial element in pharmaceutical research. Natural products provide us with molecules that would be inaccessible via other routes and also provide templates for new drug design. Despite the fact that the biodiversity in the marine environment far exceeds that of the terrestrial environment, research of marine natural products is still in its infancy. Over the past 50 years marine organisms have proven to be a rich source of structurally and functionally diverse compounds with useful and sometimes sensational pharmacological activity. The identification of these compounds has primarily relied on either bioassay-directed isolation or classic natural products research which involved isolating the most abundant compounds and then hoping to find a use for them. The rapid developments of high-throughput screening and new access to large-scale screening efforts using highly specific, mechanism-based techniques will lead to new opportunities for natural products chemists by providing small molecules that can be used as chemical probes to study function at the molecular, cellular, and *in vivo* level. Natural products are again being seen as good source of structural diversity. In providing compounds for molecular libraries it is the structural diversity and potential for biological activity that is important.



Dr. Lyndon West at the 2006 ASP Annual Meeting.

What was it like to work with Dr. Faulkner? What would you like us to know about him?

It was an honor and a privilege to have worked with Prof. Faulkner at Scripps Institute of Oceanography. He was a dedicated and hardworking scientist who had a genuine love of marine natural products chemistry. This scientific curiosity and rigor will be passed down to those who work in my laboratory.

Amy Keller and Dr. Lyndon West contributed to this article.

From the Archives

The Vincatini: An Infamous Green ASP Concoction

by Dr. Edward Kennelly with Dr. Norman Farnsworth

In 2009, the American Society of Pharmacognosy will be celebrating the 50th anniversary of its founding. As described in a separate article (page 14), the Society is planning a number of ways to commemorate this auspicious occasion, including the ASP Photo Project and ASP Archives. The Newsletter has begun digging into these resources in order to publish items from the past, and annotate them with member memories. ASP encourages all members to submit items to the ASP Photo Project and Archives. If you would like to suggest a topic to be featured in "From the Archives", please forward them to the Newsletter.



Dr. Phil Babcock at the 1964 ASP Annual Meeting. The caption on the original photo said, "Phil next to that famous sign... Just a teeny Vincatini topside."

This issue's featured archive photo was taken at the 1964 ASP Annual Meeting in Pittsburgh, Pennsylvania at a time when rat pack headlined in Vegas, and alcohol flowed freely at cocktail parties. Enter into this scene ASP's own contribution to this swinging era, a martini in honor of one of the most famous medicinal plants, *Catharanthus roseus* (syn. *Vinca rosea*), the rosy periwinkle. While most ASP members know *C. roseus* as the source of the anticancer compounds vincristine and vinblastine, fewer may be aware that it inspired a potent green concoction, the vincatini, at an Annual Meeting.

The vincatini was invented by Dr. Norman Farnsworth. The vodka-based drink was introduced at the 6th Annual Meeting since the scientific theme was "*Vinca/Catharanthus*". The banquet for the 1964 Annual Meeting took place on a riverboat that cruised the Monongahela and Allegheny rivers, and it was there that the first vincatinis

were shaken. When asked for the recipe, Dr. Farnsworth stated that "the ingredients are secret...only known to me. In addition to vodka, there is chlorophyll but past this point I CANNOT DIVULGE THIS SECRET." Dr. Farnsworth reports visiting Dr. Paul Schiff at the University of Pittsburgh recently, and seeing a partially full five gallon jug of residual vincatini.

Dr. Farnsworth contacted Smirnoff vodka before the 1964 Annual Meeting, and the distiller agreed to supply as much vodka as ASP needed if the Society took a picture indicating that the vincatini contained Smirnoff vodka. The archive photo indicates that ASP was good to its word, since Smirnoff appears on the sign taped to a wall. ASP reportedly received ten cases of Smirnoff vodka for the meeting.

A number of ASP members erroneously identified the smartly clad gentleman in the photo as a Smirnoff representative. However, upon closer inspection, Drs. Farnsworth and Ara DerMarderosian have pegged the vincatini drinker as fellow pharmacognosist, Dr. Phil Babcock, who retired from Rutgers University College of Pharmacy, and now resides in Arizona.

Dr. Farnsworth remembers the vincatini being a hit at the 1964 banquet, and noted that there were many headaches the next day! However, Dr. DerMarderosian recalls the drink in a more sober analysis, "it certainly looked like mouthwash but had a more potent chlorophyllic tang."

At this year's ASP Annual Meeting a new batch of vincatini was prepared in the hospitality suite at the Crystal Gateway Marriott by Dr. Barry O'Keefe. He reported that "several people tried the vincatini and responses were mixed: some liked it and some didn't. I think the level of appreciation depended on the amount of 'secret ingredients' added to the mix of vodka and chlorophyll."

The ASP Newsletter is moving to electronic distribution. If you receive the Newsletter via post please see page 8 for details concerning your future deliveries.

David J. Slatkin, Ph.D, Treasurer
The American Society of Pharmacognosy
3149 Dundee Road, #260,
Northbrook, Illinois 60062

ASP Membership

Full Membership

Full membership is open to any scientist interested in the study of natural products. Dues are \$75 per year. In order to receive the Journal of Natural Products the subscription rates are as follows: United States, Canada, and Mexico: \$131 (Print Edition), \$70 (Web Edition), \$140 (Archive Web Edition); All other countries: \$196 (Print edition), \$70 (Web edition), \$140 (Archive Web Edition).

Associate Membership

Associate membership is open to students of pharmacognosy and allied fields only. These members are not accorded voting privileges. Dues are \$25.00 per year. In order to receive the Journal of Natural Products the subscription rates are as follows: United States, Canada, and Mexico: \$98 (Print Edition), \$70 (Web Edition), \$140 (Archive Web Edition); All other countries: \$163 (Print Edition), \$70 (Web Edition), \$140 (Archive Web Edition).

Emeritus Membership

Emeritus membership is open to retired members of the Society who maintained membership in the Society for at least five years. Dues are \$10.00 per year. These members receive the ASP Newsletter. Emeritus members may subscribe to the Journal of Natural Products at the Full Member rates.

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 Brossi, National Institutes of Health (NIH), MD • Dr. David P. Carew, Univ. of Iowa, IA
 - Dr. John Cassady, Oregon State University, OR
- Dr. Gordon C. Cragg, National Cancer Institute (NCI), NIH, MD
 - Dr. Norman R. Farnsworth, Univ. of IL at Chicago, IL • Dr. R. Hegnauer, Leiden, Netherlands
 - Dr. Albert Hofmann, Switzerland • Dr. Harry H. S. Fong, University of Illinois, IL
- Dr. James E. Robbers, Purdue Univ., IN. • Dr. Mansukh Wani, Research Triangle Institute, NC
- Dr. E. John Staba, Univ. of Minnesota, MN • Dr. Hildebert Wagner, Univ. of Munich, Germany
 - Dr. David J. Slatkin, Chicago State University, IL



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