

# PSNA News

Phytochemical Society of North America Sociedad Fitoquímica de América del Norte Société Phytochimique de L'Amerique du Nord

Volume 47, Number 1 April 2009



Message From the President

Mark A. Bernards

I am pleased to write to tell the PSNA membership that our plans to reinvent the Recent Advances in Phytochemistry series are progressing well. The RAP Editorial Board has recently voted to accept a proposal put forth by the Springer publishing group. What's more, the arrangements that we have established in-

clude a very attractive price for sales included with the registration for the annual meeting! While the society will not collect any royalty revenue for books sold this way, the substantially reduced price represents a tangible benefit for our membership. Even with the cost of membership factored in, the cost is quite reasonable, especially for a high quality publication such as the RAP.

Speaking of membership, I would like to take this opportunity to remind you that 2009 membership dues are still owing for many members. As of the first of April, we have seen only 65 membership renewals paid in full. If you aren't amongst this elite group of phytochemists, don't despair: there is still time to submit your membership renewal form (see the back cover of this newsletter, or visit www.psna-online.org). While you are at it, feel free to recommend your colleagues and students! You can tell them all about our RAP series and what a great deal it is, as well as promote the upcoming meeting while you are at it.

Preparations for the 2009 PSNA Annual Meeting are well underway. A meeting website has been set up (http://bioinformatics.towson.edu/PSNA2009), and contains important information about registration, abstract submission and accommodations, as well as program details. Within the pages of this newsletter there is also a list of confirmed invited speakers and a call for nominations for Arthur Neish Young Investigators. We certainly look forward to seeing as many of you as possible at this year's event.

Lastly, included within this newsletter is a ballot for electing the next President Elect of the PSNA. Please take the time to consider who you think would best serve the society as its next President Elect, and complete a nomination form to get them on the ballot. More importantly, please take the time to vote! As with last year, we will conduct an electronic vote.

See you at Towson in August!



In this issue: Call for Officers Nominations and Call for Neish Young Investigator Award Nominations; Details on the 2009 PSNA Conference in Towson, MD, August 8-12

This is the printed version of the PSNA Newsletter. The web PDF version can be downloaded from the website: www.psna-online.org.

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ADVISORY COUNCIL (Being reorganized)

## The Phytochemical Society of North America

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## PSNA Elections: Call For Nominations

Nominations are sought for the office of President-Elect for the Phytochemical Society of North America. All current members of the PSNA are eligible to be nominated, except those that have served in this role in the past. Names of potential nominees should be sent to Dr. Norman G. Lewis (lewisn@wsu.edu), no later than June 01, 2009. Ballots will be prepared and an electronic vote conducted. The winner will be announced during the Business Meeting at the 2009 Annual Meeting at Towson University, Towson MD.

The term of President-Elect is effectively three years, albeit with a graduated role. The first year is as President-Elect; however the incumbent will automatically become PSNA President in the next year, and fulfill the duties of Past-President the year after that. For a full description of the duties of each of these positions, please refer to the Constitution & Bylaws information posted on the PSNA website (http://www.psna-online.org). Follow the link to "Society Business" and select "Constitution and Bylaws".

## Arthur Neish Young Investigator Mini-Symposium: Call for Nominations

This mini-symposium is named in honor of Arthur C. Neish (1916-1973). In the 1950's and 1960's, Dr. Neish was a pioneer in the synthesis and use of radiolabeled precursors and was one of the major contributors to knowledge of plant natural product biosynthetic pathways (Romeo, J.T. 2000. Forward.



# The 2009 PSNA 49th Annual Meeting at Towson University August 08-12

Recent Advances in Phytochemistry 34:viii). He was a strong mentor of young scientists and has been recognized by having the young investigator symposium named after him. Funds supporting this endeavor were donated by the Phytochemical Society of North American (PSNA), the National Science Research Council of Canada (NSRC), Pfizer, and private donors.

The first young investigator minisymposium was held in 1999 at the PSNA meeting in Montreal. The society uses the fund to support young investigators as featured speakers to enrich participation in the PSNA, support a diversity of topics, and provide what may be an important professional and career development opportunity for young investigators. There is no application procedure as this is an invitational award.

For the 2009 PSNA meeting at Towson University, PSNA members may submit nominations to members of the Meeting Committee, including James Saunders (isaunders@towson. edu), Mark Bernards (bernards@ uwo.ca), David Gang (gang@ Ag.arizona.edu) or Norman Lewis (lewisn@wsu.edu). **Nominations** should include a CV of the nominee and a letter stating reasons for the nomination. For these awards, a new investigator is someone within the first 2-3 years of establishing an independent research program and typically will be no more than 5-6 years past the award date of his or her Ph.D. (or equivalent) degree.

## PSNA 2009 49th Annual Meeting

The 2009 PSNA 49th Annual Meeting will be held at Towson University, August 08-12. The meeting will feature a broad Symposia topic on Biologically Active Phytochemicals which should be of interest to all members of the PSNA. A wide spectrum of speakers have been invited to address this topic. These include:

Dr. James Duke, The Herbal Village, "The use of Herbal compounds in traditional medicines"

Dr. Vonnie Shields, Dept. of Biological Sciences, Towson University, "Phytochemical taste reception in insect larvae: ultrastructure, feeding behavior, and electrophysiology"

Dr. Sangeeta Dhaubhadel, Southern Crop Protection and Food Research Centre, Agriculture and Agri-Food Canada, "Regulation of isoflavonoid synthesis in soybean seeds"

Dr. Mark Bernards, Department of Biology, The University of Western Ontario, "The ecological role(s) of ginsenosides"

Dr. Jinhui Dou, Botanical Review Team, FDA, "Botanical drug development in the U.S."

Dr. Jed Fahey, Bloomberg School of Public Health, "The action of glucosinolates/isothiocyanates on Helicobacter pylorias"

Dr. Ikhlas A. Khan, National Center for Natural Products Research, Thad Cochran Research Center, "Drug Discovery of Natural Products for Pharmacognosy"

Michael C. Tims, National Institutes Standards and Technology, "A Little Biology Goes a Long Way: Evaluation of Extraction Methods for Gallic Acid, Catechins and Xanthines in Green Tea"

Bill J. Baker, Department of Chemistry, University of South Florida, "Antarctic 'Red Marine Algae' produces influenza inhibitory chemistry"

Dr. A. Douglas Kinghorn, College of Pharmacy, The Ohio State University, "Discovery of Potential Anticancer Agents from Tropical Plants"

Contributed presentations or posters on any area of Plant Science are welcome. Towson University has committed \$5000 to help sponsor this meeting as well as providing the meeting facilities at no cost to the society. We are looking forward to publishing a volume from this meeting organized by the editorial board of the Recent Advances in Phytochemistry and hope that all members of the Society will come and enjoy the 49th Annual Meeting and Symposia of the Phytochemical Society of North America in the Baltimore area.

#### Registration:

Registration forms can be downloaded in Word or pdf format from the Conference Website (http://bioinformatics.towson.edu/PSNA2009/) and e-mailed to jsaunders@towson. edu. The registration fee is very reasonable at \$275/regular member & postdoc and \$125/student (grad or undergrad). For non-members, the fees will be \$335 and \$155, respectively, and include the added bonus of one year's PSNA membership!

#### Abstract Submission:

Please type your single page abstract on 8.5" x 11" white paper leaving a 1.5" margin on all sides. Use Times New Roman (or similar), 12 pt. Please indicate whether the abstract is for a poster or short talk. You will be notified of the session, time, and format for your presentation.

Abstracts should be submitted electronically to jsaunders@towson.edu, using the following format:

TITLE IN BOLD CAPITAL LETTERS

Author(s) Name; Author's Affiliation and Address, email.

Skip one line.

Type text of abstract.

Please return your abstract by July 10, 2009.

Posters should be 36 inches wide by 42 to 48 inches high.

#### Accommodations:

Single and double suites have been reserved at the Burkshire Marriott Conference Hotel of Towson, Maryland, which is located directly on campus. It is a very short walk to the meeting site and conference facilities. Each suite has a separate kitchen, living room, bathroom and private one or two separate bedrooms. Each bedroom has either a Queen or King size bed and there is a sofa in the living room that also opens into a double bed. To obtain discounted rates for this conference, all reservations and payments need to be made directly through the conference organizers. Do not make reservations directly with the hotel. We would like to receive hotel reservations by July 10, 2009 to guarantee an available suite. Sharing rooms is a cost effective mechanism for accommodations for this meeting. Parking is available at no cost within the hotel, however a car will not be necessary during the conference as all activities will take place on campus. Shuttle service can be arranged to the local Airport at Baltimore Washington International (BWI) airport or the train connection at Penn Station.



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## Phytochemical Society of North America Sociedad Fitoquímica de América del Norte Société Phytochimique de L'Amerique du Nord

#### **Member Annual Renewal Form**

Please fill in the following form and return to the Treasurer with your dues payment.

Payments should be made by one of the following: check drawn on a US checking account, US travelers check, or US money order, International Money Order, Credit Card on the PSNA Website or Paypal payment to psnatreasurer@yahoo.com Please make check or money order payable to the Phytochemical Society of North America.

Credit Card Payment: Paying membership dues online via credit card has now been established. Please select the link from the PSNA homepage to pay by credit card. A paypal account is NOT required but will expedite the process. If using a paypal account, send directly to psnatreasurer@yahoo.com

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Regular member - \$60.00 per year Student member - \$30.00 per year

Return this statement along with your payment to: Dr. Franck Dayan

The PSNA homepage is now available at www.psna-online.org

PSNA Treasurer USDA-ARS P.O. Box 8048

University, MS 38677

Multiple Member Renewals: Please use one of the payment methods above.

Name Institution Fee

Total Enclosed \$\_\_\_\_



## Phytochemical Society of North America Sociedad Fitoquímica de América del Norte Société Phytochimique de L'Amerique du Nord

### **New Member Application Form**

Please fill in the following application and return to the Treasurer with your dues payment. Once your application has been processed, you will receive newsletters and special mailings. You are also eligible for PSNA member discounts on the Recent Advances in Phytochemistry series (See Website).

Payments should be made by one of the following: check drawn on a US checking account, US travelers check, or US money order, International Money Order, Credit Card on the PSNA Website or Paypal payment to <a href="mailto:psnatreasurer@yahoo.com">psnatreasurer@yahoo.com</a>. Please make check or money order payable to the Phytochemical Society of North America.

Credit Card Payment: Paying membership dues online via credit card has now been established. Please select the link from the PSNA homepage to pay by credit card. A paypal account is NOT required but will expedite the process. If using a paypal account, send directly to psnatreasurer@yahoo.com

Advance Payment: It is now possible to pay dues in advance. If you wish to take advantage of this feature, please indicate above the years for which you would like to pay in advance.

Dues schedule:	Regular member - \$60.00 p Student member - \$30.00 p	•	
Return this statement along w	vith your payment to:	Dr. Franck Dayan PSNA Treasurer USDA-ARS P.O. Box 8048 University, MS 38677	
Name (Dr., Mr., Mrs., Ms.):		<i>,</i>	
Mailing Address: Line 1:			
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Volume 47, Number 2 December 2009

### President's Message

David Gang

This past year brought a change in government administration to the USA. While we all understand that ours is an international society, such changes do have an impact on world politics and can also have an impact on science policy around the globe. This change in administration was followed by a shift in priorities in research funding and directions on many fronts that impact Society members. The largest change may be the reorganization of the research branch of the USDA, to create the new National Institute of Food and Agriculture, or NIFA. I believe that those of us who have a strong interest in Phytochemistry and related fields, be they plant metabolism, biofuels, or medicinal properties of plants or related areas, will view this change as a positive one. I hope that you will join me in supporting Roger Beachy as the new director of NIFA. I believe that he will be a great ally to plant biologists in general and to phytochemists and biochemists in particular. I am hopeful that we will see investment from NIFA in areas of research that we all know are critical to support if we are to retain stability of our food and fuel supplies. I encourage those of you who reside in the USA to find ways to support NIFA activities that are beneficial to our cause. This can be done by having conversations with your legislators, by serving on grant panels or acting as ad hoc reviewers, or by vocalizing support for positive efforts by NIFA and other agencies in areas related to Phytochemistry. I am sure that members from Canada, Mexico and other nations can see similar opportunities in their respective nations, such as in supporting efforts by Genome Canada to encourage plant biochemistry related research.

I believe that one of the most important opportunities that we now face resides in the fact that scientists in our field are now in a position to begin to make more of an impact in science policy at the national and international levels. Many of you already are actively engaged in this endeavor. It is critical that all members of the society be aware of and seek out opportunities to educate policy makers and the general public regarding the importance of science in general and of plant biochemistry and chemistry in particular.

Through current biofuels initiatives in North America and worldwide. for example, our members have an unprecedented opportunity to be involved in reshaping the way that plant chemistry is viewed by other plant scientists in particular and other scientists and our national populations in general. The knowledge base present in our society's membership is unique in the world, and we (I am talking about all members from the most senior to the youngest of student members) are therefore in a unique position to be able to provide important information and judgment regarding potential policy directions that may be taken at all levels.

I also applaud our members who take direct education of future generations to heart. If our Society and its mission, to promote plant chemistry and biochemistry research, is to continue to grow and have an impact in the world, we must enlarge our ranks with members from the younger generations. In this regard, the society has also renewed efforts in recent years to increase membership. We continue to encourage past

Continues on Page 3 ...



In this issue: 2009 meeting reports, and update on the 2010 meeting

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## President's Message ... continued from page 1

members to renew their interest in the field of Phytochemistry, viewed in the broadest sense, and rejoin our ranks. We also encourage new members to join. We need to seek new ways to foster this effort. I have high hopes that with your assistance, with the assistance of the members first and foremost, we will be able to continue to expand our membership over the next few years. There are important reasons to do so. Most importantly, I believe that our Society and its members, as I outline above, face new opportunities in being in a position to help shape science policy worldwide.

To the faculty members and senior scientists: please encourage your students and post-docs to join the PSNA attend the annual meeting this coming year. Our membership dues are low compared to many other societies, making membership readily available to students and post-docs. To the younger members, please join us again at this next year's meeting and encourage your friends to attend. I believe that the venue for next year's meeting will be especially attractive (on a tropical island on the Caribbean coast of Florida, at a beautiful hotel resort for a reasonable price--sounds like a meeting not to be missed, and that isn't even considering the great science that will be discussed!). Joining forces again with the American Society of Pharmacognasy, as we have done in the past, will bring new opportunities for our members. I personally believe that this meeting will open up opportunities to develop collaborations with others that may have otherwise remained untapped. Please see the meeting website for more information on this great opportunity: www.asp2010.com.

During the following year we will hold an annual meeting celebrating the 50th Anniversary of the Society. That meeting, to be held on the north Kona coast of the big island of Hawai'i, will again be at a great location and will open up additional opportunities for collaboration. We expect many of our friends from sister societies in Asia to join us for snorkeling, scuba diving and of course great science. Please plan now to attend that meeting. More details will follow in the next few months.

Although we have also faced many challenges during the past year, such as enduring the worst economic downturn since the Great Depression of the 1930s, I believe that we have many reasons to be optimistic about the future. Funding opportunities for collaborative research enable new approaches to old problems, making many of these now appear tractable. New advances in technology each year increase our members' ability to perform world class science at reduced prices.

I also wish to welcome you to another great issue of the PSNA newsletter showcasing our annual meeting, held this past year at Towson University in Baltimore, Maryland. Jim Saunders and the rest of the local organizing committee and support staff did a great job of hosting the

meeting participants and making the meeting a pleasant experience at an enjoyable venue. The Baltimore area had a lot to offer the participants, from a lovely evening with Jim Duke and his herbs and songs, to delightful dining on the waterfront. Towson provided a great setting for the meeting, where participants could easily mingle and renew friendships or make new acquaintances.

As you will see in this issue, this past year's PSNA meeting was viewed by those who attended as a great success. The diversity of symposium and contributed talks and posters continued on with the society's efforts of recent years in showcasing and supporting all areas of research related to Phytochemistry and plant biochemistry/metabolism. We heard about topics ranging from ecology and evolution to electrostimulatory effects of phytochemicals and insect neurological responses, from genomics to genetics to geminal coupling in NMR, from analytical chemistry and metabolomics to application of biosynthetic knowledge and metabolic engineering in efforts to improve plants.

It is a great time to be a scientist who is interested in plants, the chemicals that they produce and how they produce them!

## 2009 PSNA Annual Meeting "Biologically Active Phytochemicals"

M. Soledade C. Pedras, Secretary

The 2009 PSNA meeting was held at Towson University, a beautiful campus on the suburbs of Baltimore, Maryland on Aug. 8-12, 2009. The broad Symposium topic "Biological-

ly Active Phytochemicals" included several invited talks and contributed presentations on very diverse areas of Phytochemistry that filled the three and half days of this meeting. The great hospitality of the organizer James A. Saunders and all his team at Towson University plus Benjamin Matthews, USDA, Jed Fahey, Johns Hopkins University



Jim Duke's medicinal garden









Scenes from the 2009 PSNA Meeting

and Mark A. Bernards, University of Western Ontario and the great warm weather made this conference very enjoyable and productive.

(continues on page 3) (2009 PSNA Meeting continued from page 1)

The Meeting took off on Saturday evening with a very interesting key note presentation by James Duke on "Spices and Culinary Herbs in Folk Medicine and Phytomedicine" (complete with a song about "Old Bay" spice) which was followed by a great reception, and provided a good opportunity to renew acquaintances and find the latest news. The following morning sessions started at 8:30 am and included presentations on Phytochemicals and Human Health, Biochemical Evolution of Phytomedicines, Cuticular Triterpenoids, Phytochemicals in Medical Foods for Phytotherapy, and Botanical Drug Development in the U.S. The afternoon session included 2 minutes Poster Introductions and poster presentations (over 40).

Monday started with an invited presentation on Analytical Strategies for Ecologically Active Phytochemicals; followed by The Effects of Alkaloids on the Feeding Behavior and Neurophysiology of Insects; Salvage of Folate Catabolites in Plants; COMT Mutations and Effects on Both Lignin Primary Structure and Deconstruction; Drug Discovery of Natural Products for Pharmacognosy; Xanthohumol and Related Prenylated Flavonoids from Hops; Identification, Biochemical Charaterization, and Structure Function Analysis of a Flavonol 3-O-Glucosyltransferase from Citrus Paradisi; and Red Callus Culture of Arabidopsis as a Tool for Analyzing the Regulation Mechanism Controlling the Function of Pap1 Transcription Factor

The sessions on Tuesday included presentations on Ecologically Active Phytochemicals; Antarctic Red Marine Algae Products; Evaluation of Extraction Methods for Gallic Acid, Catechins and Xanthines,; Glucosinolate Degradation Products in Fermented Meadowfoam Seed Meal; Biosynthesis Of Volatiles In Plant Defense: Steroidal Characterization Glycoalkaloids: of PAP1-Transgenic Cell Suspension Culture; Spilanthol and extracts from Spilanthes acmella; Cruciferous Plant Defenses and Pathogen Attack; and Tellimagrandin II Biosynthesis.

The last session on Wednesday morning included presentations on Regulation of Isoflavonoid Synthesis, Ecological Role(s) of Ginsenosides; HPLC/MS Profiling of Anthocyanin and Carotenes; Substrate Versatility of Monolignol Acyltranserases and Phenol Synthases; and Hinokiresinol Synthase, and Improving Sensitivity of HMBC Spectra.

Tuesday evening was highlighted by a visit to Jim Duke's medicinal garden at his home in Fulton, Maryland. The attendees were treated to a personal tour of the gardens with commentary and demonstrations by Jim, all accompanied by the sounds of a classical guitarist. The tour was certainly a great highlight of the meeting. More information on Jim's garden and on ethobotany can be found his website at <a href="http://www.greenpharmacy.com">http://www.greenpharmacy.com</a>. Some of the attendees then went out for an evening on the Baltimore waterfront.

The titles and abstracts of all presentations (invited and contributed) as well as all conference participants and their addresses can be downloaded at http://bioinformatics.tow-son.edu/PSNA2009/Agenda.html. A great banquet held on Tuesday



Smith Hall on the campus at Towson State University



Tim Martin, Tissa Thomas, Christina Engstrom and Jim Saunders



President David Gang and Jim Saunders







Gale Bozzo and Mark Bernards



Daniel Owens



Jeffery Weidenhamer



Soledade Pedras



evening featured a historical and very entertaining presentation by Professor Norman Farnsworth on "YSONGOCAMRAHP and the Search for Bioactive Chemicals".

The Awards Ceremony followed with the 2009 Frank and Mary Loewus Travel Award Recipients.

Next up were the Best Poster Presentation Awards to Nik Kovinich of the University of Ottawa, Reza Sohrabi of Virginia Tech University and Ivette Guzman of New Mexico State University. The Arthur C. Neish Young Investigator Awards were given to Gale Bozzo of the university of Guelph, De-Yu Xie of North Carolina State University, and Syed Moinuddin of Washington State University.

The Young Investigators Program was held on Tuesday, after the afternoon session and brought together our young and senior phytochemists for exchange of ideas and advice, etc. The topic for this session was tips for applying for job. Comments and hints ranged from how to get an application to the top of the applicant pile to what to do in the interview.

The PSNA would like to thank the organizing committee chaired by James Saunders, Christopher Saunders, Tim Martin, Christina Engstrom, and Tissa Thomas for all their enormous amount of work in putting this meeting together. Thanks also to the meeting sponsors, Towson University and McCormick and Company, Inc. Finally, thanks are due to the session chairs James Saunders, Cecilia McIntosh, Roland Roberts, Tim Dwyer, John Arnason, David Gang, and Norman Lewis and to all participants for their enthusiasm and participation.

The next PSNA meeting together with the APS is set for July 2010.





Jed Fahey



Douglas Kinghorn





James Duke and his garden





Thor Arneson and Bill Baker



Mark Bernards at the PSNA Awards Ceremony



Nik Kovinich University of Ottawa,



Reza Sohrabi Virginia Tech University





Ivette Guzman New Mexico State University.



# 2009 Neish Award Speakers



Dr. Gale Bozzo Dept of Plant Agriculture University of Guelph, Guelph ON, Canada.

Dr. Gale Bozzo received his BSc (Biology) from York University in 1996, and his MSc form the same institution in 2000 under the supervision of Brian Colman. His thesis was based on carbon concentrating mechanisms in freshwater algae. Dr. Bozzo carried out his PhD studies under the supervision of Bill Plaxton in the Department of Biology (Queen's University) where hwestudied the biochemical properties of intracellular and secreted purple acid phosphatases induced during the phosphate-starvation response in tomato. In 2005, Dr. Bozzo received an NSERC postdoctoral fellowship to study plant folate biochemistry in Andrew Hanson's lab (Horticultural Sciences Dept, University of Florida). Specifically, he studied the biochemical and molecular aspects of folate transport and folate precursor glucosylation and sequestration. A major focus was on developing biochemical approaches to investigate enzymatic reactions involved in the salvage of folate degradation products in plants. In 2008, Dr. Bozzo was hired as an Assistant Professor in the Department of Plant Agriculture at the

University of Guelph. His lab is currently studying the biochemistry of processes involved in browning disorders in postharvest fruits as well as the mechanisms of flavonoid catabolism in Arabidopsis during environmental stress. The aim of the latter work is to identify the functional role of flavonoid deglycosylation processes in Arabidopsis.



Dr. Sangeeta Dauhbhadel Agriculture and Agri-Food Canada Southern Crop Protection and Food Processing Lab, London, ON, Canada

Dr. Sangeeta Dhaubhadel was born in Nepal and received her B.Sc. Agriculture (hons) degree with major in Plant Breeding and Genetics from Haryana Agricultural University, India. She completed her Masters in Molecular Biology and Genetic Engineering from Govind Ballabh Pant University of Agriculture and Technology, India in 1992 and Ph.D. from Department of Plant Sciences (Biology), University of Western Ontario in 2001. During her Ph.D. in Dr. P. Krishna's laboratory at UWO, Dr. Dhaubhadel discovered the first direct evidence on the mechanism of brassinosteroid-induced thermotolerance on plants. In May 2001, Dr. Dhaubhadel joined Dr. M. Gijzen's laboratory at Agriculture and Agri-Food Canada, London for a short postdoc where she studied the routes of isoflavonoid accumulation in soybean seeds. Her study demonstrated that total accumulation of isoflavonoids in soybean seeds is a result of both in vivo synthesis within the seed and transport from maternal tissues. In May 2002, Dr. Dhaubhadel was the successful candidate for the indeterminate Research Scientist position at Agriculture and Agri-Food Canada, London. Dr. Dhaubhadel's research interest lies in the area of expression and regulation of genes involved in the synthesis of plant natural compounds. The current research in her laboratory focuses on identifying and characterizing the regulatory factors involved in isoflavonoid biosynthesis and its related pathways.



Dr. Syed G A Moinuddin Institute of Biological Chemistry Washington State University Pullman WA, USA

Dr. Syed Moinuddin received a Master's Degree in Organic Chemistry from Andhra University (India) in 1994 and a Ph.D. in Synthetic Organic Chemistry in 2001 from the same institution. His Ph.D. was completed under the supervision of Dr. Revuru Venkateswarlu where he dealt with synthesis of modified podophyllotoxins that belong to a class of compounds known as lignans. In 2001, he joined Professor Norman G Lewis' laboratory at Washington State University as a Research Associate where he contin-

ued his research work in various areas of strategic national importance such as plant compounds for cancer treatment and cancer prevention, as well as for plant-based biofuels. Dr. Moinuddin extended his work on possibly the most complex plant natural products known, lignins. He has developed a series of synthetic regimens to study the effects of mutations in the lignin biochemical pathway. The goal of this project is to study inter-unit linkage frequencies and lignin primary structure.



Dr. Deyu Xie Department of Plant Biology North Carolina State University Raleigh, NC 27695

Dr. Deyu Xie received his B.Sc., (Biology) in 1988 from the Department of Biology, Hunan Normal University, and his MSc (Cytogenetics) in 1993 from the Department of Biology, Beijing Normal University. Dr. Xie earned his Ph.D. (1997) in Plant Physiology and Plant Molecular Biology, from the Department of Cell and Gene Engineering, Institute of Botany, Chinese Academy of Sciences. After a Post-doc with Richard Dixon at the Noble Foundation, Dr. Xie was appointed as an Assistant Professor in the Department of Plant Biology, North Carolina State University (2005), where he has established a research group investigating the role of transcription factors in anthocyanidin biosynthesis.



## 2010 Annual Meeting of the Phytochemical Society of North America

The Phytochemical Society of North America (PSNA) and the American Society of Pharmacognosy (ASP) will meet together at St. Petersburg Beach, Florida, July 10-15, 2010. This will be a large meeting with 500-600 anticipated participants. The meeting venue will be at the Tradewinds Resort (www.justletgo.com). Participants will fly to Tampa and then take a short shuttle across the bay to the meeting site.

There will be 8 symposium topics: 1.Natural Products in Agriculture; 2. Biodiversity; 3.Drug Discovery – Problematic Diseases; 4. Issues in Botanicals; 5. Natural Products, Ecological Roles, and Tritrophic Interactions; 6. Bioassays and Targets; 7. Metabolism and Metabolomics; 8. Metabolic Engineering and Biotechnology. There will be both invited speakers and contributed paper in each symposium.

Aside from a stimulating scientific program, we can offer you near perfect weather in Florida in July, with sea breezes and Gulf temperatures hovering around 86°. Family attractions include Busch Gardens Tampa, Disney World Orlando, the

Salvador Dali Museum in St. Petersburg, and countless others.

We look forward to your participation in this meeting. A meeting site is being established and a call for papers will be sent soon.

The ASP website is www.pharmacognoscy.us

The site for the ASP 2010 meeting is www.asp2010.com.

Visit the PSNA website (www.psnaonline.org) for links and updates on the meeting.

A program committee consisting of leaders from the industrial and academic communities has been assembled and a first-rate scientific program consisting of eight general symposia has been put together covering the following topics:

- \* Natural Products in Agriculture
- \* Biodiversity
- \* Metabolism and Metabalomics
- \* Drug Discovery- Problematic Diseases

- \* Issues and Botanicals
- \* Natural Product Ecological Roles and Tritrophic Interactions
- \* Bioassays and Targets
- \* Metabolic Engineering and Biotechnology

Confirmed Speakers Symposia #1 - Natural Products in Agriculture,

\* Pam Marrone, Marrone Bio-Innovations; "The Potential of Natural Products in Agriculture" \* Sharon L. Doty, University of Washington, "Endophytes for sustainable bioenergy crop production"

Symposia #2 - Biodiversity, \* Susan McCormick, USDA/ ARS; "Trichothecene Triangle – toxins, genes and plant-microbe interactions"

\* Jurgen Rohr [bio], University of Kentucky, College of Pharmacy; "Generation of Biodiversity of Microbial Natural Products through Combinatorial Biosynthesis"

Symposia #3 - Drug Discovery – Problematic Diseases,

- \* Dennis Kyle, University of South Florida, College of Public Health; Title forthcoming
- \* Gunda Georg, University of Minnesota, Masonic Cancer Center; "Natural Products as Promising Therapeutics for Pancreatic Cancer Treatment"
- \* Scott G. Franzblau; University of Illinois at Chicago, Department of Medicinal Chemistry and Pharmacognosy Director, Institute for Tuberculosis Research; "Natural product-based drug discovery for tuberculosis"

Symposia #4 - Issues in Botanicals.

\* Diane Birt, Iowa State University, College of Human Sciences/ Agriculture and Life Sciences; "Using diversity in Echinacea, Hypericum and Prunella to understand and enhance potential health benefits"

\* De-an Guo, Shanghai Institute of Materia Medica, Chinese Academy of Sciences; "Recent Research Progress in Traditional Chinese Medicine"

Symposia #5 - Natural Products: Ecological Roles and Tritrophic Interactions,

\* James Tumlinson, Penn State, College of Agricultural Science, Ralph O. Mumma Professor of Entomology, Director, Center for Chemical Ecology; ""

\* Juergen Gross [bio], Julius Kuhn Institute; "Drugs for Bugs: The potential of infochemicals mediating insect-plant-microbe interactions for (phyto)medical purposes"

Symposia #6 - Bioassays and Targets,

- \* Susan Mooberry, UT Health Science Center, Pharmacology; "Mitosis, the Great Divide: The value of Cell-based Screens to Identify Tubulin-disrupting Antimitotics"
- \* Hendrik Luesch, University of Florida, Chemistry; "Global and Targeted Approaches to Determine Bioactivities and Mechanisms of Action"

Symposia #7 - Metabolism and Metabolomics,

\* Anne Osborne, John Innis Center, UK; "Operon-like Gene Clusters for Adaptive Evolution in Plants"

\* Eve Wurtele, Iowa State University; "Searching the Ttranscriptomic and Metabolomic Space toDdecipher Metabolism and its Regulation: Focus on Complex Polyketides in Medicinal Plants"

Symposia #8 - Metabolic Engineering and Biotechnology, \* Wendy Kelly, Georgia Tech University, Chemistry; "Thiostrepton: a Model System for Thiopeptide Antibiotic Biosynthesis"

\* Eric Schmidt, University of Utah, Molecular Biology; "Supply and Genetic Modification of 'Symbiotic' Natural Products"

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