The Changing Face of ASP: The Role of Women

by Dr. Bill Baker

In the following three essays, Drs. Alice Clark, Tawnya McKee and Barbara Timmermann highlight for us the current perceptions of the role of female scientists in our Society. The pictures they paint are varied, with the international female scientist being least representative while the representation of women among the associate members of the Society are most characteristic of gender distributions found in the general population. Even among the associate membership, however, there is room for improvement, and our major goal as a Society must be maintaining parity of women in full memberships as well as in committee assignments and in award recognition.

After all, over the last 50 years of the Society, women have contributed countless discoveries to our field. Key among these are insights in chemical ecology, discovery of biomedically significant natural products, and in the establishment of molecular mechanisms of bioactivity.

It is impossible to imagine what the field of natural products would look like in the absence of contributions made by women, but the three essays featured herein make the point that we need to be vigilant in encouraging and supporting our best students, regardless of their gender or other demographic. It is our hope that these articles will stimulate further discussion in support of this goal. Please do not hesitate to make your own thoughts on the subject known to me for possible further action.

continued on page 4

ASP Awards for 2008

by Dr. Phil Proteau

A variety of circumstances associated with the joint meeting of the ASP with the AFERP, GA, PSE, and SIF in Athens, Greece (August 3-8, 2008) and the interim ASP meeting in Oxford, Mississippi (April 12-16, 2008) have necessitated an earlier deadline for the 2008 award applications to December 15, 2007. This will allow the ASP Awards Committee to evaluate the applications and decide upon awards in time to allow individuals to make travel arrangements to attend either of the meetings.

In addition to the deadline change, there are also a few changes to the travel awards and grants that need to be highlighted:

Student Travel Grants - Up to three $1000 grants will be available to support travel to the meeting in Athens. Additional travel awards, including the Lynn Brady Travel Awards (up to $600), will be presented to students attending the interim meeting. An indication should be made in the cover letter of the application which meeting will be attended.

Active Member Travel Grants - Up to three $1000 grants will be available to support travel of active members to the meeting in Athens. Additional grants (up to $600) will be available to assist active members to attend the interim meeting. Please indicate which meeting you plan to attend.

continued on page 3
Editor’s Corner

In this issue of the ASP Newsletter, we pay tribute to the achievements of female ASP members. This theme represents the first in a Newsletter series entitled “The Changing Face of ASP”. This series was inspired, in part, by a photograph of the ASP attendees at the 1960 Annual Meeting in Boulder, Colorado. I first saw the photograph pictured on this issue’s cover last summer in Dr. Varro Tyler’s archives at the Lloyd Library, and began to consider how diverse our membership is now compared to the early 1960’s. As we approach our 50th anniversary, the Newsletter will examine various ways the society’s membership has changed.

To explore how ASP has changed with regards to the role of women, I asked for input by a number of female ASP members. Three active female ASP members, Drs. Alice Clark, Tawnya McKee, and Barbara Timmermann, agreed to write essays for this issue of the Newsletter. Dr. Clark has been a ground-breaking member of ASP in many respects. She was the first and, to date, only female President of our Society. She also was the first female Associate Editor of the Society’s scientific organ, the Journal of Natural Products. Dr. Clark, along with her graduate student, Ms. Christina Coleman, have gathered statistics about the role of women in the Society over the past decade. Their analysis of the numbers is eye-opening.

The other essayists are ASP Executive Committee members Drs. McKee and Timmermann. In my original solicitation for these essays, I encouraged the writers to provide thought-provoking pieces, and to hold no punches. I think Dr. McKee’s essay does just that. Dr. Timmermann provides an international perspective on women in ASP.

Other female members have also contributed to this issue of the Newsletter. Long-time ASP member and former member of the Executive Committee, Dr. Marilyn Speedie, tells what it was like in the early days of the society. Former chair of the Younger Member’s Committee, Dr. Sara Crockett, relates her experiences as a female member in more recent days.

I have asked a number of active ASP members, both males and females, to answer the question “How have women influenced the American Society of Pharmacognosy?” These interesting responses are sprinkled throughout the Newsletter.

All of the usual Newsletter columns have focused on female ASP members for this issue. This includes Dr. Leng-Chee Chang’s new discoveries featured in “Behind the Scenes in Pharmacognosy” and a brief history of the important contributions of two female ASP Newsletter editors, Drs. Joy Reighard and Renuka Misra, described in “From the Archives.” Our new member profiles Dr. Susan Hawthorne, who brings an interest in anticancer compounds and equestrian sports.

Clearly there are many achievements to celebrate among the Society’s female members, and also much work still to be done.

The Newsletter also notes the two Society-sponsored meetings for 2008. The deadline for travel awards for these meetings is December 15, 2007. The interim meeting will be in Oxford, Mississippi, and the joint international meeting will be in Athens, Greece. I hope all ASP members will be able to attend at least one of these.

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

Newsletter Staff

Edward J. Kennelly, Ph.D.
Editor-In-Chief

Amy C. Keller
Assistant Editor

James T. Lyles
Layout Editor

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Please send information to:

Edward J. Kennelly, Ph.D.
Editor-In-Chief, ASP Newsletter
Department of Biological Sciences
Lehman College, CUNY
250 Bedford Park Blvd. West
Bronx, NY 10468
718-960-1105
asp.newsletter@lehman.cuny.edu
ASP Awards for 2008

Student Research Award and the Kilmer Prize - Because these awards are limited to meetings held in continental North America, both of these awards will be presented at the interim ASP Meeting in Oxford. Therefore, travel assistance accompanying these awards will only apply to attendance at the interim meeting in April, 2008.

Student Poster Awards - The poster awards will only apply to posters presented at the interim meeting in Oxford.

D. John Faulkner Travel Award and Matt Suffness Young Investigator Award - Recipients of these awards may choose to use the award to attend either of the meetings.

The other award applications that are due on December 15 are those for the Undergraduate Research Award and the Research Starter Grants.

Please contact me, phil.proteau@oregonstate.edu, if you have any additional questions.

ASP Photo Archive Project: Call For Photos

We want your photos!!

As we near the 50th Anniversary of the ASP, we have launched the ASP Photo Archive Project. The intent is to collect photos from ASP meetings and related events from over the past half century and to have them available for viewing, as well as for the Newsletter, Annual Meetings, and other situations where we want to recount our history.

If you have any photos from past meetings, please send them to Dr. John Beutler, who is in charge of organizing our archive. Digital format is the easiest, but he can also manage print photos and slides. Dr. Beutler promises to return your print photos quickly if you send them to him. If you submit in digital format, please be sure that the resolution is good (>800 dpi, preferably 2,000 to 3,000 dpi). The preferred file format is TIFF, but JPEG is acceptable.

Captions with as much information as possible are also desired, but we can also use “mystery” photos to let others assign what is happening! If you have any photos to share, from our meetings from 1959 to 2006, please contact Dr. Beutler at beutler@ncifcrf.gov.
The Changing Face of ASP: The Role of Women

by Dr. Alice M. Clark and Christina M. Coleman

The American Society of Pharmacognosy is a voluntary association of people with common interests in the biology and chemistry of natural products. In addition to being members of this society, we all recognize that we are also members of a larger society of scientists, and of many other societies, be they gender based, ethnic, cultural, religious, recreational, or any other type. We are an incredibly diverse group held together by our common interests in the progress of the field of Pharmacognosy.

While we often think of progress in terms of the science, it is useful to reflect on where our society stands in terms of larger social issues as well, such as the evolving role of women in our chosen field. From a review of the data, it seems that the ASP has been successful in fostering, supporting, and encouraging interest among female researchers. The key indicators that signal our progress are membership, meeting participation, recognitions and awards, and leadership and service. While there may be many reasons for this success, the data show the increasing role of women in the ASP in most of these areas.

In 1961, two years after the formation of the ASP, the percentage of women was just over 10% (out of about 250 members); this is noteworthy given the era and the fact that the ASP was a relatively new and highly-focused society. Since then, the total membership has grown to more than 1,100 individuals with just over 30% of these being women. This speaks well for the Society and is a reflection of both the increasing presence of women in science and the attraction of our discipline for these scientists. In addition, the current associate (student) membership is further indicative of the growing role of women in science, as 45% of approximately 100 younger members are women.

At the 1961 meeting of the ASP, there were a total of 52 participants, four of whom were women (7.7%). Last year, the meeting drew just over 420 total participants, of whom 37% were female. This is a five-fold increase in the number of meeting participants who are women, an eight-fold increase in total attendees, and an increase of about 6% in the overall member involvement in the meetings - remarkable growth in just 45 years. It is also notable that female attendance at meetings for the past 10 years has consistently been between 30% and 40% of the total attendance, with a slight but noticeable trend towards the 40% mark in the most recent years (36.3% in 1993 and 35.9% in 1995, as compared to 38.3% in 2005, 39.7% in 2006, and 37.1% in 2007).

Over the years, the Society has developed a number of recognition mechanisms, especially in support of research and meeting attendance. From reviewing the award recipients for the past 10 years, awards to the ASP’s younger scientists are divided about equally between men and women. This has not been the case with the awards for established members. While much speculation could be made regarding the fundamental reasons for this difference, including the apparent correlation to the relatively equal gender split in the associate membership population, it is interesting that the distribution of awards is slightly different than the overall percentages of female membership and meeting involvement.

While the balance of the awards for younger members is a positive indication, it is also important to recognize that there has yet to be a female recipient of either the Norman R. Farnsworth ASP Lifetime Research Achievement Award, or of Honorary Membership. This may reflect the relatively recent involvement of women in the sciences, in general, and will likely change as the number of senior female members of the Society increases.

As with most other scientific societies, the bulk of the work of the ASP is done by volunteer committee members. In this capacity the role of women in the ASP has also changed significantly, as female committee involvement has doubled.

continued on page 9
When I was asked to write this piece about my impressions of the changing role of women in the ASP I was sent a picture from the 1960 ASP meeting. My first response to looking at the picture was surprise at seeing six women in the photograph of 58 people. I began to wonder who they were. It was easy to think that they were the spouses of attendees, but then I noticed that at least two of them were wearing name tags. Was it possible that they were scientists? Maybe they were botanists or possibly even graduate students? They would be the ones I would love to sit down and talk to about how the Society and the role women play in it has changed over the years.

My first ASP meeting was 1988 in Park City, Utah, where as a graduate student, I was one of the projectionists trying to absorb the talks (and keep the slides in focus) from the little window high in the back of the auditorium without a sound system. I do not even remember if I presented a poster, but I do remember meeting other students and post-docs, some of whom are still friends and colleagues today.

Since that first meeting in 1988, I have managed to go to every ASP meeting except for three (1990, 1991 and 2001). I enjoy them not only for the science presented, but for the friendships formed and sustained at them. While they have perhaps grown by two-thirds over the years, they are still small enough to know many of the individuals that regularly attend, and large enough to meet new folks each year.

If you look at the recorded history of our Society, which is rather sparse from a “publicly accessible” point of view, one could conclude that the role of women is marginal. In 50 years we have had a single female president, only four women on the Executive committee since 1986, and none of our Honorary Members or Research Achievement Awardees are or have been women. Even in the awards for young independent researchers, the Matt Suffness Young Investigator Award has had only two women receive the award since its inception in 1992 but interestingly, five out of 18 research starter grants have gone to women since 1997.

When I have brought up this topic with male colleagues, I have often been told that one needs to be “patient” since the number of women has only been appreciable in the last 30 years or so, and it would take time for the recognitions of women to increase. I have honestly run out of patience on these issues, but I also recognize that the reasons are more complex than many would like to believe.

Looking at the statistics from the 2006 meeting (easiest for me since I was the chair) we had 485 attendees of which approximately one-third were women (160). The number of women is estimated since the Society does not collect either gender or ethnicity information from members; this number was about evenly split between members, students, and postdocs. As students, women are very competitive when looking at the awards. This is true regardless of what award one looks at. Indeed, I think the Society is very welcoming to all students and postdocs regardless of gender. The question then becomes, what happens? If in 50 years we have gone from 10% to 33%, why are there not more recognizable women leaders in the ASP? Is it just the “leaky pipeline” seen in chemistry in general? Perhaps that is part of the answer, but I actually think that we, as a Society, also contribute measurably to the problem. It is true that many more men move into academic positions for lots of reasons that I will not repeat here. (If you are interested, any number of publications have written reports on this issue including C & E News, Science, and Nature also American Associate of University Women and Association for Women in Science). Where do the women go? Whether it is industry, government or biotech, why do they disappear from the Society?

When I was chair of the 2006 meeting, and we were asking the ASP Foundation to apply for a National Institutes of Health meeting grant, I knew that is was critical to invite women and minorities at all levels to participate in the meeting from serving on the committee itself, to being speakers and session chairs. I mentioned on more than one occasion that we should try to have a program that was only women and minorities as the invited speakers and even as session chairs. Predictably (?) this was met with not only laughter and then dismissed, but also more than a hint of hostility. I think that if we had planned such a meeting we would have seen some of the same attitudes, especially if one or more

continued on page 9
The Changing Face of ASP: The Role of Women

by Dr. Barbara Timmermann

When I was approached to give an international perspective for an article on women in the ASP, I thought that this was going to be a rather simple task. After a first look at the ASP membership list, I realized that the number of women members in the society reflected the general situation of women in academia. The list became even shorter when I had to comment on foreign members who are also prominent as well as active in the Society.

Although the number of female members has recently increased across all categories, the ASP still lacks the presence of a substantial number of foreign women who are also well-established and independent scientists in the fields of pharmacognosy and natural products chemistry. Current foreign members are from Australia, Belgium, Brazil, Canada, China, Denmark, Finland, Germany, India, Italy, Madagascar, Mexico, Philippines, Spain, Turkey, and the United Kingdom.

Surprisingly, I noticed a lack of female members from most of the countries in Latin America. Mexico, an exception, has been consistently represented in a very prominent manner by Professor Rachel Mata de Espindola and her research group. Professor Mata, from the Facultad de Quimica at the Universidad Nacional Autonoma de Mexico, is a scientist who has gained the respect and admiration not only from the international natural products chemistry community but from the ASP membership as well. Not only she is an accomplished researcher, she is the leader and mentor to dozens of students who have studied under her guidance and who have become successful scientists on their own merit. Professor Mata is a regular participant at the ASP annual meetings along with her current and former students. The annual contributions by this group to conference presentations can not be overlooked. Professor Mata’s prominent role in the ASP is augmented by her active participations as a member of the Advisory Board of the Journal of Natural Products and as reviewer of manuscripts for this and other top-flight journals. Among other professional positions, she served as President of the Phytochemical Society of North America.

The ASP has other prominent international members including Drs. Vanderlan da S. Bolzani of Instituto de Quimica, UNESP, Brazil, Dr. Gabriele M. Koenig of the University of Bonn, Germany, Dr. Mary Garson of The University of Queensland, Australia, Dr. Dulcie Mulholland of the University of Surrey, U.K., and Dr. Kristin Ingolfsdottir of the University of Iceland. Before her retirement from the University of London, Dr. Margaret Roberts was an active member of the Society.

One must bear in mind that the non-United States female membership in the ASP could be reflective of the actual economic, cultural, pipeline, and other challenges which are particular to individual foreign countries. There is a possibility of a future increase in the ASP membership if the foreign women who are currently training as graduate or post-doctoral students in United States institutions return to their countries as independent scientists to occupy prominent positions in academia or industry.

ASP could become a major force to those women who share primary commitment to research and a conviction that the next generation of scientists must be nurtured.

A brief glance at the ASP website provides an impressive snapshot of the extensive and valuable service currently being provided to our Society by many outstanding women members. Of note under “Officers and Committees” are Cindy Angerhofer, Tawnya McKee and Barbara Timmermann, who serve as three of the four elected members of the Executive Committee (excluding the President, Vice- and Immediate Past- President), while reference to the Journal of Natural Products front page shows Alice Clark as Assistant Editor, and Gabriele Koenig, Rachel Mata, Valerie Paul, Barbara Timmermann and Amy Wright as Advisory Board members.

Looking back to earlier records, I feel that we owe much to Marilyn Speedie and Georgia Perdue who were pioneers in Society committee activities in the 1970s, to be joined by Joy Reighard, Audrey Bingel and Alice Clark in the 80s. Alice also provided outstanding service as our first woman President in 1994-95; to date she has been our only woman President, but this situation will surely change soon.

In addition, our Society is justifiably proud of its international membership, and here again our women members feature strongly. As mentioned above, Gabriele Koenig (Germany) and Rachel Mata (Mexico) are on the Journal Advisory Board, and will soon be joined by Vanderlan Bolzani (Brazil). Other prominent women members include Princess Chulabhorn of Thailand, and Kristin Ingolfsdottir, Rector of the University of Iceland.

I hope I will be forgiven for only mentioning a few names, but I refer you to the website to appreciate the full impact of our women members. Their service adds vitality and strength to the every aspect of our Society activities and organization, and is of the greatest importance to the life of our Society. Their rapidly increasing involvement augurs well for its continued progress and success.

by Dr. Gordon Cragg
Reflections of an ASP Pioneer

by Dr. Marilyn Speedie

I was surprised to learn that I may have been the first woman to serve on the Executive Committee for the American Society of Pharmacognosy. I think that by that time I was accustomed to being the only woman, or one of few women, in many of my professional environments.

I graduated in 1970 in a class of pharmacy students who were 10% women; I was one of few women in my graduate program at Purdue, and then I was the only female faculty member in the Departments of Pharmacognosy and Medicinal Chemistry at the University of Maryland at Baltimore (later to become the Department of Biomedical Chemistry). The Executive Committee was just one more male-dominated environment and I was comfortable there as I am in most such environments.

The ASP certainly had other women attending its meetings and I equally enjoyed the interaction with them and the male members of the Society. These were my friends, my colleagues, my mentors, and in some cases, my collaborators.

Although there are some best-forgotten memories of a few situations of provocative slides and inappropriate remarks, for the most part I felt included and valued, and unaware of my gender.

Certainly I trusted (then and now) that members voted for me because they thought I would do the job at hand, and not because of my gender. My experiences in ASP have served me well as I proceeded to other leadership roles as department head and dean, as well as board positions and the presidency of the American Association of Colleges of Pharmacy.

I remain a member of ASP in honor of what it meant to me as I was developing my scientific career and because I value the discipline, even though my career these days extends far beyond a single disciplinary area.

I am pleased if I have been able to serve as a role model for some younger females as they have contemplated their potential role in their scientific disciplines.
Young Women in ASP

by Dr. Sara Crockett

I was so happy to be invited to write an article for the ASP newsletter on the topic of “The Role of Younger Female Members in the ASP!” But, how difficult to fit into 500 words or less....

When I was 15 years old, I received a test back from my high school chemistry teacher with a 95% score and the comment “Not bad for a girl!” This comment immediately fueled a burning desire in me to outdo every male in the class, and from this perspective, was a positive influence. By the time I entered ASP, I was relatively adept at fielding such, shall we say, politically incorrect comments, with a sense of humor that was, nonetheless, combined with a desire to change the perception, attitude, and behavior toward women in science. I believe that many women currently in the society have had similar experiences, and share this desire.

I was encouraged to see that such positive female role models as ASP members Drs. Barbara Timmermann, Cindy Angerhofer, and Tawnya McKee were members of the executive committee, and that several women played important roles in other official committees. I was proud to note that Dr. Alice Clark had served as ASP president from 1994-1995.

It was less encouraging to observe that no female had been elected president since this date, that the Norman R. Farnsworth ASP Research Achievement Award and Matt Suffness Award had been uniformly given to men, and that few women were members of the editorial boards of the various journals relevant to our field. In addition, it was rather depressing to see that all past and present Honorary Members, as well as all ASP Fellows, are male.

The important remarks to make in light of these observations are, “Why is this the case?” and “What can we do about it?” I believe that an encouraging attitude at the high school (or earlier!) level towards the role of women in science, teamed with education about future study and employment opportunities, is essential. Are you a female member of the ASP? Take part in your local, national or international science fair! Visit your local high school and give a talk about what pharmacognosy is! I did this recently in my tiny home town of Orofino, Idaho (three classes = 46 students), and it was a wonderful experience.

Do you have a college in your town where you could share your experiences studying and working in the field of pharmacognosy? If you work at a university, provide the opportunity for visiting female researchers to talk about their experiences, and learn from their observations! In order to encourage future female participation in the ASP, we must continue to encourage a positive trend in perception, attitudes and behavior towards women in the society.

Young women, as well as men, entering the society must strive for excellence, in order to promote this trend. I firmly believe that members of either gender should be assessed according to their scientific excellence and treated accordingly. Push for involvement in the various committees in the ASP, particularly the Young Members Committee if you are just starting out, and speak out on issues that concern you!

I hope that this article will spark commentary among the members of both sexes and encourage further discussion on this topic. Write to me at crockett.sara@gmail.com. I’m gathering comments and suggestions.

I usually do not like making a distinction between women and men concerning their contributions or influence, or for that matter, anything else. I feel that we are all equal colleagues and should be treated the same. However, as I pondered how women actually have influenced the ASP, I realized that when it comes to influential leadership, women ASP members still have considerable inroads to make. Over the 19 years that I have been an ASP member, I can only recall one woman ASP President, Dr. Alice Clark, and she was the only woman in the history of the society to have that office.

I looked back and noted that were also neither any women Honorary Members nor any women ASP Research Achievement Award recipients. It is only in the last few years that I recall there even being any women Executive Committee members. At the last few Annual Meetings, we have had several excellent women symposium speakers and some excellent women meeting organizers.

Our society has been fortunate to have had some very influential women editors and now a female student as co-editor of the ASP Newsletter. The Newsletter is the main news vehicle of our Society and has certainly been influenced by these women. Now since I am a woman, I pondered how I have influenced the Society. Unquestionably, the Society has influenced me. For example, I was a past recipient of an ASP Research Starter Grant that was extremely helpful in getting my academic and research career started. It allowed me to have considerable influence over my graduate students in their research and to have them compete for several ASP student awards.

But how have I influenced the Society? As a member of several committees, I must say that perhaps I might have influenced the Society that it needs to be more aggressive in recruiting and retaining members. New members are our future, and our Membership Committee has designed a brochure highlighting the ASP and its many benefits of membership. I have also recruited new members, and as a contributor to the Newsletter, I introduce new members to our Society’s membership and let them know the reasons they joined and what they hope to achieve through their membership. I hope to be able to continue to influence this great Society!

Dr. Diane Swaffar
The Changing Face of ASP: McKee Essay

of the speakers proved lackluster. Then why is it acceptable, often without a second thought, for there to be meetings where all invited speakers are men?

We do little, as a Society, to promote or support women within our midst once they are no longer postdocs and so we lose them to other Societies as they develop in their professions. Women do not see the potential to lead and be recognized for their leadership. As a Society, we have not gotten past rewarding the founders for their foresight and skill in starting and sustaining the Society through the years. We have gone outside the club for some Norman R. Farnsworth ASP Research Achievement Awards, but again all have been men.

I am not advocating an overthrow of the current leadership nor completely ignoring the contributions of the founders of the Society. I am suggesting that we need to think outside the box beyond the familiar faces to those who have not been directly a part of the ASP, but whose research has contributed to the use and/or understanding of natural products. I believe that if we work a little harder to identify significant contributors to our broad, interdisciplinary field that we can increase and will increase the number of women recognized by the Society and give others a reason to join or continue as members.

Where do the young members go when they graduate and more importantly, when they move to their first independent job? How many or what percentage work in the broadest definition of natural products or pharmacognosy? These are the ones most likely to be convinced that the ASP is worthy of their time and support. The more we keep active, the more we will increase the number of women. Beyond that, we need to make it a requirement of meeting planners that there be diversity in the invited speakers. It is more work, but if we want to send the message that the ASP truly welcomes and values the contributions women make to our field, I think it is necessary. All of us need to be proactive by submitting nominations of deserving women for Honorary Membership, The Norman R Farnsworth ASP Research Achievement Award, the Matt Suffness Young Investigator Award and others, and finally, we need to identify women to serve on ASP committees and as officers of the Society.

Can I envision the ASP as a Society in which these questions and discussion are irrelevant? Yes, actually I can. One only has to look at other scientific societies like ACS (American Chemical Society) or SIM (Society of Industrial Microbiologists) to see Societies that have moved effectively to include more women in visible roles. In the ASP, it will only happen slowly. First we have move past the point of women setting precedents as award winners or as elected leaders, only then can these events become common place and roughly in keeping with our numbers in the active, participating membership. Our Society can only be strengthened in the process.

The Changing Face of ASP: Clark Essay

in just the past 10 or 12 years. The number of women who held committee positions (standing and ad-hoc committees) went from seven in 1995 and 10 in 1996 to 14 in 2005, 15 in 2006, and 21 in 2007. For perspective, the total number of committee positions (standing and ad hoc) ranges anywhere from 50-80+, and in several instances, a single woman or man may hold more than one position in a given year. As committee members, these women are in key positions for influencing and mentoring younger female scientists. They also have influence on how the Society continues to grow and evolve with regards to female participation and recognition. In addition, as more women accept leadership roles on different committees, it is more likely that there a another female will be elected to lead the Society in the near future.

In conclusion, the growth and evolution of the ASP has, perhaps, reflected the best case scenario of the increasing role of women in the sciences. Female membership, meeting participation, and leadership have consistently increased, as has recognition for younger female members. As women continue to take a role in the future of the Society, the ASP can pride itself on its increasing recognition of the intellectual role of women in the sciences. As we look towards the next 50 years of the ASP, we must remember that it is incumbent upon us as scientists to continue to take full advantage of the intellectual capacity available to us, regardless of our individual affiliations with other societies.

Note: Data was collected from the ASP website, Current Members Directory, 1961 Members Directory and Conference Registration List, Conference Abstract Book, Committee and Registration Lists for 1993 and 2007.
In Memoriam: Dr. Clifford Chang

By Drs. Jerome Gurst and Peter Tanner

Long-time ASP member, Dr. Clifford Chang died on Monday, October 15, 2007 in Honolulu, Hawaii following complications from heart surgery. Dr. Chang was a member of the Chemistry Department at University of Western Florida from 1968 until his retirement in 2003. After living in Pensacola, Florida for 40 years, he had returned to Hawaii in December 2006.

ASP President Dr. Bill Baker said, “Cliff, besides a close family friend, was a tireless advocate for natural products and an active member of the ASP. He was best known in the community for his work on isonitriles but was responsible for the exposure of generations of undergraduate students to natural products research. Always willing to lend his help and share his enthusiasm for the field he loved, he was the consummate Gentleman Scientist. He will be very much missed.”

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

ASP Past President, Dr. Roy Okuda, knew Dr. Chang since the early 1980’s, and recalled, “Cliff was one of the first Ph.D. students of the late Dr. Paul J. Scheuer of the University of Hawaii at Manoa. He began his graduate work about 45 years ago, at a time when the field of marine natural products was still relatively obscure. His papers on sea urchin pigments (the echinochromes and spinochromes) from the mid-1960’s are among some of the early classics in the field. Throughout his nearly 40-year career at the University of West Florida, he maintained his research activity by spending summers and sabbaticals in labs at places such as Oklahoma, Santa Cruz and Hawaii. Cliff has contributed a number of significant review articles to the field, which have become useful references. He was always a cheerful and happy person, and was looking forward to his returning to his home in Hawaii and enjoying his retirement.”

Dr. Chang accepted an academic appointment at the University of Western Florida in 1968 as an assistant professor and worked his way through the ranks to full professor. During his tenure at the University of Western Florida, he conducted research in organic chemistry, particularly marine natural products chemistry, and worked with scientists at Monsanto (now Solutia) during many summers.

Dr. Chang spent a sabbatical leave at the University of Oklahoma, and a number of summers associated with the University of Hawaii. He authored five book chapters, 29 journal articles, and seven technical reports at Monsanto (Solutia). His teaching was recognized with a Teaching Incentive Program Award.

Throughout his career, Dr. Chang worked with the Pensacola Section of the American Chemical Society (ACS) in a variety of positions including the Chairmanship. Perhaps most significant is that he served as a representative of the local section at national meetings of the ACS as Alternate Councilor and then Councilor for almost 30 years. In addition, Cliff was very active with the American Chemical Society as member of numerous national committees.

He is survived by his mother and his siblings, two sisters and three brothers along with their families. Condolences may be sent to the family (Dennis Chang, 2132 Mahalo Street, Honolulu, HI 96817). In lieu of flowers, the family has suggested that memorial donations be directed to the Chemistry Department Scholarship Fund through the University of Western Florida at http://uwf.edu/chemistry/giving.htm.
The National Center for Natural Products Research (NCNPR) within the School of Pharmacy at The University of Mississippi is pleased to announce the 7th Annual Oxford International Conference on the Science of Botanicals (ICSB) in conjunction with the 4th Interim ASP Meeting, University, Mississippi, from April 12-16, 2008. The conference is supported by a cooperative agreement between the NCNPR and the Center for Food Safety and Applied Nutrition (CFSAN) of the United States Food and Drug Administration (FDA). This conference is also being co-sponsored by the Shanghai Institute of Materia Medica (SIMM)/CAS, China, The Council of Scientific and Industrial Research (CSIR - India), and the Society for Medicinal Plant Research (GA).

The purpose of this conference is to review, discuss, and explore the confluence of current research topics in natural product chemistry, pharmacognosy and botanicals. Topic areas will include such issues as authentication, cultivation, collection, post-harvest practices for producing quality plant material, chemical and toxicological methods for the quality and safety assessment of botanicals, natural products’ impact on tropical diseases, and recent advances on central nervous system research utilizing natural products. Each session will open with a plenary speaker outlining the current approaches, limitations, and research needs of the topic area.

Contributed presentations, both oral and poster, are invited. The deadline for abstract submission is December 15, 2007. Each session will open with a plenary speaker outlining the current approaches, limitations, and research needs of the topic area.

Where can I get more information about this conference?
The conference has established a website, www.oxfordICSB.com, and an e-mail address, icsb@olemiss.edu, for those that need further information. The website will be updated regularly providing pertinent planning and scheduling information for the conference and attendees.

Where is Oxford, Mississippi, and how do I get there?
Oxford is approximately 75 miles south of Memphis Tennessee. Driving directions are available at the conference website. Memphis (MEM) is an international hub for Northwest airlines and there is a direct flight from Amsterdam on KLM. There are shuttles available, but for groups it may be more convenient to rent a vehicle.

How many people will be attending?
Since this conference is also being co-sponsored by GA, CSIR-India, and SIMM-CAS, we are anticipating a significant international as well as national attendance with 300 expected participants.

Will there be travel grants for attending the meeting?
Yes. You should stay tuned to the ASP website for announcements about the deadlines for submitting travel grant applications. The deadline will be earlier than in previous years, and falls on December 15, 2007.

What is the weather like in Oxford, Mississippi in April?
The average temperature is in the mid 60’s °F (18 °C) with a chance of spring showers. So bring a light jacket and come enjoy a southern spring.

What is Oxford, Mississippi like?
Oxford is a thriving community with a quaint Deep-South hometown appeal. The city is known as the home of Nobel Prize winning author William Faulkner and has been featured as a literary and arts destination in such publications as Southern Living, Conde-Nast Traveler and Modern Maturity. Visitors appreciate Oxford for its Southern hospitality, sophisticated shops and excellent restaurants. The heart of Oxford is its square, which is surrounded by a variety of shopping and dining venues to suit many tastes. Of course there are the southern food staples that every visitor should
try, including BBQ, fried catfish, crawfish and the “meat and three veggie plate meals” that can be found at many of the local establishments for lunch. But if you are a vegetarian, do not be afraid as the food selection in Oxford contains more than just meats and fried items.

For accommodations, the hotels reserved for the conference are in close proximity to both the square and the Oxford conference center. Oxford does not have a mass transit system but with a town this small you can easily get around. If needed, there is a local taxi service. The conference will be providing shuttle service to and from the hotels to the conference center at the start and end of each day.

Some final thoughts:

The ICSB has grown significantly since its inception but we still maintain the one-on-one interactions that the attending scientist will walk away with due to our genuine hospitality and attention to details. Since this year the conference is in conjunction with the ASP 4th Interim Meeting, we anticipate that the scientific exchanges will be on a much larger scale. So come on down, relax, and enjoy some southern hospitality along with an in-depth and diverse scientific program.

For further information please contact:

Dr. Ikhlas Khan
ICSB@olemiss.edu
www.OxfordICSB.org

ASP Members Awarded Program Project Grant

by Amy Keller

ASP Member Dr. A. Douglas Kinghorn, Jack L. Beal Professor and Chair at Ohio State University (OSU) College of Pharmacy, in collaboration with nine other ASP members, has been awarded a $7 million Program Project Grant (PPG) from the National Institutes of Health’s (NIH) National Cancer Institute (NCI) for a project entitled, “Discovery of Anticancer Agents of Diverse Natural Origin.”

The project’s aim is to isolate new anticancer compounds from tropical plants, aquatic cyanobacteria, and fungi. This research involves screening extracts from these organisms in bioassays at OSU College of Pharmacy, University of Illinois (UIC) at Chicago, Illinois, Research Triangle Institute, Research Triangle Park, North Carolina, and Bristol-Myers Squibb, Pharmaceutical Research Institute, Princeton, New Jersey.

The five-year project consists of three phases. The first, Project 1, is titled “Extraction, Dereplication, Isolation Chemistry (Plants), Biological Evaluation” and is led by Dr. Kinghorn, in collaboration with ASP member Dr. Esperanza J. Carcache-Blanco, Co-Project Leader, Dr. Heebyung Chai and ASP member Dr. Young-Won Chin, Co-Investigators, UIC.

Project 2, entitled, “Plant Acquisition, Cultured Cyanobacteria, Isolation Chemistry (Cyanobacteria), and Structure Elucidation” is led by ASP member Dr. Jimmy Orjala, University of Illinois at Chicago Project Leader, and ASP members Drs. Norman R. Farnsworth and D. Doel Soejarto, Co-Project Leaders.

In Project 3, “Fungal Acquisition, Isolation Chemistry (Fungi), Structure Elucidation, and Bioassay” consists of ASP member Dr. Nicholas H. Oberlies, Research Triangle Institute, Project Leader, ASP members Drs. Mansukh C. Wani and David J. Kroll, Research Triangle Institute, Co-Project Leaders. ASP member, Dr. Cedric J. Pearce, Mycosynthetix, Inc., Durham, North Carolina, is a collaborator.

Dr. Kinghorn notes, “We are very fortunate indeed to get this collaborative PPG funded by NCI, and it is a very positive sign of support for the field of natural products research. We have a very good blend of very experienced and younger investigators in this project team, and the manner in which the project has been structured will give several of the younger members of the group a chance to develop project management skills over the next few years.”
Dear Colleagues and Friends,

We have the privilege and pleasure to inform you that the 7th Joint Meeting of the scientific societies AFERP, ASP, GA, PSE, & SIF will be held in Athens, Greece at the Athenaeum Intercontinental Hotel on August 3-8, 2008.

Our primary intention is to gather experts and scientists in natural products with pharmaceutical, nutraceutical, cosmetic, and agrochemical interest from all over the world and invite them to present their researches and to describe current scientific trends. There will be many opportunities during the Congress, for extensive discussions and exchange of knowledge and views.

The Scientific and the Organizing Committees, as well as the five scientific societies cordially invite you to participate, thus decisively contributing to the Congress success.

With the warmest salutations,

The President of the Congress
Professor Leandros Skaltsounis
Prepare for Athens: Important Greek Phrases!

by Dr. Nick Oberlies and Aristea Varouhakis (Nick’s Mom)

I hope you are starting to put your plans together for the Annual Meeting in Athens this coming summer. It is not too early to start looking for flights.

Below are some simple Greek phrases that will hopefully help you get around Greece. There are a few things to remember in this regard. First, very few people in the world speak Greek fluently. Thus, Greeks will greatly appreciate the fact that you are trying to speak their language. You will win new friends by doing so. Secondly, remember that many words in English are derived originally from Greek. So, you might be surprised how many words you know. For those of you who are fans of “My Big Fat Greek Wedding”, it is true that all American-Greeks know these derivations. My yaya (grandmother) used to point this out all of the time. Finally, most Greeks know at least a little English (and many are quite fluent, especially in the major cities). Thus, between what ever broken Greek you can muster from the examples below and their ability to speak English, I am very confident that you will not have any problems.

So, print out the guide below, take it to your favorite Greek restaurant and start practicing your Greek for our Annual Meeting in 2008! Check out the ASP website frequently, as we will post some travel tips there too as the date approaches.

In the Greek language, nouns are either male or female. Before each noun you will see either the word toh, tah, or tah, (male form of “the”), oh, (male form of “the”) or toh (neutral form of “the”). Tah, is the plural of toh. The word “toh,” is pronounced as we would say TOE.

Where we have put the letter “h” in words - it is not pronounced. The exception is the notation below for “good night.”

In pronouncing the letter “r” it is rolled off the tongue.

I will CAPITALIZE and underline, the part of the word which is accented.

Hello/goodbye/toast to your health: YAH-sou
Good morning: kah-lee-MEH-rah
Good night: kah-lee-nee-eeh-tah (pronounce the “h” in ee) 
Husband: oh, see-zeeh-ghos
Wife: ee, ghee-NEH-kah
Please / if you please?: SEH, pah-rah-keh-LAH
Thank you: eef-hah-rees-TOE
The Coffee Shop... toh, kah-feh-nee-oh
The Coffee Shop... also referred to as: ee, cah-feh-TEE-ree aw (similar to how we’d pronounce cafeteria)
The Bathroom/Toilet..... ee, twa-LAH-tah
Where is the bathroom... pou, EH-neh, ee, twa-LAH-tah, SEH, pah-rah-keh-LAH?

If you can remember “where is” and then start pointing, you will get pretty far. Where is:
Where is... pou, EE-neh
How much does it cost?..... PO-so, EE-neh?
How much is: PO-so, EE-neh (add what you are asking about)
Beer: ee, BEE-rah
Book: toh, vee-VLEE-oh
Coffee: oh, kah-FEHS
Flag: ee, see-MEH-ah
Flowers: tah, lou-LOU-thee-ah
Hat: toh, kah-PEH-loh
Ice cream: toh, pah-ghoh-TOH
Map: oh, HAR-tees
Picture: ee, toh-toh-ghr-ah-TEE-ah
Shirt: toh, pou-KAH-mee-soh
Shoes: tah, pah-POU-tsee-ah
Ticket: ee, tee-KEH-tah

How much is: How much does it cost?

Outdoors
Bird: toh, pou-LEE
Cat: ee, GAH-tah
Dog: oh, SEE-los
Moon: toh, fen-GAH-tah-ree
Sky: oh, ou-rah-NOS
Star: toh, ah-STEH-ree (plural: tah, ah-STEH-ree-ah)
Sun: oh, EE-lee-oh
Tree: toh, THEN-throh

Things
Airplane: toh, ah-eh-rah-PLAH-neh
Ball: ee, BAH-lah
Bed: toh, kreh-VAH-tee
Boat/Ship: toh, PLEE-oh
Bus: toh, eh-lef-the-REE-oh
Cab: toh, tah-XEE
Car: toh, af-toh-KEE-nee-toh
Chair: ee, kah-REE-klah
Clock/Watch: toh, roh-LOH-ee
Door: ee, PORH-tah
Eye Glasses: tah, ghee-ah-LIA
Pillow: toh, mah-ksee-LAH-ree
Soap: toh, sah-POU-nee
Subway: toh, ee-lef-tree-KOH
Table: toh, trah-PEH-zee
Train: toh, TREH-noh
Towel: ee, peh-TSEE-ah
Window: toh, pah-RAH-thee-rah

continued on page 15
Food / Restaurant Things

Apple: toh, MEE-loh
Banana: ee, bah-NAH-nah
Bread: toh, psoh-MEE
Butter: toh, VOU-tee-rhoh
Cup: toh, flee-TZAH-nee
Dish: toh, pee-AH-toh
Egg / Eggs: toh, ahv-GHOH / tah, ahv-GHAH
Fish: toh, PSAH-rhee
Fork: toh, pee-RHOU-nee
Glass: toh, poh-TEE-ree
Grapes: tah, stah-FEE-lee-ah
Kalamari: toh, ka-la-MAH-ree (same as in English)
Knife: toh, mah-HEH-ree
Meat: toh, KREH-ahs
Milk: toh, GHAH-lah
Plate of Appetizers: pee-kee-LEE-ah
Potato: ee, pah - TAH - tah
Spoon: toh, kou-TAH-lee
Water: toh, neh-RHOH

Can you help me please?
boh-REES, nah, meh, voy-ee-THEE-sees, seh, pah-rah-kah-LOH?

You are very lovely: EE-seh, poh-LEE, oh-RAY-ah

How to order food: Most Greeks speak English, so it shouldn’t be too much of a problem.

Some Suggestions:
- Meh-ZEH-thes -appetizers (on menu from which to select)
- Or choose pee-kee-LEE-ah - a good bet in bars, grills, and sea-side cafes. This is a platter of a variety of eats. Usually a couple of stuffed grape leaves, meatballs, feta cheese, calamari, smelt, cucumbers, sausage, etc. It all goes down very well with beer, wine, or ouzo.
- Dol-MAH-thes - stuffed grape leaves
- Sah-LAH-tah, hor-yia-tee-KEE - Greek peasant salad (cucumbers, tomatoes, feta, with oil/vinegar and oregano).
- Sou-VLAH-kia - usually in choices of beef/pork; lamb; chicken; fish
- Mou-sa-KAH - baked eggplant/cheese dish; sometimes with potato, sometimes with meat
- Koh-TOH-pou-loh - grilled Greek chicken with potatoes
- Ar-NEEH - lamb on the spit with Greek potatoes
- Kah-TSEE-kee - goat on the spit (Nick’s favorite)
- yeh-mee-STAH - rice and meat stuffed vegetables; usually tomatoes, green peppers, zucchini, or eggplant
- Pah-STEE-chee-oh - layers of tube macaroni with meat sauce, with cream sauce on top

Many areas of Athens and other places in Greece (including the islands) have their own specialties. Be adventurous and try them! If you are in doubt, just ask the waiter to bring “what ever is good.”

Pastries you might like:
- Bah-klah-VAH - well known in the US as well.
- Ghah-lah-toh-BOO-ree-koh - custard-filled layers of filo dough, then drenched in honey, sugar water, butter, and baked. Very tasty!
- Kha-tah-EE-fee - a shredded wheat looking dessert - it is actually shredded filo dough, with nuts throughout, drenched in honey, sugar water, butter, and baked.

Ouzo should be tried at least once: It’s a clear liquid, and usually given to you in a small bottle or small carafe. It tastes a bit like licorice. They will also give you a glass of ice and a small carafe of water. Pour some ouzo into the ice and add enough water to float the cubes. It’ll turn milky-white, and will be ready to drink. Ouzo is to be sipped, some times prior to a meal.

Greek wines / Greek beers: Greece has many fine wineries, primarily down in Central-Peloponnese and the islands. Many restaurants will have their own home made wine that they serve in a carafe. If they have it, you should try it. Retsina is very common and is an acquire taste (it has some pine resin in it). However, not all Greek wines are Retsina, so be adventurous. The most common beers in Greece are Heineken, Amstel, and Mythos. Nick highly recommends the latter.
ASP 50th Anniversary Logo Contest

by Dr. Roy Okuda

In 2009, the ASP will celebrate the 50th anniversary of our founding in 1959. For this special occasion, a special logo will be used to mark this milestone. The logo will be used in various ways, such as in the ASP Newsletter, printed items for the Annual Meeting, a special pin, and other ways, so it will have a lot of viewings!

We know the ASP is full of creative minds, so to encourage logo design submissions, the ASP Foundation (ASPF) is sponsoring a logo design contest. The guidelines for preparing and submission designs are listed below. The designer of the selected logo will receive one complementary registration for the 50th Anniversary Meeting of the ASP in Honolulu, or $500 if unable to attend the meeting.

The rules for the logo design contest are below:

1. Submission must be by an active ASP member. Younger members are especially encouraged to contribute!
2. Submissions should at minimum, include the following design elements:
   - ASP “flower” logo
   - the years “1959-2009”
3. While not required, reference to the 50th or Golden Anniversary may be included, if it can be made to fit appropriately.
4. The logo should generally represent the broad nature of ASP and its members, and not focus on one specific area. However, one possible approach is to have, for example, four “panels” each representing different areas, such as plants, microbes, and marine organisms.
5. The logo should be versatile enough to be used on pins (1”), printed matter for the Annual Meeting, and the ASP Newsletter.
6. No copyrighted or trademarked images should be included in submissions.
7. The selected logo becomes the property of the ASPF, and may be used for any purpose determined by ASPF. The basic elements of the logo may be used by ASPF as a template and modified.
8. If the design is submitted by a team of two or more persons, the team will divide the winning proceeds.
9. Submissions should be sent as pdf files to: RobertKrueger@ferris.edu

Deadline for all submissions is March 1, 2008. A panel of judges appointed by ASPF will determine the winning logo design.
The Newsletter is pleased to announce the following upcoming conferences and meetings. The events portrayed here reflect what listings and notices the Newsletter has specifically received. For a more extensive calendar, please visit the ASP website at [www.phcog.org](http://www.phcog.org). If you have a conference or event you would like mentioned, please send us relevant information, including any graphics or appropriate fliers to [asp.newsletter@lehman.cuny.edu](mailto:asp.newsletter@lehman.cuny.edu).

<table>
<thead>
<tr>
<th>Conference</th>
<th>Location</th>
<th>Dates</th>
<th>Website</th>
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<tbody>
<tr>
<td><strong>49th Annual Meeting of the Society of Economic Botany</strong></td>
<td>Durham, North Carolina</td>
<td>June 1-5, 2008</td>
<td><a href="http://www.econbot.org">www.econbot.org</a></td>
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<tr>
<td><strong>The 49th Annual Meeting of the American Society of Pharmacognosy/7th Joint Meeting of AFERP, ASP, GA, PSE, and SIF</strong></td>
<td>Athenaum Intercontinental Hotel, Athens, Greece</td>
<td>August 3-8, 2008</td>
<td><a href="http://www.phcog.org/AnnualMtg/Athens.html">www.phcog.org/AnnualMtg/Athens.html</a></td>
</tr>
<tr>
<td><strong>The 4th Interim Meeting of the American Society of Pharmacognosy and 7th Annual Oxford International Conference on the Science of Botanicals</strong></td>
<td>University, Mississippi</td>
<td>April 12-16, 2008</td>
<td><a href="http://www.oxfordicsb.net">www.oxfordicsb.net</a></td>
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</tbody>
</table>
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 10 domestic full members, one international full members, and seven associate members. We look forward to meeting you and learning more about you and your work.

### Full Members
Dr. Brian O. Bachmann  
Nashville, Tennessee

Dr. Mark Bohlke  
Chestnut Hill, Massachusetts

Dr. Susan Hawthorne  
Belfast, Northern Ireland

Dr. Haidy N. Kamel  
University, Mississippi

Dr. Toni M. Kutchan  
St. Louis, Missouri

Dr. Jung Yeop Lee  
Ann Arbor, Michigan

Dr. Dudley G. Moon  
Albany, New York

Dr. Vanisree Mulabagal  
East Lansing, Michigan

Daisuke Takahashi  
Bethesda, Maryland

Dr. Coran Watanabe  
College Station, Texas

Dr. Meinhart H. Zenk  
St. Louis, Missouri

### Associate Members
Dr. Kofi Annan  
London, United Kingdom

Mr. Jesse D. Carty  
Omaha, Nebraska

Mr. Aminul Islam  
Kolkata, India

Ms. Naira Quintana  
Fort Collins, Colorado

Afsaneh Rajabi  
Tehran, Iran

Sarah J. Robinson  
Santa Cruz, California

Ms. Jaclyn Marie Winter  
La Jolla, California
Meet a New ASP Member

by Dr. Diane S. Swaffar

ASP welcomes many new members from all over the world to the Society this year. For this “Women in ASP” issue, we are pleased to feature a new female member, Dr. Susan Hawthorne. She is a Lecturer in Pharmacology at the top-ranked School of Pharmacy at Queen’s University of Belfast (QUB), in Northern Ireland. She lectures on pharmacology and veterinary pharmacy to pharmacy students. We are grateful to Dr. Hawthorne for giving us the opportunity to get more acquainted with her.

How did you hear about the ASP?
I heard about the Society through reading articles published in the Journal of Natural Products.

Why did you join ASP?
Pharmacognosy is a relatively new area for me so I decided to join the Society to meet people working in related areas and to keep up to date with current research.

What are your research interests in pharmacognosy?
I have had a long standing interest in oncology and have many years experience in the design/synthesis of protease inhibitors and molecular enzymology. Recently I have become interested in the use of natural fruit extracts, such as blueberry and pomegranate, in the treatment of both prostate and breast cancer, and whilst this is a novel area of research, my team has produced some interesting in vitro results to date. We are now starting to look at the effects of these natural fruit extracts in in vivo models.

What is your scientific and academic background?
I obtained a B.S. (Hons.) in Biochemistry from QUB. My Ph.D. in Biochemistry was also obtained from QUB and involved investigation of the proteases secreted by the liver fluke Fasciola hepatica and their role in survival, metabolism and feeding of the parasite. As a Wellcome Trust Research Fellow, my postdoctoral work, whilst still involving proteases, focused on the enzymes produced by various cancers. Since becoming a member of academic staff at the School of Pharmacy QUB, I have concentrated my research on the role of proteases in the biology and progression of prostate, breast, and esophageal cancer.

What would you like to achieve through your membership?
I hope to develop international collaborations with colleagues in related areas and to develop a natural products research program within my School. I would also like to promote pharmacognosy within the United Kingdom, as it is not taught widely.

What do you like doing in your spare time?
My boyfriend and I have just bought a farm to start breeding horses and I am currently undertaking British Horse Society examinations so that I can become a registered riding instructor.

Is there anything else that you would like other ASP members to know about yourself?
As this is a new area of research for me, I would like to develop collaborations with researchers working in similar areas. I can be contacted at s.hawthorne@qub.ac.uk.

Thank you, Susan and we are glad to have you as a new member!
How did you become interested in marine organisms and anticancer compounds?

I have always been interested in the field of drug discovery from natural sources as new chemotypes for drug development. I was drawn to marine organisms because they offer a rich source of unexamined potent bioactive molecules. They offer structural diversity and complex stereochemistries that are valuable as templates for exploring novel molecular diversity.

Anticancer agents interest me because marine organisms, such as those found on sponges, are predators that live on other living beings to survive. They often produce foul-tasting toxins that have evolved as chemical weapons for use against other sponges. These chemical entities may have potential as anticancer agents. Sponges are known for their symbiotic relationships with many different kinds of bacteria that are potential sources as anticancer agents.

Who in your laboratory carried out the research?

Dr. Guangmin Yao, a postdoctoral associate, carried out the research. He obtained his Ph.D. degree from Shanghai Institute of Materia Medica, China.

Mr. Nicholas Vidor, a former M.S. student at the University of Minnesota Duluth (UMD) helped in performing the hyphae formation inhibition assay, HPLC isolation, and NMR structure elucidation.

Mr. Adam Foss, a former B.S. student at UMD, also helped in isolation, performing bioassays, and working as a team member on this project.

Many others, mostly undergraduate students, helped to build up and contribute to our research team.

Could you provide a brief explanation of the work and results in your own words?

Recently, protein kinases have emerged as extremely promising molecular targets in anticancer therapy. The Ras/Raf/MEK pathway is necessary for Ras regulated proliferation, and plays a role in tumorigenesis and cancer progression. We are focused on the search for naturally occurring Ras/Raf kinase inhibitors. Two whole-cell models were adopted in our study. Hyphae formation inhibition assay, HPLC isolation, and NMR structure elucidation.

*Lemnalia* sp. was selected for further investigation as one of our promising leads. In this study, four new decalin-type bicyclic diterpenoids, and one known compound, were isolated from an extract of the marine soft coral *Lemnalia* sp.

The challenge is in the isolation and structure elucidation of these minor components. These diterpene glycosides showed activity in the hyphae formation inhibition assay against *Streptomyces* 85 E and will be further evaluated in more complex and selective secondary assays.

What impact does this research have on natural product science or the field of bioactive compounds?

We hope the natural products provide some starting leads or structural insights for further investigation as protein kinase inhibitors. Also, the structures may provide some biosynthesis pathway insights in the field.

continued on page 21
You have achieved a lot as a natural product chemist. Do you have any advice or insight to share with other women ASP members starting out on their careers?

**As an educator:** Love and enjoy what you are doing! The presence of young promising students have always inspired me to become a better mentor and an inspirational teacher and researcher. I find it very rewarding to enhance the growth of students in scholarship and to help their careers flourish in the scientific research community, I try to achieve these goals while building a trusting and respectful relationship with students, and researchers.

**About Your Attitudes:** Focus and perseverance! Also, persistence and endurance in writing and submitting grant proposals. See yourself as successful and be a positive thinker. Being positive can help you work through some pretty difficult situations. Hire well-motivated people. Cultivate a spirit of team work and a sense of fairness.

Be open-minded and open to growth. Be people-oriented, and willing to expend a good deal of effort building positive relationships with students and colleagues.

Currently, I am working at the College of Pharmacy at University of Hawaii, Hilo. “The Aloha Spirit” in Hawaii refers to the coordination of mind and heart within each person. It also is the way of treating others with respect, generosity and kindness, truthfulness, honesty, and discipline.
Brief News From Washington

Dr. Georgia Perdue

- **Phase 0 (pre-Phase I) Trials**—The National Cancer Institute (NCI) unveiled the Phase 0, or in FDAs terminology, pre-Phase I trials, at its September National Cancer Advisory Board (NCAB) meeting. In his overview, Dr. James Doroshow, Director, Division of Cancer Treatment and Diagnosis, noted that “most drugs fail late in development leading to enormous risk... Seventy percent of drugs in Phase II fail to enter Phase III; 59% that enter Phase III fail. This might be improved with more effort in early drug development...” said Dr. Doroshow. “If we’ve progressed from thin-layer chromatography to LC Mass specs etc., perhaps we ought to... change the models of our clinical trial designs because they have been the same since I was doing TLC....” He advises using “very intensive small early trials... to get the information that will aid drug development. The goal of these small trials is to see whether a dose can be delivered through a modulated target and allow for better understanding of dosing.” He hopes to “meld the drug development resources of his division with the imaging activities in the clinical center... into a fruitful partnership. Early trials help get rid of ineffective drugs that don’t hit their target early... and have poor bioavailability.... They fail fast and early.... I can’t emphasize enough...that industry does a lot of work in this area but academicians seldom [have funds to] develop appropriate levels of expertise in useful assays.... They don’t really do the required preclinical biomarker studies....” NCI took one of Abbott’s failed compounds, ABT-888, and put it through the “first submitted Phase 0 small-molecule oncology trial.” After filing the exploratory IND, NCI proceeded with the trial using only 13 patients. Based on the data obtained, Abbott changed its drug development program “very substantially.” Dr. Doroshow emphasized that “the timeline for this trial was greatly decreased.” He cautioned that Phase 0 “will not be useful for cytotoxic agents within a narrow therapeutic index... nor for agents used on an intermittent schedule at relatively high doses.” The aim is for Phase 0 to result in “more informative Phase I trials.” All Board members encouraged Dr. Doroshow to publish this information, because as one member pointed out, a Tufts University Study showed the average time for drug development is 14.2 years at a cost of $980 million. NCI Director, Dr. John Niederhuber, wants to see the timeline cut in half thus saving billions of dollars. Phase 0 is poised to save time and money.

- **On December 7** the Advisory Committee to the Director (ACD), National Institutes of Health, (NIH) heard the interim report from the ACD working Group and the NIH Steering Committee. The “Self-Study by the NIH in Partnership with the Scientific Community to Strengthen Peer Review in Changing Times” was presented by co-chairs Lawrence Tabak, Director, National Institute for Craniofacial and Dental Research and Keith Yamamoto, University of California-SF. NIH Director Elias Zerhouni said “The Peer Review process is the cornerstone of how NIH works. For over 60 years it has proven to be the best model, [now emulated] by Europe, Japan, China and Australia. For this review, “NIH sought input from scientific societies, investigators, grantee institutions, voluntary health organizations and its own staff.” Dr. Zerhouni’s charge was: “Fund the best science by the best scientists with the least administrative burden....” The following significant challenges were identified and potential solutions sought: **Reaffirm and Emphasize Core Values of Review; Reduce Administrative Burden; Support for New Investigators and Strengthen Review Leadership and Culture of Review.** Some solutions include: **Editorial Board Model** for reviewing applications; **Innovative R01s,** --a seven page application for a five-year, focused project; **Transformative R01s,** “Send us your boldest stuff.” This is a 10-year award, no questions asked; **Triage and Prioritization consists of a single criterion:** what is the impact of the research, and does it matter? Also, using the “revolutionary” rank instead of scoring and **Support for New Investigators,** shorter applications and increased emphasis on quality of PI. After pilots are designed early in 2008 and NIH staff, scientific societies, NIH Advisory Councils and Congress briefed, the new NIH Peer Review Policy will emerge.

- **Dr. Niederhuber** told the NCAB that the “conduct of science will be dramatically different in about five years.” The trend is for more groups to work together. We are operating on a 70-year old system.” He emphasized the importance of incorporating the **biological sciences with physics and mathematics.** “I have challenged Dr. Ana Barker to get some of the gurus together to think about this. Perhaps we can set up four or six centers across the country.” In defending NSF’s budget recently, **Representative Vernon Ehlers (R-MI), a physicist,** proved the point. He said on the House floor, “Years ago when I was a graduate student we were spending tremendous amounts of money to examine the behavior of elementary particles, protons, neutrons, etc. No one could ever have imagined a practical use. The results of that research led to the development of a CAT scanner and the MRI. Who would have ever thought that elementary particle physics would lead to major findings in medicine which every doctor relies on today.”

*continued on page 23*
• Dr. Niederhuber also told the NCAB that NCI is working “extensively and energetically to build more and more public-private partnerships.” NCI has an important role, maybe even a mandate to be the ... honest broker, the facilitator, the enabler between academia and other parts of the government.”

• At the November NCI Board of Scientific Advisers meeting, Dr. Niederhuber said that NCI is leading an NIH effort to enhance the Small Business Innovative Research (SBIR) program, a $640 million dollar trans-NIH “venture capital fund.” The institute is creating the first multiple institute support center which will include members from industry, all in an effort to make a more effective SBIR program.

• The NCI Director is a strong advocate of the Rapid Access to Interventions Development (RAID) Program. At both the NCAB and the BSA November meetings Dr. Niederhuber said that “RAID bridges the gap between a lead discovery and a drug and provides the academic and small business communities access to [NCI’s] pre-clinical contract research resources....We are strengthening [the program] and making it more robust.” RAID helps with the acquisition and formulation of bulk drugs; produces biologicals; tests the efficacy of agents in animals and studies the pharmacology and toxicology.

• NCI’s Natural Products Repository of 75,000 plant and marine specimens, is featured in the electronic November 20 issue of the National Cancer Bulletin: cancer.gov/ncicancerbulletin

• Stuart Schreiber, Ph.D., has been appointed to the NCI Board of Scientific Advisers, a post he held almost 10 years ago. At that time he was part of the group that reviewed the Developmental Therapeutics Program; it endorsed the natural products program.

• Funding Opportunity: The National Center for Complementary and Alternative Medicine (NCCAM), will announce an initiative, Outcomes, Cost-effectiveness and the Decision Making Process, for R01s only. It “encourages studies of how CAM therapies function in actual healthcare settings... emphasizes observational studies and secondary data analyses evaluating the use of CAM in ‘real world’ settings....Clinical trials are not permitted.”


• The National Institute of Dental and Craniofacial Research (NIDCR) reported a few months ago that scientists have designed a synthetic material, geckel nanoadhesive, from the “ adhesive properties of the gecko lizard and the underwater adhesive properties of the mussel. It is adherent under dry and wet conditions.” Contact Bob Kuska, kuskar@nidcr.nih.gov.

• Dr. Anthony Fauci, Director, National Institute of Allergy and Infectious Diseases (NIAID) told his Advisory Council that NIAID has been increasing its funding for international research, but not at the expense of domestic research funding. NIAID staff is updating its strategic plan to be unveiled early next year.

• Dr. Fauci was one of four scientists awarded the Lasker Medical Award for his “outstanding contributions, including the President’s Emergency Plan for AIDS Relief, Project Bioshield which seeks to improve countermeasures against potential bioterror agents, and for his ability to communicate complex and difficult issues to the public.”
A Female Seat of Power in ASP

In 2009, the American Society of Pharmacognosy will be celebrating the 50th anniversary of its founding. 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 topics to be featured in “From the Archives”, please forward them to the Newsletter.

by Dr. Edward J. Kennelly

One venue in which female ASP members have played a leading role has been the ASP Newsletter. The Newsletter was first published in 1962, as an addition to the official organ of the Society, Llloydia. For more than half the history of the Newsletter, it has been edited by two female members, Drs. Joy Reighard, currently known as Dr. Joy Baumgardner, (1983-2002) and Renuka Misra (2002-2005).

The Reign of Joy

Dr. Joy Reighard edited the ASP Newsletter for a surprisingly long tenure of 20 years. She was appointed by ASP President Dr. Paul Schiff, Jr., and was involved in making the Newsletter more professional using desktop publishing software. She also helped develop the first ASP website.

A major challenge for Dr. Reighard was getting information from members in a timely manner. “Some [members] were great—others had to be ‘hog-tied’ for information,” said Dr. Reighard. She went on to note, “I got to know many people in the society, and knew who I could count on for information. After about 10 years, I was able to get help in the form of an editorial assistant who helped me with editing and lay-out.”

Dr. Reighard saw the participation of women in the Society increase a considerable amount during her tenure as Newsletter Editor. She specifically pointed to the election of the first, and only, female ASP President, Dr. Alice Clark (1994-1995), as how women have risen in leadership positions in the ASP during her time as Editor.

Dr. Reighard noted that she is not currently as active in the Society as she has been due to family commitments, and notes, “I really miss interacting with colleagues, but priorities are priorities.”

“Renuing” the Newsletter

Dr. Renuka Misra took over editing the Newsletter in 2002. She was asked by then ASP President Dr. William Pelletier to take on this responsibility during discussions at the 2001 Annual ASP Meeting in Oaxaca, Mexico. What started out as a one-year commitment, developed into a four-year tenure as Editor.

Dr. Misra brought her own style to the Newsletter. Most strikingly, she introduced a new layout and color palate to the Newsletter, using four seasonal colors for the four annual issues. She worked hard to incorporate more graphics to the Newsletter, and expanded the content areas.

The Newsletter was sent out by United States mail, and there were budget constraints for both Drs. Reighard and Misra. Dr. Misra noted that she often had to struggle to keep the Newsletter to its 16-page limit.

When asked how she has seen the role of women change in the ASP, Dr. Misra said that she felt that the role has not changed considerably. She continued, “I personally feel in ASP women are not given many opportunities to play important roles. There are many capable women in the Society, and when they are given a job they all do it very well. But somehow women are never appointed or nominated for any high ASP positions.”

ASP Newsletter Today

While the Newsletter is now edited by a male member, the Assistant Editor is Amy Keller, an Associate ASP Member. Her work is of great importance to the Newsletter, and she proudly carries on the tradition of females contributing in significant ways to the Society. Ms. Keller notes, “I really enjoy learning and writing about all the colorful ASP members and meeting them at the Annual Meetings. The Newsletter has given me a chance to be involved in a great scientific society.”
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, University of Iowa, IA
- Dr. John Cassady, Oregon State University, OR
- Dr. Geoff Cordell, University of Illinois IL at Chicago, IL
- Dr. Gordon C. Cragg, National Cancer Institute (NCI), NIH, MD
- Dr. Norman R. Farnsworth, University of IL at Chicago, IL
- Dr. Harry H. S. Fong, University of Illinois IL at Chicago, IL
- Dr. Albert Hofmann, Switzerland
- Dr. James E. Robbers, Purdue University, IN
- Dr. Otto Sticher, ETH Zurich, Switzerland
- Dr. E. John Staba, University of Minnesota, MN
- Dr. David J. Slatkin, Chicago State University, IL
- Dr. Hildebert Wagner, University of Munich, Germany
- Dr. Mansukh Wani, Research Triangle Institute, NC

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