

INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

Volume 23, Number 3, October 2006

IN THIS ISSUE

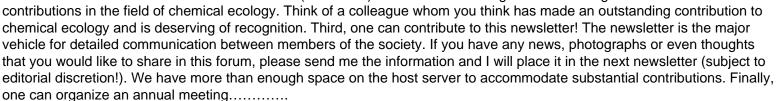
- Secretary/Editor's Message
- President's Message
- Report from the Annual Business Meeting
- ISCE Treasurer's Report
- Annual Meeting Report
- Winner, ISCE Silver Medal Award 2007
- Winner, ISCE Silverstein-Simeone Award 2007
- **Student Presentation Award Winners**
- Call for Nominations for the Year 2008 ISCE Silver Medal and Silverstein-Simeone Awards
- Call for Nominations for ISCE Vice-President, Councilors for 2007
- **Member News**
- **Meeting of Interest**
- **Position Available**

The ISCE Newsletter is published triannually, normally in October, February, and June. It is financed through member contributions. None of the material contained herein may be reprinted without the proper written acknowledgment of the editor. Address all correspondence and newsletter submissions to the editor (Stephen Foster, stephen.foster@ndsu.edu). Deadline for the next issue is February 15, 2007.

Secretary/Editor's Message

Another highly successful annual meeting has passed. Angel Guerrero and his team organized a terrific meeting and even managed some spectacular weather for the occasion!

For most members, participation at the Annual Meeting is the major way in which they contribute their services to the Society. However, there are several other ways in which members can contribute to the Society's function. First, one can stand for election as a member of the Council (or Executive). If you are interested, get a colleague to nominate you for the Council (see below). Councilors are elected for three years, are expected to attend at least two annual meetings during that time, and get to participate in decisions concerning the running of the society and its business. Second, one can nominate colleagues for the Silver medal or Silverstein-Simeone awards (see below). These awards recognize outstanding



Thanks to Angel Guerrero and Valerie Clark for the photos from the Barcelona meeting.

Stephen Foster

Secretary, ISCE





A few months ago, a Federal Express package arrived at my office. With great pleasure and a little trepidation I opened it. Two gavels and two yellow ties were waiting inside. (Duplicates are essential back-up plans, even for presidents). At that symbolic moment, Jocelyn Millar's capable hands ceased to preside over my favorite professional society and the job became mine. Having someone else pick out my ties was no big deal. Indeed, for years, I've suspected that my wife has tried desperately to derail my wardrobe choices by leaving new options hanging in my closet while the old, the familiar, (the beloved polyester ties, even) disappeared. I have and hereby embrace change, and, being a southpaw, seized the left-handed gavel and the opportunity that comes with it to say a few words to you at this time.



When asked to put my name in the hat to run for vice-president and president-elect some time ago, I felt honored. The ISCE annual meetings are the ones I most regularly and enthusiastically attend and where I meet many of my favorite people in science each year. For the majority of us, attending the annual meeting is as easy as clearing our schedule, making travel arrangements and preparing an abstract and presentation. But, for at least one of us each year (usually for the one who looks the most beat-up and exhausted), it is the culmination of several years of hard work. In this column, I want to thank our hosts and highlight the preparatory toil and tears behind opening night.

Before I hosted the Tahoe meeting in 2001, I had no idea what a host did. Oh, I gathered preliminary data: budgetary advice from others such as "you must break even." Webster's unabridged seemed a logical initial step into uncharted waters. Webster's "host" from the Old French is multi-faceted. A "host" can range from an innkeeper to a man who entertains guests in his own home at his own expense. Its meaning expands to include an embryo into which a graft is inserted, a talk-show host on radio or T.V., and, finally, a happy place for parasites to take up residence. So, there you have it.

The innkeeper (host) must begin years in advance to contract with the local conference center or hotel, sometimes laying down a good-faith deposit of several thousand dollars. Arriving at a registration cost may be the most difficult part of the preparation for a meeting. Of course there must be coffee and refreshments during breaks and the annual banquet. The difficulty comes when items have fixed costs. Meeting rooms, for instance, often cost the same whether I00 or 300 people attend the meeting. When I hosted the 2001 Tahoe meeting, we needed between 150 to 250 in attendance in order to satisfy facilities and finances.

If I invited y'all into my home, I might initiate the topic of conversation. The host asks a few prominent members to serve as an organizing committee to select topics and speakers for symposia. I tried, in 2001, to choose topics with broad appeal as well as personal interest to me, and hopefully these competing interests overlap. The host presents the broad outlines of the proposed meeting to the executive council two years in advance, and then more details to both executive council members and to all attendees one year in advance. In my home, as my guest, you wouldn't pay a dime. In the real world of ISCE meetings, however, there are the costs of meeting rooms, refreshments at breaks, printing costs, excursion fees and hopefully few unanticipated incidentals.

There are no free rides, but, neither, happily, are there any parasites! That aspect of what it means to be a "host" does not apply here. The lively and productive discussions engendered in the ISCE annual meeting environment cannot be scheduled or pre-planned.

Over my years working in insect pheromone biochemistry, I have seen many novel ideas grafted into the creative process and watched embryonic possibilities mature into new directions or unexpected expansion in the laboratory.

Host as a talk-show entity demands both technical dexterity and high social skills to foster informed conversation. Several months prior to the meeting, the host, working with the organizing committee, puts the scientific program together. Typically, more people will choose oral presentations over posters, and it is a difficult decision to select who presents what. As the time approaches, the host arranges for people to chair sessions, assist with projection equipment, registration, excursions, etc. Gone are the slides of the 2001 meetings. By 2006, every presentation was powerpoint. Over the years we have also enjoyed some very entertaining "social lectures" and it is up to the host to select and sometimes "encourage" the appropriate people to present.

Then, as the meeting proceeds with exciting symposia and papers, great posters, good fellowship and enjoyable banquets, the host can take a deep breath knowing that another successful meeting has taken place. One of the outcomes of successful meetings is growth and development of embryonic ideas that grow through collaboration. Certainly there is a great deal of informed conversation.

Please take a few minutes to thank Angel Guerrero for hosting the excellent meeting in Barcelona last July, Jeff Aldrich for the

outstanding meeting in Washington, D.C. the previous year, and all our previous hosts over the last decade (Arnasson, Philogene, Abou-Zaid in Ottawa, Francke in Hamburg, Vilela in Brazil, Clement in Marsaille, Renwich in Ithaca, Isman in Vancouver and Harmatho in Prague). And Dr. Boland, we thank you in advance for your work on next year's meeting in Jena. I am sure that each of these hosts counted on the help of their associates as I did. These people deserve a hearty round of applause also.

Gary Blomquist President, ISCE



The three caballeros

Report from the Annual Business Meeting

Report from the Annual Business Meeting – Held 12.15 pm Monday 17th July 2006

President Jocelyn Millar started by reading the election results: Wendell Roelofs was elected as new vice-President. Maurício Bento, Michael Birkett, Stefan Schulz, Paulo Zarbin were elected as councilors. Hanna Mustaparta will join them as outgoing past president. President Millar thanked the outgoing councilors, Murray Isman (past president), Heidi Dobson, Coby Schal, Sadahiro Tatsuki, Manfred Ayasse, Anne-Genevieve Bagnéres, and Hiromi Sasagawa for their service to the society.

Treasurer Ken Haynes presented the financial report (see below). Erika Plettner and Tom Baker audited the report. John Hildebrand moved to accept the report, it was seconded by Jeremy McNeil and passed unanimously.

Next, Secretary Foster presented a brief report. It had been a typical year with no major problems. Three newsletters had been produced. Responsibility for alerting members that they had not paid dues had been passed to the Treasurer, which bypassed the convoluted communication of members enquiring about membership payment through the secretary. Subscriptions to the Journal appeared to be running smoothly, with no members complaining about not receiving their subscription. Foster thanked Treasurer Haynes and Webmaster Cossé for their efforts in the efficient day-to-day running of the Society.

Webmaster Cossé's report was presented (by Foster) in absentia. Briefly, the ISCE website has seen a 100% increase in web visits compared to last year. Last year the website had about 45,000 visits; this year's numbers are over 92,000. Besides ranking high on search engines like Google and such, the ISCE website is now also listed in the new Current Web Contents by Thomson Scientific.

John Romeo reported on the status of the Journal of Chemical Ecology. The Journal was in a good shape. There had been 339 submissions in 2005, with a rejection rate of 43% (199 accepted); twenty three of these submissions were rapid

communications. Plant-insect interactions were the dominant (ca. 50% of total) category of submissions. The average decision time after submission was 52 days, with the authors sitting on the manuscript a further 46 days before the second submission. There were 5 editors at the moment, although more were needed. The editorial board would be increased from 36-42 members with some old members being rotated off. The impact factor had increased from 1.607 to 2.03. The journal was ranked 39th (out of 120) in ecology and 156th (out of 220) in cell molecular biology. The journal had a very high number (6329) of citations in 2005. Authors from 40 countries submitted to the journal. Articles were online 2 months before the print or online edition were available. There was a new Springer contact (Victoria Ferrara) in New York. A disturbing trend was the increase in number of errata from authors.

Next, Angel Guerrero presented the report of the local meeting host. Guerrero presented a break down of the finances for the meeting. Several sponsors had given money in support of the meeting. Overall, with current registrations (226), he expected a small surplus of approx. 500 euros. President Millar thanked Guererro and his organizing committee for all their efforts.

Guererro then presented a report on the student travel awards. In addition to excellence, the committee had tried to spread the awards around different countries. Eight people were selected (see below) of which 4 were giving oral presentations and 4 posters. A total of \$7500 was awarded. The winners were: Bianca Ambrogi (Brazil), Erika Banchio (Argentina), Fiona Berry (UK), Sarah Butler (USA), Sven Geiselhardt (Germany), Stephan Goller (Germany), Christine Merlin (France), Gina Pontes (Brazil).

President Millar reported that Fuji Flavor did not renew their financial support for the Silver Medal and so new sponsors were needed. Millar announced the 2007 award winners. Koji Nakanishi (Columbia University) had won the Silver Medal and Walter Leal (Univ. Calif., Davis) the Silverstein-Simeone award. Millar then outlined the schedule for future meetings:

2007: 23rd ISCE Annual Meeting, Jena, Germany, 22-26 July.

2008: 24th ISCE Annual Meeting, State College, Pennsylvania, USA.

2009: 25th ISCE Annual Meeting, Neuchatel, Switzerland.

2010: 26th ISCE Annual Meeting, Tours, France.

2011: 27th ISCE Annual Meeting, Vancouver, Canada

2012: 28th ISCE Annual Meeting, Vilnius, Lithuania

2013: 28th ISCE Annual Meeting, Champaign-Urbana, Illinois, USA

Tentatively, Stockholm, Sweden, had also been offered as a meeting site, but this had not been confirmed by the Council.

President Millar discussed the Student's Awards Reporting sub-committee [Gary Blomquist (chair), Jeff Aldrich, Wittko Francke] recommendations on guidelines for Student Awards, and added that these would be put forward for ratification next year. Finally, he called on members to nominate new officers.

As there was no new business, Coby Schal moved to close the meeting, Tom Baker seconded the motion and it was passed unanimously. President Millar closed the meeting at 12.55 pm.





Copyright Columbia Pictures

John G or Edward G? Which one appeared in Mackenna's Gold?

ISCE Treasurer's Report (prepared 30 June 2006).

The society's financial situation continues to be healthy. Our assets grew by 8.6% in 2005, and have grown by 8.9% so far in 2006. An important part of the 2006 increase comes from the donation of the Washington D.C. meeting surplus to the Society. Our assets are distributed in stocks (44%), bonds (21%), a CD (13%) and cash on account (22%). To ensure continued modest appreciation of our portfolio, our spending should be limited to 4% of the portfolio value. If other revenues and expenses remain as is, we should have a comfortable buffer for fiscal year 2007.

In 2006, we received a gift in support of our student travel awards from Trécé (\$2500) and a gift to support the Silverstein-Simeone Award from Springer Publishing Co. (\$2000). We lost corporate sponsorship of the Silver Medal Award. We have spent \$7500 on student travel awards for this meeting, and will spend \$1000 for student presentation awards. Travel expenses for our two Silver Medal Award winners are pending.

We have 373 active members coming from 43 countries. There are 104 life members, 252 regular members, 15 student members, 1 sponsor member, and 1 honorary member in the database. I think that we should be concerned about the small number of student members. As a percentage of our total membership (4%) it is low (e.g., for the Entomological Society of America, the number is 16%). In addition, we have a significant number of past members who have chosen not to renew their membership in recent years, including a number of active chemical ecologists. Some of these individuals will renew membership eventually, but few individuals renew after 3 years of lapsed membership. Despite this persistent problem, our membership increased 16% over last year at this time. Part of this increase may be attributed to the membership benefit allowing a reduced rate of registration for this meeting.

For 2007, the Journal of Chemical ecology will continue to be available at the reduced member's rate of \$132.

K.F. Haynes ISCE Treasuer

Annual Meeting Report



Angel Guerrero in Santa Maria del Mar asking for extra help with running the

The 22nd Annual Meeting of the Society was held at the Faculty of Biology of the University of Barcelona from July 15th-19th 2006. The meeting was very successful not only because of the high number of attendants, 224 participants from 29 different countries, but also because of the high quality of the presentations and the stimulating discussions. Particularly pleasing was the number of students (61). There were a total of 84 oral presentations, some of them in parallel sessions, 123 posters and 3 special lectures.

After a well-attended welcome party on Saturday evening, the meeting started on Sunday morning with an impressive plenary lecture by John G. Hildebrand, one of the two recipients of the ISCE Silver Medal Award for 2006, on the fascinating topic of explorations of moth-host interactions through the brain. Immediately afterwards, the first symposium "Biochemistry and molecular biology of olfactory reception", chaired by Walter S. Leal, brought us the latest developments on the molecular mechanisms involved in sex pheromone perception. In the afternoon, we all enjoyed an exciting lecture by Jerrold Meinwald, introduced by Wittko Francke, on the chemical basis of biotic interactions. Practical approaches of pheromones and attractants for pest control was the symposium topic on Monday morning, chaired by Tom C. Baker. The symposium was followed by the ISCE General Assembly. In the afternoon, the participants and their accompanying persons enjoyed a tour visiting the most famous sights of the city, particularly those designed by the famous Catalan architect, Antoni Gaudí,, such as Parc Güell and the Holy Family Church, in addition to a visit to the Montjuic Mountain to enjoy a splendid view of the city.

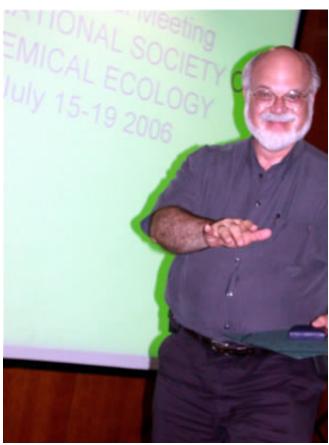
meeting

On Tuesday, two symposia on "Biosynthesis and pheromone production", chaired by Wendell L. Roelofs, and "Causes and consequences of variation in Lepidoptera sex pheromones", chaired by Ring T. Cardé, brought us back to science in a stimulating way. In the middle of both symposia, Jocelyn Millar chaired the Student Awards presentations that ran through a variety of subjects from the molecular basis of olfactory rhythms to a functional shift from allomones to sex pheromones. In the evening, we all enjoyed an exciting concert at the church of Sta. Maria del Mar, a building of extraordinary beauty and one of the finest examples of the gothic style of architecture. Following the concert, a delightful banquet preceded an enjoyable Social Lecture by Walter Leal. The pleasant evening continued with a Jerry Meinwald flute concert, a preview, by Wilhelm Boland, of the 23rd ISCE meeting to be held in Jena 2007, and a lottery of a brand new Spanish guitar. In spite of the late return to the hotels, few participants missed the first lectures of the last symposium "Plant-herbivore interactions", to the delight of the chair Thomas Hartmann,. After the symposium, Coby Schal presented Cam Oehlschlager as the recipient of the second ISCE Medal Award, and Cam impressed us with several examples of what mass trapping can do for managing insect pests in tropical crops. The meeting ended with the wish for all to meet in Jena next year.

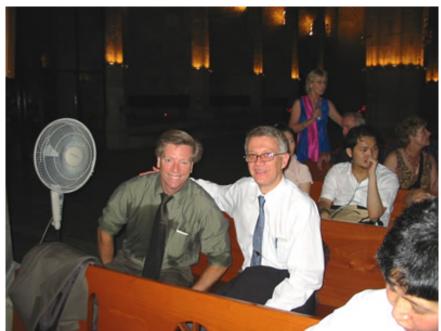
Finally, I am most grateful to the sponsors that have made the meeting possible with their support: Ministry of Education and Science, Generalitat de Catalunya, CSIC, Faculty of Pharmacy of the University of Barcelona, Springer, Syntech, Bedoukian, Trécé and Kenogard, S.A. I also thank the chairmen of the symposia, particularly W. Leal and Th. Hartmann for their continuous interest and help before and during the meeting, the invited speakers, the outgoing president J. Millar, Allard Cossé and Stephen Foster. But overall I am particularly indebted to my colleagues of the organising committee that have made a splendid job in making the Barcelona meeting very successful.

Angel Guerrero ISCE 2006, Meeting Host









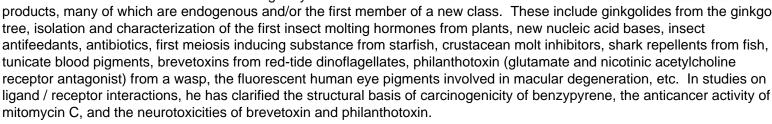
"It's true! Odors do travel downwind!"



Koji Nakanishi was born in Hong Kong, and brought up in Lyon, London, and Alexandria. He graduated from Nagoya University, 1947 with Fujio Egami. After 2 years of post-graduate work with Louis Fieser, Harvard University, he returned to Nagoya University where he completed his Ph.D. in 1954 with Yoshimasa Hirata He was Assistant Professor at Nagoya until 1958 and then Professor of Chemistry at Tokyo Kyoiku University. In 1963 he moved to Tohoku Univeersity, Sendai, and in 1969 joined Columbia University, becoming Centennial Professor in 1980.

He was a founding member and research director of the International Centre of Insect Physiology and Ecology (ICIPE) in Kenya, 1969-1977, and 1978-1991, Director of Suntory Institute for Bioorganic Research, and was a director at Biosphere 2, Arizona, Columbia University, from April 2001, until its termination in December 2003. His research covers isolation, structural and bioorganic studies of bioactive compounds, retinal proteins, interaction between ligands and neuroreceptors, development of various spectroscopic methods, especially circular dichroic spectroscopy. His spectroscopic contributions also include the finding and first applications of the NMR nuclear Overhauser effect in structure determination during the ginkgolide studies (1967),

He has published ca.750 papers, and has authored, co-authored, or edited 9 books on spectroscopy and natural products. He has determined the structures of over 200 biologically active natural



His studies with retinal analogs and retinal proteins have made seminal contributions in understanding the structural and mechanistic basis of animal vision and phototaxis. In 2000 his group succeeded in clarifying relative movements of the retinal and the opsin receptor thoughout the visual transduction process; this is the first and still the only such study performed with G protein coupled receptors (GPCR). From human eyes he isolated and determined the structures and biosynthesis of the fluorescent pigment A2E and analogs that lead to the incurable eye disease age-related macular degeneration (AMD), and prevention of the damaging effects of A2E by anthocyanins and derivatives. His neuromodulatory studies on the ginkgolides are aimed in clarifying the basis of their involvement in memory enhancement, prevention of Alzheimer's disease, and antagonism of the platelet activating receptor (PAFR). He also discovered that the ginkgolides are antagonists of glycine receptors and GABAA.

His spectroscopic contributions include the finding and first applications of the NMR nuclear Overhauser effect in structure determination during the ginkgolide studies (1967), and in particular development of the exciton coupled circular dichroic method (1969), a nonempirical sub-microgram scale technique for determining various aspects of molecular chirality of organic molecules in solution. The method has developed into an extremely versatile micro technique applicable to compounds ranging from small molecules to various types of ligand / receptor complexes.

As of June 2006, about 400 students and postdoctoral fellows have gone through his lab., i.e., 90 in Japan and 310 at Columbia University. A total of 105 Ph.Ds have graduated from his group in Japan and USA (May 2006), while about 140 of his former colleagues hold academic positions at universities. He has received awards from U.S.A., Japan, Bulgaria, China, the Czech Republic, Holland, Italy, Saudi Arabia, Sweden, Switzerland, Taiwan and U.K. A Nakanishi Prize of the American Chemical Society (ACS) and the Chemical Society of Japan (CSJ) started in 1996 and is awarded in alternate years in Japan and the U.S.



Winner, ISCE Silverstein-Simeone Award 2007

Walter Leal, professor and chair of the Department of Entomology at the University of California, Davis, is the recipient of the 2007 Silverstein-Simeone Award. Leal, internationally known for his research on chemical ecology and how insects detect smells, is best known for his research on the identification and synthesis of insect sex pheromones and on the chemical ecology and chemical communication of insects and potential applications for pest control. His research has practical implications in explaining how insects communicate within species, how they detect host and non-host plants, and how insect parasites detect their prey.

Leal joined the UC Davis entomology faculty in 2000 as an associate professor and advanced to professor in 2002. He is an elected fellow of the American Association for the Advancement of Science (AAAS); a past president of the International Society of Chemical Ecology (ISCE); and secretary and upcoming chair-elect of Section B--the Physiology, Biochemistry, Toxicology, and Molecular Biology section--of the Entomological Society of America.

Leal received his bachelor's degree in chemical engineering in his native Brazil and advanced degrees from universities in Japan: his master's degree in agricultural chemistry from Mie University, and his doctorate in applied biochemistry from the University of Tsukuba.



"I think its buibuilactone!"

Before joining the UC Davis faculty, Leal served as research leader of the Science and Technology Agency of Japan and the Bio-Oriented Technology Research Advancement Institute (BRAIN) and head of the Laboratory of Chemical Prospecting at the National Institute of Sericultural and Entomological Sciences in Tsukuba.

Student Presentation Award Winners at 22nd ISCE Annual Meeting, Barcelona, Spain

The student presentation award winners were:

Poster: Yuko Kumano, The temporal change in floral odors affects pollinator arrivals in Homalomena propingua

Oral: Jean-Marc Lassance, Male odor drives female choice in the European corn borer, Ostrinia nubilalis

Call for Nominations for the Year 2008 ISCE Silver Medal and Silverstein-Simeone Awards

The ISCE Silver Medal Award is intended to recognize career achievement by an outstanding scientist working in the field of chemical ecology. The Silverstein-Simeone Award, established in 1995, to honor Milt Silverstein and John Simeone, is made on the basis of recent or current work, by the individual, of an outstanding nature at the "cutting edge" of chemical ecology. The recipient must deliver a plenary lecture at the annual ISCE meeting and publish a paper on the same topic in the Journal of Chemical Ecology. The expenses of the recipient of the Silverstein-Simeone Award to attend the annual meeting are paid by the society through the generous sponsorship of Springer Publishers. Nominators should be ISCE members in good standing. Nominations will be reviewed by the President and Vice President for relevance to the appropriate award, before forwarding them to the full ISCE Executive Committee. Should a nomination for one award be considered more relevant for the other award, the President will contact the nominator(s) regarding reconsideration. Current ISCE officers or councilors are not eligible for the awards because of possible conflict of interest. Note that previous, unsuccessful nominations must be renominated to be considered for the awards. It would be helpful to resubmit the nomination packets for these individuals.

The nomination process is the same for both awards and is as follows:

• A nomination letter explaining why the nominee should be recognized for the award, stressing either their current cutting-

edge research (for the Silverstein-Simeone award) or their career achievements (for the Silver Medal award).

• Curriculum vitae, including a list of publications pertinent to the research on which the award is based (for the Silverstein-Simeone award), or a full list of publications (for the Silver Medal award). If desired, supporting letters from other colleagues.

Please submit all parts of the packet in electronic format (including supporting letters) along with one paper copy to: Dr **Gary Blomquist, President**, Department of Biochemistry and Molecular Biology, University of Nevada, Reno, NV 89434, USA Email: garyb@cabnr.unr.edu

Deadline for receipt of nominations: 31 December 2006

Call for Nominations for ISCE Vice-President, Councilors for 2007

Nominations for the positions of Vice-President and four new councilors are called. The position of Vice-President is prestigious in that he/she will assume the position of Society President in the year following tenure of the role of Vice-President.

ISCE councilors are elected for a term of three years. Councilors must commit to attending at least two ISCE Executive meetings during this period. Their other principal responsibilities are participation in the selection of the Silver Medal and Silverstein-Simeone Award and to provide general guidance and assistance to the Executive Committee. It is expected that all people nominated for the above positions have a strong record of participation in Society activities and meetings. It is highly desirable that the elections have competition for the positions, i.e., that there is more than one high quality candidate for Vice-President and at least 5 candidates for the councilor positions.

Please send names, contact addresses, phone and fax numbers, and e-mail addresses of candidates along with a short description of why you think the candidate(s) would be suitable for office, to Dr Jocelyn Millar, Past-President, Department of Entomology, University of California, Riverside CA 92521, USA. Email: Millar@ucr.edu

Deadline for receipt of nominations is December 31 2006.

Member News

Walter Leal, a professor of entomology who is internationally known for his research on chemical ecology and how insects detect smells, is the newly appointed chair of the Department of Entomology at University of California, Davis, effective July 1. He will serve a five-year term, replacing interim chair and emeritus entomology professor Robert K. Washino.

From the Mind of Gunnar Bergstrom......

ANALYSES are ways to know of what and when, of quantity and how

BIOLOGY is study of the living of eating, mating and evolving

CHEMISTRY studies molecules and their functions interactions, structures and formations

DIVERSITY of molecules and species a richness greater than French cheeses

ECOLOGY is how creatures live together in one house, built for any weather

FIELD EXPERIMENTS mark the beginning and the end of any study aimed to find the active blend

GC-MS is a foremost tool sensitive, informative and real cool

HORMONE, PHEROMONE, TRANSMITTER help survival of the fitter

INTERDISCIPLINARY synergy comes through Chemical Ecology!

JEAN-HENRI FABRE – un chercheur spirituel with an idea of a "radiograph" of smell

KNOWLEDGE is built up with all amused but how can it at best be used?

LABORATORY can be a little room where good ideas breed and bloom

MOLECULAR BIOLOGY and GENETICS are a kind of chemical athletics and aesthetics

NONTOXIC methods of control use pheromones in a selective role

OLFACTORY SIGNALS: ODOURS and PERFUMES as markings, trails and scent-plumes

PHYSICS: the largest and the smallest things unseen - and also everything between

QUANTUM of evolutionary change volatiles are minimally modified or rearrange

R with S is chiral twin one is out and one is in

SIGNAL SYSTEMS help convey messages of ay and nay

THEORY, PRINCIPLE and LAW to summarize and predict from what we saw

UBIQUITOUS is chemical communication a challenge for continued exploration

VARIATION in plants by their scent repellent, defense and attrahent

WATER also carries odour signals of fish and shrimps, of whales and other navals

X, Y, Z - Chemical Ecology`s three dimensions Evolution, Structures and Functions

A Chemical Ecology OLFABET GB 20 Sept. 2005

Meeting of Interest

10th Gordon Research Conference on Plant-Herbivore Interactions

Dear Colleagues

We are pleased to announce that the 10th Gordon Research Conference on Plant-Herbivore Interactions has been scheduled for February 18-23, 2007, at the Crowne Plaza, Ventura, California.

For over 25 years, the GRC series on Plant-Herbivore Interactions has served as a premier forum for scientists investigating the ecology and evolution of plant-herbivore interactions. Planning is now underway for the 2007 conference, with speakers spanning the range from functional genomics to ecosystem processes. For more information, consult the Gordon Research Conferences.

Web site: http://www.grc.uri.edu/ Rick Lindroth and Martine Rahier Chair and Vice Chair.

2007 GRC on Plant-Herbivore Interactions

Position Available

Assistant Professor: Molecular Basis of Chemoreception and/or Behavior in Insects, at the University of California, Riverside CA.

USA, starting July 1, 2007.

Position is tenure track, 11 months/year, 25% teaching, 75% research. Appointment level and salary commensurate with experience. Ph.D. with extensive training in using molecular biology techniques to investigate chemoreception and/or behavior in insects is required. Postdoctoral experience an asset. The appointee will develop a strong basic and applied research program, participate in graduate and undergraduate teaching in Entomology and interdepartmental programs, and supervise graduate students. Applicants should send CV, statement of research interests, reprints and manuscripts in press, and arrange to have four letters of reference sent to Jocelyn Millar, Search Committee Chair, Department of Entomology, University of California, Riverside, CA, 92521, USA; e-mail: Jocelyn.millar@ucr.edu, phone (951) 827-5821, FAX (951) 827-3086. Applications may be submitted electronically or by mail or courier service. Letters of reference may be sent by email initially, with signed hard copies following. Applications, including letters of reference, should be received by Dec. 31, 2006, but position will remain open until filled. Further information about the Entomology Department and the position can be found at http://www.entomology.ucr.edu.

Information on UC Riverside's numerous Interdepartmental programs can be found at http://www.ucr.edu/academic.html.



Stephen Foster, Editor Department of Entomology North Dakota State University Fargo, ND 58105, USA Stephen.foster@ndsu.edu

Visit the ISCE Webpage at http://chemecol.org/

homepage