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Secretary / Editor's Message

Dear members! This newsletter contains the link to the latest news from the upcoming ISCE meeting in Vancouver, presentation of the award winners and information about the election of the new Vice President, a new Treasurer, and new Councilors. The current executives also thank all our candidates in this election for volunteering!

Please read the candidates 'curricula vitae or statements and then fill in the ballot on the ISCE webpage before June 1 2011.https://sites.google.com/a/chemecol.org/welcome/ballot

There are very sad news: in March, Prof. em. Tom Eisner has passed away. We all are sorely missing him. Please find below an obituary written by Prof. Robert A. Raguso.

ISCE Award Winners for 2012 Awards

Silver Medal Award: Tom Baker
Congratulations on your selection to receive the Silver Medal Award of the International Society of Chemical Ecology for 2012.

http://ento.psu.edu/chemical-ecology

Silverstein-Simeone Award: Julia Kubanek
Congratulations on your selection to receive the Silverstein-Simeone Award of the International Society of Chemical Ecology for 2012.

To read more see:
http://www.biology.gatech.edu/people/julia-kubanek/?id=julia-kubanek

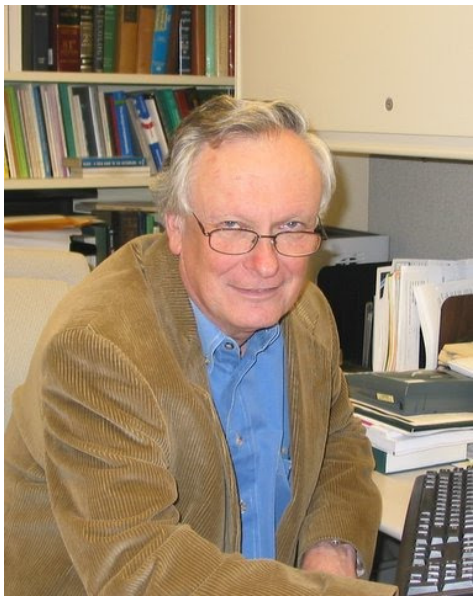
News about 2011 ISCE Meeting in Vancouver, Canada

Please remember to register before May 15! Registration will be more expensive after that date. Various alternatives for lodging are available!

Our current Vice President and designated ISCE President 2011-2012

Dr. Paulo H. G. Zarbin is an Associate Professor in the Department of Chemistry, Federal University of Paraná, Brazil, since 1998, and served as chairman of the graduate committee in chemistry in 2002-2004. Paulo obtained his Ph.D. at Federal University of São Carlos in 1998, with part of his thesis research being conducted at the National Institute of Sericultural and Entomological Science, Tsukuba, Japan, in 1996-1997. He served as an ISCE councilor in 2007-2009, and is currently a member of the editorial board of the Journal of Chemical Ecology. He is an assiduous attendant of the ISCE meetings as well as the Asian-Pacific Association of Chemical Ecology meetings. He was the initiator and organizer of the 1st Brazilian Meeting on Chemical Ecology in 1999, which is now in its 6th edition, and Paulo is one of the founders of the recently created Latin American Association of Chemical Ecology, ALAEQ, serving as one of the first ALAEQ councilors. His main research interest is identification, synthesis, biosynthesis and field evaluation of insect pheromones and other semiochemicals, up until now including coleopterans, lepidopterans and heteropterans

Please vote for the next ISCE Vice President:



Nomination of next ISCE Vice President (2011-2012): Ring T. Cardé

Ring T. Cardé is Distinguished Professor of Entomology, holder of the A.M. Boyce Chair in Entomology, and until 2009 Chair of the Department of Entomology, University of California, Riverside, which he joined in 1996. His previous post was Distinguished University Professor and Head of Entomology at the University of Massachusetts. He started his academic career in 1975 at Michigan State University, following a postdoctoral with Wendell Roelofs at Cornell University's New York State Agricultural Experiment Station in Geneva. Ring grew up with a fascination for studying insects, particularly moths, and received a B.S. in Biology from Tufts University and M.S. and Ph.D. degrees in Entomology from Cornell University. His interests in moth biology led him to graduate work deciphering taxonomic and biological relationships in an obscure group of hard-to-tell-apart moths. In turn this led him to study pheromone communication in moths and how distinctive chemical channels foster reproductive isolation among closely related species. Of late his research group has concentrated on how flying male moths and female mosquitoes use odor plumes to navigate a course to an odor's source, respectively, a pheromone-emitting female moth or a prospective vertebrate host. Such studies rely principally on analyses of video records of flight tracks and an understanding of the fluid dynamics of odor dispersion.

He has published 230 scientific papers and reviews and edited 6 books on insect chemical ecology, pheromones, and insect biology. He is a Fellow of the Entomological Society of America, the Entomological Society of Canada, the American Association for the Advancement of Science, and the Royal Entomological Society. In 2009 he was awarded our society's Silver Medal.

Please vote for a new Treasurer!

Dr. Jeremy D. Allison is an Assistant Professor at Louisiana State University. He received his undergraduate degree in Biology at the University of Guelph, and a Master of Pest Management (MPM) at Simon Fraser University (SFU). His MPM degree dealt with chemical ecology studies of long-horned beetles and bark beetles. His Ph.D. is from the University of California at Riverside (UCR) with a research focus on studies of the evolution of pheromone communication in Lepidoptera. He has had the pleasure of conducting studies with two ISCE Silver Medal Award winners (Professors John Borden at SFU and Professor Ring Cardé at UCR). His current research and teaching focus on integrated pest management and chemical ecology of forest insect pests. Some of his current projects include: 1) Investigation of chemically-mediated interspecific sub-cortical interactions among larval bark and cerambycid beetles; and 2) The role of pheromones in reproductive isolation and niche partitioning in southern Ips bark beetles.

Please vote for the four new Councilors (you can vote for four colleagues)!

Nomination of ISCE Councilors 2011:

Hans T. Alborn is a research chemist at USDA ARS Center for Medical, Agricultural and Veterinary Entomology, Gainesville FL. He might be best known as an analytical chemist/mass spectrometrist with a keen interest in the development and optimizing of GC/MS and LC/MS based techniques. However, his main research has always been focused on plant - insect interactions with a specific interest in host plant attraction and selection for feeding as well as oviposition and how these behaviors are affected by feeding induced plant responses. He is also interested in synergistic interactions between insect pheromones and constitutive as well as induced host plant volatiles. In addition he is also involved in below ground chemical ecology, studying nematode behavior such as host attraction and pheromone mediated interactions. Dr. Alborn has authored/co-authored more than 60 publications of which 15 have been in the Journal of Chemical Ecology.

Dr. Bente Gunnveig Berg is an Associate Professor at the Norwegian University of Science and Technology (NTNU), Trondheim. Her basic academic studies include biology, mathematics, and athletics science. She received her PhD at the Department of Zoology, NTNU, in 1998 (supervised by a former president of the ISCE, Professor Hanna Mustaparta). She continued as a postdoc researcher at the same institute until 2001. The last ten years, she has been engaged as an Associate Professor within biological psychology at the Department of Psychology, NTNU. In general, her research interests include principles characterizing chemosensory information processing. By utilizing the moth brain, she has studied how pheromone and interspecific signal information is encoded at different levels of the olfactory pathways, and also how species-specific hallmarks are expressed in the pheromone network of related species. Besides, she has investigated the neurochemical organization of the olfactory pathways. Parts of the studies have been carried out in cooperation with colleagues at the Philipps University of Marburg and

the Free University of Berlin. Currently, she is establishing collaboration with Professor Kong-Ming Wu, Chinese Academy of Agricultural Sciences.

Dr. Renee Borges was born in India on February 25th of 1959. She has obtained her bachelor's degree in zoology and microbiology with distinction from the Institute of Science of the University of Bombay in 1979, where she then also obtained her master's degree in animal physiology with a first class level in 1982. Dr. Borges received her PhD from the University of Miami, Florida, USA, with a thesis entitled "Resource heterogeneity and the foraging ecology of the Malabar Giant Squirrel Ratufa indica".

Since 2005, Dr. Borges has published 26 articles in different international journals such as Current Biology, Journal of Theoretical Biology, Journal of Comparative Physiology, Journal of Tropical Ecology, Functional Ecology, etc.

Her research interests remain broad and include mainly the chemical ecology and visual ecology of the insect partner in plant–animal interactions (particularly: ant–plant interactions), the ecology of mutualists and parasites in the fig-fig wasp system, the evolution of sexual displays in plants, and phytochemicals and their role in food selection by herbivores. Dr. Borges holds currently the position of an Associate Professor at the Centre for Ecological Sciences, Indian Institute of Science, Bangalore, India. She is Member of the "Western Ghats Ecology Expert Panel" of the Ministry of Environment and Forests, Government of India (a special committee interacting with Members of Parliament of Western Ghat and the Minister of Environment and Forests, to designate ecologically sensitive areas in the Western Ghats where development will be controlled). Furthermore, Dr. Borges is elected fellow of the Indian Academy of Sciences since 2009, associate editor for Acta Oecologica since 2008 and member of the editorial boards of the Journal of the Indian Institute of Science and of the Journal of Biosciences.

Maria Carolina Blassioli Moraes was born in Brazil in November 20th November, 1970. She graduated with a Bachelors Degree in Chemical Technology from the University of Campinas – SP, Brazil (1995), a Master's degree in Chemistry from the University of São Paulo – São Paulo – SP, Brazil (1997), and a Ph.D. in Analytical Chemistry from the University of São Paulo – SP, Brazil (2001). She spent two periods of time as a Post-Doctoral Research Fellow , the first one in 2002 at the Centre for Nuclear Energy in Agriculture (Cena / USP), After completing the first fellowship, she officially joined the staff at Embrapa Genetic Resources and Biotechnology (CENARGEN, Brasilia) in 2002 as a research scientist in the Chemical Ecology group. At the start of her employment with CENARGEN, Dr. Moraes has visited the Laboratory of Jeffrey Aldrich (USDA-ARS) and Jocelyn Millar (University of California - Riverside) to gain

experience with her new research area. In 2005, she undertook her second post doctorate at Rothamsted Research – England, alongside Mike Birkett and John Pickett, from where she gained experience in Chemistry with emphasis in analytical chemistry, acting on the following topics: elucidating the chemical basis of cis-jasmone induced defence in wheat and soybean for aphid and stinkbug control, the identification of stinkbug sex pheromones, including deployment of novel analytical techniques for undertaking these investigations. She has been an ISCE member since 2005 and has been attending the ISCE meeting regularly since then. She has been building her curriculum with relevant works regarding the Chemical Ecology subjects. During the last five years she has published 23 papers about Chemical Ecology studies and she is scientific adviser of the recently created Latin American Association of Chemical Ecology (ALAEQ), it shows her commitment to promoting chemical ecology in Latin America. She is academic councilor of Master and Ph.D. students from distinguished Universities from Brazil covering the main research subjects of chemical ecology such as, chemical characterization of volatiles molecules, insect behavior, and development analytical methods for semiochemicals studies involving tritrophic interactions. She received an award as distinct young scientist by the Distrito Federal State Foundation in 2009, and was also awarded several times by the Brazilian Agricultural Research Corporation (Embrapa) for her achievements on Chemical Ecology studies.

Carmen Rossini Caridad was born in Uruguay (January 8th, 1967). She graduated as a Bachelor (Chemistry) in 1989 and with a Pharmaceutical Chemist degree in 1992, both at the Universidad de la República (Uruguay). She completed her doctoral studies at Cornell University with Professor Thomas Eisner (1999) where she studied dynamics of chemical defenses in insects. She has also spent a time with Professor Isao Kubo at Berkeley (2005) and two periods of time at the Consejo Superior de Invetigaciones Científicas (CSIC), Madrid with Dr. Azucena González-Coloma (2007, 2009), in both cases working with chemical defenses from plants. Currently she is an Associated Professor at the Chemistry School (Universidad de la República) where she co-founded the Chemical Ecology Laboratory (http://leq.fq.edu.uy/). At present, Carmen teaches Biology for the Chemistry Major, and Chemical Ecology (Chemistry Major and graduated students). She has published 41 papers which include different topics on Bioactive Natural Products (CV at http://www.anii.org.uy/SNI_areas.php?area=1). Since her coming back to Uruguay, she has got several international and national grants; and has been awarded national and international awards including the National Prize of the Veterinary Academy (2009), and a TWAS-Rolac award for young scientist (2006) for her studies on semiochemicals. Recently, she co-organized the 1st Meeting of the Latin American Association of Chemical Ecology (ALAEQ), being currently a member of the ALAEQ board. Carmen is now working on chemical and biological characterization of secondary metabolites (chemical defenses from plant and insects, botanicals and insect-plant interactions).

Alejandra J. Troncoso is currently working at the Laboratorio de Química Ecológica, Facultad de Ciencias, Universidad de Chile. She obtained her licentiate degree in Biology at the Universidad Mayor de San Simón (UMSS) in Cochabamba, Bolivia in 2002. The same year, she started a LANBIO fellowship at the Laboratory of Chemical Ecology at the Universidad de Chile under the guidance of Dr. Hermann Niemeyer. In 2005 she entered the PhD program in Ecology and Evolutionary Biology at the Universidad the Chile and continued her ecological chemistry training. To date, she has guided the research work of three LANBIO fellows from Bolivia, and two undergrads from Chile in diverse ecological chemistry research themes. Once she obtains her PhD degree she plans to return to Bolivia and start the first Ecological Chemistry Laboratory in Bolivia centered at UMSS and sheltered by the first Chile - Bolivia collaboration in Ecological Chemistry. Her research focuses on the influence of multitrophic interactions (mediated by both physical and chemical cues) on the evolution of barriers to gene flow in sympatry.

Member News

For Love of Eisner
Thomas Eisner (1929–2011)

On March 25, 2011, Chemical Ecology lost one of its original guiding lights, Thomas Eisner, after a long and courageous battle with Parkinson's Disease. By now, numerous obituaries have detailed his prolific career as a research scientist, photographer, musician and champion of environmental and human rights. Equally well documented is his intriguing personal odyssey, beginning as a child refugee from fascist Europe and ending as a beloved professor emeritus at Cornell University. Others have profiled his numerous awards in recognition of his excellence in research (National Medal of Science, Carty Award of the National Academy of Sciences), his ability to communicate the joy of scientific discovery (Lewis Thomas Prize, New York Film Festival Grand Prize) and his tireless dedication to conservation (Tyler Prize for Environmental Achievement). Instead, in this brief essay I celebrate Tom's unusual scientific vision, rooted in the synergism between natural history and the experimental study of mechanism, and nurtured through collaborations across the physical sciences. The Eisner Vision figured prominently in the establishment of Chemical Ecology as a field, as well as the founding of my home department (Neurobiology and Behavior) at Cornell. It is carried forward today by his former students and remains a unifying philosophy among the new generation of chemical ecologists at Cornell, with whom I have the privilege of working.

Tom Eisner's keen interest in natural history was kindled during his childhood in Uruguay, described glowingly in his autobiographical "For Love of Insects". Aside from Niko Tinbergen's "Curious Naturalists", I find this book unrivaled in its humble and joyous account of a life spent pondering nature.

Its passages resonate with anyone whose scientific career was sparked by early encounters with the natural world and was sustained by a desire to understand its inner workings. As an adult, Tom continued to seek inspiration through critical observations of natural history, accompanied by his wife and lifelong collaborator Maria (Loebell) Eisner, the naturalist Mark Deyrup, and their students. These observations invariably were followed by bioassays in which hapless frogs, birds, spiders, ants or fish were duped into approaching a would-be prey item, only to get splattered with some noxious defensive secretion. Although Tom's explorations required increasingly more sophisticated tools, these only enhanced, rather than diminished, the Eisnerian sense of wonder so familiar to generations of Cornell students.

Tom was a great aficionado of analytical equipment, especially anything that pushed the limits of optics, microscopy and high speed/resolution photography. So many of his group's seminal contributions, including the mechanisms of benzoquinone emission by bombardier beetles, the adhesion of the palmetto beetle's tarsal bristles to leaf surfaces, and the "hidden" patterns of UV reflectance in flower petals, were communicated through stunning photographic images. As accomplished a photographer as Tom was, he benefited from (and lovingly acknowledged) Maria's mastery of SEM, and frequently recounted in lectures his awestruck encounter with Harold "Doc" Edgerton, MIT's pioneer of strobe photography, whose high speed wizardry revealed the cooling mechanism for the abdominal emission chambers of bombardier beetles. Tom also enjoyed a long and fruitful collaboration with Dan Aneshansley, an engineer who devised elegant methods for measuring the physical properties (e.g. heat evolution, force transduction) by which beetles defend themselves against predators. Of course, it was Tom's career-long partnership with Jerry Meinwald, whose group provided critical expertise in analytical chemistry, which had the greatest impact on our field. Tom and Jerry's decades of identifying strange compounds from even stranger glands led them through a forest of natural products, from the C10 cyclopentanoid constituents of catnip (nepetalactone) and walking stick defensive sprays (anisomorphal), to carminic acid, lucibufagin steroids and pyrrolizidine alkaloids that protect cochineal bugs, fireflies and tiger moths, respectively, from a grisly death. In the quality and quantity of their collaborative output, Eisner and Meinwald were the "Lennon and McCartney" of Chemical Ecology, and their "greatest hits" continue to inspire students of chemical defense, counter-defense and mimicry. As interest (and expertise) in natural product elucidation continues to wane among university chemistry departments, we are reminded of how crucial such collaborations are to the continued growth of our field. During his last years, this remained one of Tom's greatest concerns.

Tom sometimes lamented that his research had been criticized for its "lack of conceptual framework", but this criticism was shortsighted. In his foreword to "For Love of Insects", Tom's friend and intellectual gadfly E.O. Wilson likened him to a pointillist painter, from whose body of focused, detailed case studies emerges a canvas rich with patterns "of evolutionary adaptation, molecular evolution, behavior and life cycles that likely would not have been revealed by other means". As a group, chemical ecologists have been slow to grasp evolutionary theory and slower to embrace conditionality in the interactions whose mechanisms they dissect with such care. Not so with Tom and his students, whose studies of butterfly courtship, tiger moth alkaloid acquisition, spider web construction or herbivore-induced nicotine mobilization were rife with fitness tradeoffs, cost-benefit analyses and contingency. The students responsible for these studies are among today's most conceptually sophisticated interpreters of animal (and plant) behavior. Like Tom, their current research builds upon the foundation of natural history with sophisticated experimental manipulations of visual and acoustic as well as chemical and metabolic signals, in studies designed to explicitly measure fitness consequences.

Finally, Tom felt that by combining aesthetically appealing patterns with rigorous experimental

elucidation of their underlying processes, he could more effectively communicate the splendor and importance of the natural world to a broader public, and educate them on the dire need to conserve nature's pharmacopoeia for future generations. In the final passage of "For Love of Insects", Tom described the mutual dependence between the role of nature in sustaining human curiosity and the increasingly urgent role of human curiosity (and its valuation) in preserving the world's remaining wild places. "Will the collective urge to discover keep natural history alive?" he asked. "Without [human] curiosity, without a passion for discovery, nature cannot endure. And without nature, curiosity will fade…It is so fundamentally human to thirst for knowledge and to turn to nature for visions of the unknown".

Thomas Eisner inspired generations of chemical ecologists to turn to nature for chemical visions of the unknown, visions that have given form and structure to the increasingly complex interaction webs that we now study in terrestrial, aquatic and marine environments across the globe, as communicated in this journal. He will be sorely missed by those who were inspired by his vision and his unquenchable sense of wonder about the natural world. I will remember him fondly, along with his tales of toxic steroids and femmes fatales, whenever fireflies light up the humid summer evenings of Ithaca.

Robert A. Raguso
Department of Neurobiology and Behavior
Cornell University
Ithaca, NY 14305 USA

Positions Available

We search for a future group leader in the chemical ecological aspects of evolutionary neuroethology. The candidate should optimally have a very good knowledge and experience regarding chemical methodology (GC, GC-MS) and its combination with electrophysiological techniques (GC-EAD. GC-SSR). She/he is also expected to be able to design and perform both laboratory and field assays. The candidate will work within our main projects involving fruit fly and/or moth chemical ecology and olfactory neuroethology, and will interact with four other group leaders specializing in olfactory neurophysiology, odor-mediated behavior and evolutionary aspects of olfaction. The selected candidate will initially be hired on a postdoctoral stipend for one year and will work as a junior group leader within

the department. Depending on the outcome of the first year of work, the selected candidate can be offered a 2+2 year position as full group leader.

Selected candidates will be invited for interviews and presentations during the autumn of 2011. The finally selected candidate is expected to start her/his work in Jena January 1, 2012.

Applications should contain a two page CV, a publication list, three letters of reference and a three page maximum project proposal how the candidate sees her/his work developing at the department. Information regarding present activities can be found athttp://www.ice.mpg.de/ext/evolutionary-neuroethology.html

Application deadline is August 1, 2011.
Applications should be sent to Prof Dr Bill S Hansson

hansson@ice.mpg.de

and be marked “CE group leader”