



International Society for Neuroethology

Newsletter March/April, 2012

International Society for Neuroethology
P.O. Box 1897
Lawrence, KS 66044, USA
Website: <http://neuroethology.org/>

Voice: +1-785-843-1235
(or 1-800-627-0629 Ext. 233)
Fax: +1-785-843-1274
E-mail: isn@allenpress.com

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ISN Officers

President: Paul S Katz, Neuroscience Institute, Georgia State University, P.O. Box 5030, Atlanta, GA 30302-5030, USA. Tel: +1-404-413-5398

<http://neuroscience.gsu.edu/pkatz.html>

email: pkatz@gsu.edu

Treasurer: Fred Delcomyn, Department of Entomology, University of Illinois at Urbana, 320 Morrill Hall, 505 S. Goodwin, Urbana, IL 61801, USA. Tel: +1-217-333-8793; Fax: +1-217-244-3499

email: delcomyn@life.uiuc.edu

Secretary: Karen Mesce (2011–2012)
Dept. Entomology & Grad. Program in Neuroscience
University of Minnesota, 219 Hodson Hall
1980 Folwell Ave., Saint Paul, MN 55108, USA
Phone: +1-612-624-3734

Fax: +1-612-625-5299

email: mesce001@umn.edu

Past-President: Martin Heisenberg, Theodor Boveri Institut (Biozentrum), Lehrstuhl für Genetik und Neurobiologie, Universität Würzburg, Am Hubland, D-97074 Würzburg, Germany. Tel: +49-931-8884450; Fax: +49-931-8884452

email: heisenberg@biozentrum.uni-wuerzburg.de

President-Elect: Alison Mercer, Department of Zoology, University of Otago, PO Box 56, Dunedin, New Zealand
Tel. 64 3 479 7961, Fax. 64 3 479 7584

email: alison.mercer@otago.ac.nz

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President's Column

Paul S. Katz

President of the ISN, Georgia State Univ, USA

Evolution is central to Neuroethology in terms of both Biology and the Society for Neuroethology itself. If you do not consider

evolution, then the field of neuroethology can seem to dissolve into a hodgepodge of reports about how animals produce their idiosyncratic behaviors. Although one of the great pleasures of attending the International Congress of Neuroethology is to listen to incredible tales about the mechanisms underlying animal behavior, such as how owls catch prey or how bees see in dim light or how electric fish avoid being jammed, the importance of such research, in the absence of a central unifying concept, can pale against unifying research into finding cures for diseases. This problem obviously affects the ISN and its members. Are we just a storytelling group, or is there something that links the curious stories together that makes them compelling and important? As stated by Theodosius Dobzhansky, in his essay entitled, “Nothing in Biology Makes Sense except in the Light of Evolution”:

Is there an explanation, to make intelligible to reason this colossal diversity of living beings? Whence came these extraordinary, seemingly whimsical and superfluous creatures...and...apparent biologic curiosities? The only explanation that makes sense is that the organic diversity has evolved in response to the diversity of environment on the planet earth.-(The American Biology Teacher, 35:125-9, 1973).

So, evolution provides an answer as to why there is diversity, but is describing the diversity that results from evolution all that we do as neuroethologists? Are we merely stamp-collectors, marveling at the fascinating diversity or do we use this diversity to learn more? As Darwin noted in the last sentence of *Origin of Species*, “...endless forms most beautiful and most wonderful have been, and are being, evolved.” Are these endless forms merely endless experimental subjects?

Darwin spent most of his life documenting stories that provided support for the theory of evolution by natural selection. In his *Origin of Species*, he started with stories of breeding pigeons, he told stories about variation under nature, and then went on to those about survival of the fittest. He told many individual tales about animals and plants

under a variety of conditions before finally introducing his theory and discussing its ramifications. The stories provided the “data” upon which the theory was based. The tale about the finches, one of the most famous, would be just a curiosity if it did not illustrate the concept of descent with modification.

As we know, Darwin’s theory was missing a mechanism. He did not know about genetic inheritance or mutations and so could not account for how descent with modification actually occurred. In 1942, Julian Huxley, grandson of Darwin’s bulldog, Thomas H. Huxley, published *Evolution: The modern synthesis*, which brought together many ideas regarding genetics, cytology, systematics, botany, morphology, ecology and paleontology. This updated theory of evolution now included many more stories from a broader variety of fields. Recently Pigliucci and Müller have published *Evolution: The extended synthesis*, incorporating still more stories into an even grander theory of evolution. These include stories that go beyond gradual allele changes to tales about epigenetics, niche construction, and whole genome evolution among other things. In isolation, the stories are interesting in their own right, but together they form a powerful understanding about how life has evolved on this planet. The theories that were synthesized from the stories are predictive and explanatory. The stories are no longer idiosyncratic; they are illustrative mechanisms that have shaped every living organism on the planet. This information is compelling and important!

Neuroethology lacks a central theory that pulls together all of its stories. In an essay entitled “On Aims and Methods of Ethology”, Nikko Tinbergen wrestled with these issues for ethology.

It is just a fact that we are still very far from being a unified science, from having a clear conception of the aims of study, of the methods employed, and of the relevance of the methods to the aims. Yet for the future of Ethology, it seems to me important to continue our attempts to clarify our thinking, particularly about the nature of the questions we

are trying to answer.-(Zeitschrift für Tierpsychologie 20:410-433, 1963).

Tinbergen foreshadowed the field of Neuroethology, writing, “it begins to be difficult, and in some cases impossible, to say where Ethology stops and Neurophysiology begins.” He promoted breaking down the boundaries between traditional physiology, molecular biology, neurophysiology, and physiological psychology. ISN promotes this viewpoint. Not only do our members come from a variety of these different disciplines, but we have now joined with other societies interested in behavioral science and have submitted a grant proposal to NSF for funding a mentorship program for students. The ISN also provides funding for international courses that teach neuroethology. The next generation of researchers will be better able to apply techniques across fields to answer questions related to the mechanisms of behavior

Tinbergen provided four basic aspects that should be addressed in studying behavior: Causation, Survival value, Ontogeny, and Evolution. However, beyond that, he did not provide a central theory in which to place these questions. Is there a unifying theory of neuroethology? I think the same problem can be posed to neuroscience in general. Neuroscience suffers from a plethora of phenomena that are related to the functioning of the nervous system with no central theory to unite them. The difference, as I see it, between neuroscience and neuroethology is that neuroethology is focused on functions as they relate to natural behavior. In this way, neuroethology is in a better position to unify neuroscience because any theory that unifies brain phenomena must explain animal behavior across species.

Neuroethology differs in its approach from Biopsychology (also known as Physiological Psychology or Psychobiology or, unfortunately, as Behavioral Neuroscience) in that the latter seeks to find general principles using animals in standardized tests, whereas neuroethology stresses the uniqueness of each species. Although I think that neuroethology provides a much more realistic assessment of the function of the nervous system, I have to concede that biopsychology has been much

more successful as a field. The reason is precisely because researchers are asking the same questions using the same techniques and generally using the same species (rats or mice). Therefore, researchers are intensely interested in what others in the field are doing because it directly impacts their own research questions. Neuroethology currently lacks this global unity. There are of course pockets of unity in communities such as electric fish and song bird, but these do not extend across the entirety of neuroethology.

So, is the field of neuroethology destined to be forever a collection of animal tales? Or will a central unifying theory of the neural bases of behavior emerge? I think that if there is a central theory of brain function, it is more likely to emerge for neuroethology than from any other field because WE have the data. One can not understand the generalities of brain function by studying a limited number of species doing the same behaviors. That said, we need to start thinking BIG. What are the organizing principles of brains and behaviors? Can we create a modern synthesis of neuroethology? I look forward to finding out and I encourage everyone to join in a discussion of this on our Facebook page at:

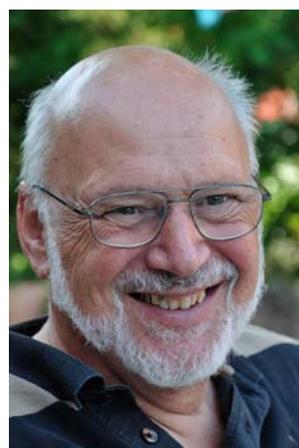
<https://www.facebook.com/groups/neuroethology/>



In Memory of Norbert Elsner 1940 – 2011

by Franz Huber

Former Director, Max-Planck-Institute for Behavioral Physiology, Seewiesen, Germany and Retired Scientific Member of the Max-Planck-Society



On the 16th of June 2011, Professor Dr. Norbert Elsner, Biologist, Insect Neuroethologist and Humanist, died from a glioblastoma.

Norbert Elsner was born in 1940 in Silesia (Central Europe). In 1946, he and his mother were exiled from their home and moved to Nordrhein-Westfalen. Norbert's father

was a prisoner of war until 1951 and died soon after his return to the family.

As a high-school student, Norbert had already become “imprinted” on Biology, influenced by his teacher Dr. Rombeck. After studying Biology and Chemistry in Münster, Tübingen and Munich — also meeting the late Max Delbrück in Cologne — he joined my laboratory in Cologne in 1964. He received his Ph.D. in 1967, focusing on the neural bases of acoustic and courtship behavior in grasshoppers. Later, he collaborated with Hugh Rowell at the Makerere College, Kampala, Uganda, concentrating on various aspects of patterned movements in insects. He gained additional insights into the biophysical problems of insect acoustics in the laboratory of Axel Michelsen in Copenhagen, and learned more about the neuromuscular organization of insect behavior and intracellular recording while working with the late Graham Hoyle, in the Department of Biology at the University of Oregon, Eugene. In 1974, Elsner received his Habilitation degree in Cologne.

In 1978, Norbert was promoted to Full Professor in Zoology and Anthropology at the University of Göttingen, where he worked until his retirement in 2008. In Göttingen, Elsner served on numerous University committees and eventually became Dean of the Biological Faculty. His academic achievements were honored by being elected to the Göttingen Academy of Sciences, the German National Academy, Leopoldina, and the Slovenian Academy of Sciences and Arts. In the Göttingen Academy, he acted until his death as Vice President of the Mathematical and Physical Division.

Throughout his life, Norbert’s scientific interests were concentrated on the underlying neurobiological bases of acoustic behavior and auditory communication in grasshoppers, including their evolution. During his residence in Cologne, he concentrated on the neuromuscular systems of complex acoustic behavior. For example, he recorded from more than 20 different muscles in freely moving, stridulating and wing-flapping grasshoppers; Elsner elucidated the orchestration of muscles and showed their phase relationships and patterning during different forms of movements. In this respect, he could have been nominated for the

Guinness Book of Records! Together with the late Otto von Helversen he developed methods of recording overt hindleg movements simultaneously with muscular activity.

As a Professor in Göttingen, Elsner stimulated and led a highly motivated group of doctoral students who unraveled the neural bases of sound pattern generation using intracellular recording techniques and staining procedures at the level of single identified neurons. Elsner called this approach “*stridulation under the microelectrode*”. Highlights during these years included Berthold Hedwig’s studies of command neurons in the brain for stridulation and courtship, the successful beginning of pharmacological brain stimulation and the elucidation of neurons within the thoracic nervous system that comprised part of the sound (song)-generator network.

Elsner also extended his research interests to the sensory side of acoustic communication, using laser vibrometry and “biological microphones“, to study communication under natural situations and the influence of non-auditory stimuli, such as respiration, leg and wing movements, on auditory receptors and central neurons. Developmental as well as evolutionary problems and questions led him to widen his scientific field. During his last years, he worked with some of his students on the Greek mountain of Tomarus, studying two species of grasshoppers that had clear differences in morphology and courtship displays. There he found a zone, where hybrid individuals of the two species had combined parental behaviors. This zone Elsner called a “*natural laboratory for Evolution*”.

One would not fully appreciate Elsner’s comprehensive activities without mentioning his unforgettable organization of the famous “Göttingen Neurobiologen Tagungen” (Neurobiology meetings). For many years, he created these very special yearly happenings that had high scientific standards and provided a great social atmosphere; they attracted neurobiologists from around the world, providing a unique forum for scientific exchange among young graduate and Ph.D. students. Last, but not least, as Vice President of the Göttingen Academy of Sciences, Elsner was the promoter of a series of so-called

“Ringvorlesungen“ (i.e., panel-type lectures with different topics) for the general public, with titles such as “Das Gehirn und sein Geist“ (Brain and Mind)— “Evolution: Zufall und Zwangsläufigkeit der Schöpfung” (Evolution: Chance and Inevitability (loose translation)) — Bilderwelten (World of Images)— Scientia poetica: Literatur und Naturwissenschaft (...: Literature and Science). There he demonstrated his broad interests and comprehensive knowledge, which document his stature as one of the very few recent renaissance figures. He was what Germans call a “Universalgelehrter” (Universal Scholar).



Gordon Research Seminar: Compare or Perish

by *Helga Groll*
University of Southampton, UK

This summer I had the amazing opportunity to organize, along with my co-chair Andrew George, the Gordon Research Seminar (GRS) on Neuroethology held at Stonehill College, Easton, MA, U.S.A. on August 13th-14th, 2011.

It all started on August 2008, when I was invited to give a presentation at the GRS about the future of neuroethology. At that time, I was in my first year of PhD candidature and therefore excited about this opportunity. This was the first time I became familiar with the GRS, which is a relatively new seminar developed by the Gordon Research Conference (GRC). The GRS on Neuroethology is a unique meeting that enables graduate students, post-docs, and other scientists with comparable levels of experience and education to come together in a highly-stimulating, non-intimidating environment to discuss their current research, and build informal networks with their peers that may lead to a lifetime of collaboration and scientific achievement. The motto “for students, by students” was very appropriate, as I not only had the honor to give a presentation, but also was elected as a co-chair to organize the next GRS in 2011.

With the title of this year’s meeting “Neuroethology: Compare or Perish” we aimed to

create a broad session with a strong focus on comparative approaches to the study of neural circuits. The seminar discussed issues related to the question: What are the neural correlates relevant to known behavioral differences among animals and how have they evolved? We particularly wanted to facilitate a lively and active participation by the students and postdoctoral fellows by shortening the presentations and lengthening the discussions. Our program included a variety of great speakers, students as well as postdoctoral fellows, and junior researchers led the sessions. The talks covered a range of organisms such as fruit flies, bees, crabs, fish and non-human primates. The seminar began with a keynote presentation by Lee Dugatkin from the University of Louisville. Student and postdoctoral talks followed and focused on the modification of animal behavior and its underlying genetic mechanisms. Speakers included Brian Dias from Emory University, Josh Lillvis from Georgia State University, Scott Dobrin from Wake Forest University and Melissa Caras from the University of Washington. The second day of the GRS included talks focused on the neural basis of sensory processing and the integration of animal social behavior and computational neuroscience. Speakers from this session included Chris Palmer from UCSD, Tsunehiko Kohashi from Washington University in St. Louis, Amber Hudson from Emory University, Stephen Shepherd from Princeton University, Tim Brawn from the University of Chicago and Linnea Van Griethuijsen from Tufts University.

We were an intimate group of 50 participants and both the group site and idyllic setting contributed to the great seminars, which fulfilled the purpose of giving young researchers the opportunity to discuss and debate science without the intimidated atmosphere of a bigger conference. The Stonehill College campus provided the ideal setting to talk with one’s peers, both during the poster sessions and the free time. I was very pleased to see that attendees were passionately engaging in and enjoying scientific discussion, and I was even more delighted to see that senior scientists offered to “chaperone” the individual sessions and showed great interest in the poster sessions.

I am very grateful to have had the opportunity to co-organize a conference and select and invite

speakers. I would like to express my gratitude toward the GRC chairs Susan Fahrbach and Jochen Zeil and vice chairs Hans Hofmann and Heather Eisthen who provided valuable feedback and support throughout the preparation as well as during the GRS. I strongly encourage students and postdoctoral fellows to make use of the opportunity of a GRS that will increase their confidence and social networking and enhance their experience of attending a conference. *The next GRS/GRC in Neuroethology will be held August 18-23, 2013, at Mount Snow Resort, West Dover, Vermont, USA.*



Sad News and Farewell: John S. Edwards 1931 – 2012

by *Karen A. Mesce*
ISN Secretary, University of Minnesota, USA

It is with much sadness that I report the very recent passing of John Edwards, Professor Emeritus, University of Washington. Born in Auckland New Zealand in 1931, John spent much of his life as a beloved Professor in the Department of Zoology at the University of Washington. For those who did not know him well, his autobiography can be found in: "The History of Neuroscience in Autobiography", volume 5, edited by Larry R. Squire, Elsevier.

http://www.sfn.org/skins/main/pdf/history_of_neuroscience/hon_vol_5/c6.pdf

I feel extremely fortunate to have known this amazing scientist who had a contagious enthusiasm for the outdoors and Biology. The following passage, taken from his autobiography, captures the person I knew and adored. He writes, ["My life in science was best characterized early on by the admonition leveled at me by my dreaded undergraduate adviser: "Mr. Edwards, you suffer from responding to an excessive diversity of stimuli." I have never quite mastered that defect, so I must preface my story with the warning that my neuroscience will be studded (or stunted) with diversions and tangents. It is said that moles know one big thing, whereas foxes know lots of little things. I am vulpine. If there is a theme in what follows, it stems from Wigglesworth (1939) that

"Insects provide an ideal medium in which to study all the problems of physiology."]

I am sure that we will hear more about John's legacy in the months ahead, but for now we say farewell and thank him for all the solutions to the problems he posed in comparative neurobiology and physiology, and for all the students and collaborators he inspired.



Make the Most of ICN-2014 and Plan to Collaborate With Japanese Neuroethologists

by *Heather Eisthen*
Department of Zoology, Michigan State University, USA
and
Yoshitaka Oka
Department of Biological Sciences, Graduate School of Science, University of Tokyo, Japan

With the International Congress of Neuroethology meeting in Sapporo in 2014, we thought this would be a good time to encourage collaborations between our colleagues in the West and in Japan. Travel to the conference could easily be combined with laboratory visits, and now would be the ideal time to begin planning such adventures.

Japan is home to a large number of neuroethologists, and its strong role in the field is illustrated by the fact that the first congress of the International Society for Neuroethology (ISN) was held in Tokyo in 1986. The ISN currently has 340 members. Almost half (160) are from the United States, and the next most populous group is in Germany, with 33 members. Japan consistently ranks third, with 21 current members. This is remarkable considering that Japan also has its own society, the Japanese Association of Neuroethologists (JAN). JAN was founded in 1987, and has about 100 members. Japan is home to a diverse array of neuroethologists, with historic strengths in research with marine invertebrates, insects, and teleost fishes. (For those curious to learn more, the roots of Japanese neuroethology are

nicely described by Sakiko Shiga in an article in the July 2007 issue of this newsletter.)

Given the large number of neuroethologists in Japan, there is surprisingly little cross-talk between neuroethologists in Japan and in the West. Our informal observations suggest that there are more collaborations between labs in the U.S. and Germany than between labs in either country and Japan. One small measure of this imbalance: the Neural Systems and Behavior course at the Marine Biological Laboratory in Woods Hole receives more than five times as many applications from Germany as from Japan.

We have been collaborating for close to seven years now, with members of our laboratories exchanging visits that have ranged from a few hours to four weeks. We describe here our thoughts on the challenges and benefits of such collaboration. First, the challenges, which we are convinced are more perceived than real.

Some might consider that the distance between Japan and any Western country imposes a barrier. In reality, if you are collaborating with another lab that is further away than the next building, there is a barrier. You cannot visit every day, and when collaborating with distant researchers you must account for the time difference in your communications. Really, though, these are small impositions. In addition, many people in the West are of the impression that life in Japan is prohibitively expensive. In my (Eisthen's) experience, this is simply not true. The University of Tokyo has a dormitory for visitors that is convenient and well set up, and I pay less than US \$40/night for the nicest room in the building. The price of food in Japan is entirely reasonable if you eat like a Japanese person; prices are only high if you insist on eating imported Western food, which is not only expensive but is usually not as fresh as local food. Finally, of course, funding for travel can be an issue, but some funding agencies have special programs to encourage collaboration between scientists in Japan and Western countries. For example, we have obtained funding from the Brain Research Cooperation Program, which provides a supplement to grants from the National Institutes of Health (U.S.) to pay for American researchers to

travel to and work in Japan. Correspondingly, we obtained funding in the form of a Joint Study Group grant from the National Institute for Physiological Sciences (Japan), which pays for researchers from Japan to travel to labs of American collaborators.

The benefits of collaboration may be obvious, but we will take a moment to remind our readers of them. Some are the same as with any collaboration: two groups of researchers with complementary expertise can carry research that neither could alone. Interacting closely and for prolonged periods with researchers in other labs can be fun and intensely educational. In our case, students in Japan benefit from the presence of visitors who force them to speak English and to experience international collaboration without going abroad, and students in Michigan are invariably excited to have a chance to show their Midwestern hospitality to international visitors. In terms of work, of course, the quality of lab space and the equipment available in Japan meets or surpasses that at many Western universities. One decided advantage to carrying out molecular biological research in Tokyo: you can place electronic orders for primers in the late afternoon, and the next morning someone will hand-deliver them to your laboratory. Also in the late afternoon, people from sequencing companies make the rounds: you hand them your tubes, and your sequence will arrive via email in the middle of the night. This combination of attentive personal service and fast high-tech results is stunning, at least to this Westerner.

Finally, traveling to and working in Japan is a delight. The country is gorgeous: it seems that in every corner of Japan, people have a keen aesthetic sense. Even in densely populated areas, such as Tokyo, gardens are everywhere and flowers are in bloom year-round. The food is fantastic, the people are friendly and polite, and everything works. Japan is of course the quintessential modern country, but its culture evolved in parallel with that of the West for so long that it is profoundly and beautifully different. We hope that you will take advantage of your time in Sapporo to forge new and long-lasting collaborations with colleagues in Japan.





Call for Nominations: Officers and Councilors of the ISN

We ask for your assistance in nominating members of the ISN to serve as candidates for officers and council members. We are looking for dedicated candidates who will represent the geographical and scientific breadth of our society.

Elections take place *via* email every 2nd year shortly after the biannual congress (ICN), which will be held this year in College Park, Maryland, USA from August 5 - 10. Candidates for the election will be presented at the business meeting during the Congress meeting.

We need a slate of candidates that includes the president-elect, secretary, and 7 councilors. The duties of these positions can be found in the bylaws <http://neuroethology.org/about/bylaws.php>

Please send the names of potential candidates to one of the members of the Nominating Committee (listed below). Do not hesitate to contact us if you have any questions. You are encouraged to propose yourself if you feel that you can devote some of your time and efforts to the ISN. The Nominating Committee will review the nominations to create a final slate of candidates that will provide a balanced Council with respect to geography, gender, research fields, and animal species. The committee is charged with creating a list of two (not more than three) candidates for each of the two officers, and about 14 candidates for Council.

So, please help us create a strong ballot. This is your society and your chance to influence its future.

Martin Heisenberg, Chair of the Nominating Committee

Nominating Committee:

Martin Heisenberg (Past-President, Germany)

heisenberg@biozentrum.uni-wuerzburg.de

Sarah Bottjer (USA) bottjer@usc.edu

Asif Ghazanfar (USA) asifag@gmail.com

Leonard Maler (Canada) lmaler@uottawa.ca

Alison Mercer (President-Elect, New Zealand)

alison.mercer@otago.ac.nz



Program for the International Congress of Neuroethology 2012

ICN 2012 will run from Sunday evening August 5 through Friday afternoon August 10. See <http://icn2012.umd.edu/> for more information

****Abstract submissions March 1-April 30, 2012****

Plenary and Evening Speakers:

Malcolm Burrows (University of Cambridge, UK): How do animals move quickly: Interactions between brain, muscle and skeleton <http://www.zoo.cam.ac.uk/zoostaff/burrows.htm>

Elke Buschbeck (University of Cincinnati, USA): The making of an eye: structural and functional diversity of stemmata

Carsten Duch (Arizona State University, USA): Probing motoneuron function with targeted genetic manipulation in *Drosophila*

Ole Kiehn (Karolinska Institute, SWE): Spinal motor networks – excitation moving us forward

Toshiya Matsushima (Hokkaido University, JP): Chick economics: Profitability, risk and competition

Arthur Popper (University of Maryland, USA): From blind cave fish to pile driving – a tale of translational neuroethology

Constance Scharff (Freie Universitat, GER): Is FoxP2 a candidate for 'deep homology'?

Walter Wilczynski (Georgia State University, USA): Reciprocal interactions of social signals and hormones in anuran acoustic communication

Founder's Lecture: Edward Kravitz (Harvard University, USA): Genetic manipulations in the fruit fly fight club

Heiligenberg Lecture: James A. Simmons (Brown University, USA): Understanding how slow neurons support fast timing behavior: Echolocating bats, electric fish, and Walter



Travel Awards

Deadline April 30, 2012

There are several opportunities for young investigators to receive travel awards to attend the International Congress of Neuroethology in August <http://icn2012.umd.edu/> All three have an application deadline of April 30, 2012. You can read more about the applications at: <http://neuroethology.org/membership/awards.php>

Young Investigator Awards:

This award is destined to doctoral graduate students and early post-doctoral fellows who have shown outstanding promise and have already made a significant research contribution in any aspect of the field of neuroethology. Our emphasis in attributing these awards is that young investigators represent the ISN of tomorrow, and the Society feels that it is very important to acknowledge and reward our future in this way. Award amount is at least \$1,200.

Heiligenberg Student Travel Awards:

Six awards or more (up to a total of \$700 each) are available to cover expenses such as travel to and from the conference site, conference registration fee, and/or housing costs.

Developing Neuroethology Award:

This fund provides travel support for neuroethologists from emerging and developing countries to attend and present their work at the International Congress of Neuroethology.



Plans for the 2014 ICN in Sapporo, Japan are in the works. For more information see

<http://icn2014.wordpress.com/>



Call for Proposals for the 2016 Congress

by *Alison Mercer, President-Elect of the ISN*
University of Otago, New Zealand

We hope that you are already considering the possibility of hosting the 2016 Congress. Now is the time to begin thinking about this in earnest and planning your proposal. Keep in mind that the conference generally attracts between 500-700 people, so it is important that you have a lecture hall that is large enough to accommodate this many people.

If you are interested in hosting the Congress, please put together a proposal and send it to me (alison.mercer@otago.ac.nz) for pre-approval. **Proposals should include the following information:**

Host information

- Name and contact information of host
- A list of the faculty, students and staff who will form the local organizing committee
- Availability of local support from your home institution, local sources, government sources (note that the Program committee will be responsible for writing grants, but if there is local support available to offset costs this is very helpful)
- An estimate of registration fees (if possible)

Proposed Dates for the Congress

- please offer a number of choices, if possible

Meeting Venue Information. This can include the following if available:

- Location
- Rooms available with seating
- Poster room locations
- Facilities for meals
- Off-site availability of food
- Internet services
- Projection services
- Childcare services

Housing information. This can include the following if available:

- Estimate of the number of rooms/beds for students and/or faculty at the meeting site, if limited
- List of local hotels
- Approximate cost of housing
- Location relative to meeting site

Transportation information

- Current airline prices from: New York, Los Angeles, Chicago, Atlanta, London, Berlin, Frankfurt, Tokyo, Sydney, Buenos Aires (this is just to compare relative costs)
- Cost of transportation from nearest international airport to meeting site
- Transportation at meeting site (if applicable)

Local attractions and/or possible daytrips

If your University or local convention center regularly hosts meetings of this size then there may be a professional conference organizer who can assist you in gathering this information.

***** *The deadline for submitting your proposal is June 12, 2012******

Prospective hosts who receive pre-approval will give a 10-minute presentation at the College Park Maryland Congress in August detailing the advantages of their venue. Information about the proposals will be available online and a poll will be conducted shortly after this year's Congress to decide where the 2016 Congress will be held. Once this has been decided, the Executive Committee will appoint two Program Chairs who will assemble a

Programme Committee to determine the content of the Congress.

I would greatly appreciate receiving a brief email from you if you are considering submitting a proposal (alison.mercer@otago.ac.nz).

Many thanks



THE 2012 ISN CAPRANICA PRIZE



The Capranica Neuroethology Prize is named in honor of Robert and Patricia Capranica to provide an annual cash prize for recognition of outstanding achievement or future promise in the field of neuroethology.

The prize consisting of \$1,000 (US) will be awarded to a promising young investigator who is the author of a paper published on line or in print during the 2011 calendar year, which is judged to be the most outstanding in terms of scientific significance in the field of neuroethology on the basis of criteria including: novelty of the scientific discovery, implications for scientific technical advancement, or importance for advancement of knowledge. The student must be first author on the submitted paper and must have played a major role in the inception and execution of the study. A secondary consideration shall be the accomplishments of the investigator such as other papers published, awards earned, leadership in societies and student organizations.

Eligible candidates must be either graduate students or postdoctoral trainees who have received their doctoral degree after 2007. Either the nominee or the advisor must be a member of ISN.

Applicants should submit (either by postal mail or by e-mail in PDF format) a brief statement of their qualifications and the significance of their published paper, a copy of the paper, a *curriculum vitae*, and a letter of reference from their graduate or postdoctoral advisor that details the role of the applicant in the published study as well as the overall accomplishments of the young investigator. The cash prize will be awarded to the recipient and their name will be announced at the next International Congress of Neuroethology

*****All materials must reach the ISN office by April 30, 2012*****

Inquiries, as well as all application materials, should be addressed to:

Capranica Prize Selection Committee
International Society for Neuroethology
P.O. Box 1897
Lawrence, KS 66044, USA
Email address: lhardwick@allenpress.com

Selection of the recipient of the Prize will be based entirely on scientific merit, irrespective of race, creed, sex, age, or nationality. Donations to the fund supporting this Prize are welcome; please contact the above address.



Sensory Ecology: An International Course for Postgraduate Students

Course Organizer: Prof. Eric Warrant
Department of Biology, University of Lund
Sweden

The senses of animals are essential for every aspect of daily life. Whether detecting a mate or a prey, escaping the attentions of a predator or simply monitoring the surrounding habitat, an animal's senses are critical to its survival. To respond to the opportunities and dangers of the world quickly and effectively, each species must possess a sensory system that is uniquely optimized to its particular ecology. This "sensory ecology" has driven the remarkable range of sensory systems we find in Nature today.

Now in its second decade, the international postgraduate course Sensory Ecology is known throughout the world. The two-week course – which is limited to 40 participants – is organised by the Department of Biology at the University of Lund. The course is held every second year in Autumn. The world's leading authorities in sensory ecology are invited to Lund to deliver an outstanding program of lectures covering all animal senses. The next course will take place in Lund from September 23-October 6, 2012.

Places will be allocated on a first-in first-served basis until the maximum number of places is filled (40 places). ***The closing date for applications is***

August 15th 2012, although the course is likely to fill before this date.

Please see the course web site for application procedures, details of the course contents and other practical information:

www.lu.se/vision-group/courses/sensory-ecology

One can also contact the organizers via the following e-mail address:

Sensory.Ecology@cob.lu.se



MOLLUSCAN NEUROSCIENCE MEETING

MAY 16 - 19, 2012

"Molluscan Neuroscience in the Genomic Era: From Gastropods to Cephalopods"

Scripps Research Institute, Jupiter, Florida, USA

The Scripps Research Institute has a beautiful conference center, and affordable housing is available on the adjacent Florida Atlantic University campus.

For more information please go to

<https://sites.google.com/site/molluscanneuroscience/fl2012/>

The Organizers hope that you will be able to join them this spring for an exciting meeting in a beautiful location.



Postdoctoral Position Available

A postdoctoral position is available at the University of Utah to perform electrophysiological experiments to understand neural mechanisms underlying vocal rhythm generation in African clawed frogs. A background in cellular electrophysiology is required. In addition to receiving strong training in cellular and systems neuroscience, the collaborative nature of the research program provides an opportunity to pursue various directions of research including computational neuroscience, optical imaging, and

molecular neuroscience. Please send CV and a list of references to:

Dr. Ayako Yamaguchi

Assistant Professor

a.yamaguchi@utah.edu

<http://www.biology.utah.edu/people/details.php?id=1727>



MATERIAL FOR FUTURE NEWSLETTERS

Send news, job advertisements, meeting announcements and other related information for the next newsletter to the ISN secretary, [Karen Mesce](mailto:mesce001@umn.edu) (mesce001@umn.edu). All materials should be sent via email.

Advertisements for jobs and graduate/postdoctoral positions should be no more than 150 words.

Suggestions for *feature articles*, including autobiographical sketches, research group reports, and Neuroethological Viewpoints, should also be sent to the ISN secretary. Please do not submit full articles of this type without a response from the Editorial Board. Feature articles may be up to 1,500 words in length.

We also welcome research commentaries, book reviews, and other material that might be of interest to the ISN community. These should be no longer than 450 words in length, and should only be submitted after consultation with the editor.

