

International Society for Neuroethology

Newsletter November 2010

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President's Column

Paul S. Katz Georgia State University Atlanta, GA, USA

It is a great honor to follow the previous presidents of this wonderful Society starting with Ted Bullock, Mark Konishi, Jack Pettigrew, Randolf Menzel, John Hildebrand, Malcolm Burrows, Al Feng, Ed Kravitz, and most recently Martin Heisenberg. I am truly humbled by this prestigious lineage and hope that I can live up to it. The International Society for Neuroethology (ISN) has been my academic home since the first meeting that I attended shortly after completing my Ph.D. I have heard many others profess similarly affectionate feelings towards the Society. Many have said to me that the International Congress of Neuroethology (ICN) is their favorite meeting to attend. As the newly incoming president, I would

like to give you my opinion about what the functions the ISN and ICN are.

The central purpose of the ISN is to promote the field of neuroethology. First and foremost, this is accomplished by holding the ICN. The ICN brings people together to exchange ideas. It introduces new students to the field and sometimes even brings in new recruits to the fold. The meeting this summer in Salamanca was outstanding. The science that was presented was first rate. The location was spectacular. The attendance was beyond expectation. Even with the current economic climate, about 600 people attended the ICN in Spain.

Since its inception, the ICN has been held every three years. For a number of reasons, we will be switching to holding it every other year. One reason for the change is that people really like the meeting. Holding it every three years is not often enough to keep young people engaged. Increasing the frequency of the meetings will provide us the opportunity to hold the meeting at more locations around the globe and thereby better serve our constituency. The 2012 ICN will be held in College Park, Maryland (http://icn2012.umd.edu/). This location was chosen out of expediency; the group at the University of Maryland had previously submitted a proposal and was ready to hold a congress. As you know, we held our usual competition for the 2014 site. There were two excellent proposals: one for Quito, Ecuador and the other for Sapporo, Japan. The membership chose the Japanese site and the Council strongly agreed with this selection. So, the 2014 ICN will be held in Sapporo (http://icn2014.wordpress.com/). The competition for the 2016 site will be announced shortly. So, if you're interested in hosting it, please start thinking about it. Another way that we promote the field of neuroethology is to bring publicize our efforts: At the ICN in Salamanca, we held a press conference for local Spanish media. I think that we managed to convey the importance of neuroethology. Many of the questions were of the type: what does this have to do with the human condition? We talked about the development of products such as hearing aids that have resulted directly from neuroethological research. We talked about the advances in computational algorithms for robotic control that have directly resulted from neuroethological research. We talked about insights about language acquisition that have resulted for neuroethological research. But we also talked about how important it is that we simply understand the life around us on this planet. Dan Margoliash pointed out how the great Spanish neuroanatomist Santiago Ramon-y-Cajal did not limit his studies to rats, monkeys, and humans. He did comparative work on a variety of organisms.

We need to promote the Neuroethology Brand. It is important that other researchers recognize and have a positive impression of what neuroethology is. It is not just the neurobiology of a bunch of weird organisms on the fringe. It is an approach to understanding how behavior is produced that considers the natural behavior of the animals, their ecological contexts, and their evolution. We don't limit ourselves to unfamiliar animals; we include rodents and apes, including people. We don't

use any one approach, we include electrophysiology, molecular biology, modeling, and behavioral observation. When people here the word Neuroethology, they should associate it high quality science that achieves an exquisite understanding of the nervous system and a mechanistic understanding of behavior.

To help promote the Neuroethology brand, Bill Kristan, Kathy French and I put out a call for people to contribute to a special issue of Frontiers in Behavioral Neuroscience on Neuroethology. The outpouring of contributions was great. We had 30 initial submissions to this special issue. Most special issues of the journal are between 10 and 15 submissions. People were very interested in having their paper associated with this volume. The manuscripts that have been accepted are already available on line

(http://www.frontiersin.org/behavioral_neuroscience/specialto_pics/neuroethology/68). It is essential that we enhance our presence on the web. This is one of our public faces that provides information to both members and non-members of the Society. I have appointed an ad hoc committee who are examining ways of revamping our web presence.

As an international organization, it is also important that we support international initiatives. We need to be involved in training the next generation of scientists. We should and do promote neuroethology courses around the world. In fact, students from the Neural Systems and Behavior Course in Woods Hole and from the ISN/IBRO course that was taught in Argentina in March 2010 attended the ICN in Salamanca.

I think that the future of Neuroethology depends upon us constantly incorporating the newest ideas and approaches into our work and infecting the rest of neuroscience and mechanistic behavioral science with our approaches. We should be inviting more people who don't consider themselves "neuroethologists" to our meeting. I heard a couple of speakers indicate that they felt a bit out of place. This may indicate that we have defined ourselves too narrowly. We shouldn't be exclusive. I would hope that the view of neuroethology could become more inclusive. If we do our job right, then neuroethological approaches will become broadly accepted as the best way to study the neural basis of behavior.

Here are the results of the 2010 ISN elections

The President-elect is **Alison Mercer**The new Secretary is **Karen Mesce Fred Delcomyn** was re-elected Treasurer.

New Council Members:

Catherine Carr Jochen Zeil Michael Dickinson Ana Silva Kentaro Arikawa Uwe Homberg Ansgar Bueschges

Because Alison was previously a Council member, she resigned her seat. The next highest vote getter, Hans Hofmann was chosen to fill the remaining time for her seat.

The rest of the council, whose terms expire in 2012 are:

John Hildebrand Hans-Joachim Pflueger Catherine Rankin Alan Roberts John Simmers Daniel Tomsic

The two amendments to the bylaws passed with almost no objection.

Paul S. Katz The new ISN President

Remembrance of Congress Past: Images and correspondence

The meeting was wonderful. The diversity of species represented was huge and the quality of science was extremely high. Both the talks and posters were, overall, excellent. I was struck by how some aspects of the neural machinery are incredibly conserved -- for example, Kathy French's demonstration that vasopressin-like peptides induce courtship behavior in leeches. I was also impressed by the breadth of methodologies employed by the presenters. Some of the technical advances I saw at the Congress, such as Anthony Leonardo's ingenious on-board dragonfly recording system, were truly outstanding.

Carli Watson, Duke University

I didn't take any pictures in Salamanca. I agree that the meeting was great. The old city is just an amazing environment, and it was superb that we could get from the hotel to the congress center and the restaurants and city center just by walking. Regarding mishaps, I am glad I made it to Salamanca, because the A/C on the Avanza bus I was taking from Madrid airport to Salamanca on August 2nd was not working and we were getting seriously cooked until the driver eventually agreed to stop and open the two skylights to get at least some air circulating.

Rudiger Krahe, McGill University

Best,

Indeed, the meeting was great, and one of the most exciting things was the number of students and young scientists who comprised the majority of participants. It was really a great event, especially for "old guys" like us.

Best,

Zvi Wollberg Tel Aviv University Hi, this is Doug Gaffin of the University of Oklahoma and I want to tell you how much we enjoyed the recent ISN meeting in Salamanca. I have returned to campus completely energized with fresh ideas and goals. I also want to express how thrilled I was to have my student, Elizabeth (Elise) Knowlton selected as one of the award winners in the student poster competition.

Douglas D. Gaffin University of Oklahoma

Concerning impressions, mishaps etc. - I very much enjoyed talking to colleagues as always, getting ideas, making plans, achieving the occasional new insight. This includes the posters, often consumed "off line", i.e. during the early or late hours. The plenary lectures were mostly really good, with the inevitable occasional exception. I liked the venturing into neighbouring realms, in the form of Astrid Prinz' talk, for instance. For me, Michael Dickinson's talk was the highlight, unfortunately in the only awkward seminar room. The negative impressions you do not want to know.

Harald

The meeting was great and I couldn't describe well enough my impressions of it. I would like to share with you two nice events that happened during the meeting...One of them was the opportunity to met old friends from the Neuroethology IBRO school that took place in Buenos Aires this year, luckily some of the students and all the teachers could assist to the meeting and take a picture to send back to the other students which couldn't assist...The other special thing was that one of our friends from the lab had her birthday during the meeting and also gave a talk in one symposium... this girl is a natural neuroethlogist and the mystic environment from Salamanca's night made this meeting extremely special for the 5 of us which came from Uruguay... and of course Rossana was very happy and shocked... we had a night tour through Salamanca as a birthday gift! Well...the congress was great and everything was fantastic!! I wanted to share these two little thing that were an extra point during the meeting.

Best, Gervasio Batista

I'm responding (hopefully not too late) to your request for stories/pictures from the recent neuroethology conference. I was fortunate enough to be able to attend with my family, which provided the context for the enclosed photo (that's my son explaining my poster). I don't have any specific stories to recall, but I do have fond memories of fine dining during late evenings in the plaza mayor, while listening to the two rival tunes playing from opposing corners of the plaza. It was a perfect way to unwind and digest all of the wonderful science to which I had been exposed during the day!

Zane Aldworth



















































2nd IBRO – ISN ADVANCED SCHOOL OF NEUROETHOLOGY IN ARGENTINA

Bienvenidos a Buenos Aires!!

Harold Zakon The University of Texas, Austin, TX

On March 14th to 26th 2010 a number of scientists and 20 Latin American students attended the second IBRO - ISN Advanced School of Neuroethology in Argentina. The school was organized by local faculty Lidia Szczupak and Daniel Tomsic, from the Universidad de Buenos Aires. Funding for the school was provided by the Latin America Regional Committee of the International Brain Research Organization (LARC-IBRO); the International Society for Neuroethology (ISN); the Facultad de Ciencias Exactas, Universidad de Buenos Aires (FCEN-UBA), and the Instituto de Fisiología, Biología Molecular y Neurosciencias - Argentina National Research Council (IFIBYNE-CONICET). The school for 2010 built on the great success of the first school in 2007, and was designed for young, promising trainees from Latin American countries who are training as MS or PhD students in the Neurosciences.

The first week of the school was devoted to lectures by and discussions with 5 visiting faculty from abroad, Catherine Carr, Michael Dickinson, Jan Hemmi, Paul Katz and Harold Zakon. During the second week of the school, the students worked with local Latin American faculty on a variety of lab exercises. The 20 students came from Argentina, Brazil, Chile, Cuba, Mexico, and Uruguay.

The school had just the right mixture of science and socializing. The first night we had a reception in Buenos Aires with excellent Argentine pizza (not surprising given the heavy Italian influence in BA). The next day students and faculty went by bus to a rustic hotel in San Clemente del Tuyú, a small quiet ocean-side town a few hours from BA. This provided a relaxed atmosphere for the first week of lectures.

On the first day, Catherine Carr (University of Maryland) opened with an overview of the history of Neuroethology. Later in the week she discussed mechanisms of sound localization in vertebrates and the independent evolution of these mechanisms in mammals, birds and reptiles, and amphibians. Michael Dickinson (California Institute of Technology) discussed broad principles of sensory motor integration focusing on sensory control of flight in *Drosophila*; Jan Hemmi (Australian National University) discussed the physics and biology of color vision and the visually-guided behavior of crabs; Paul Katz (Georgia State University) discussed general principles of central pattern generators and illustrated these with his work on plasticity and evolution of CPGs in mollusks; and Harold Zakon (University of Texas) discussed hormonal regu-

lation and molecular evolution of communication signals highlighting these topics in electric fish.

In the evenings early in the week the students presented their research so that we could get to know each other better. Their research was diverse covering such topics as the mechanisms of learning, drug tolerance, developmental neurobiology, neuroethology, behavior, and neuroanatomy.

One day, Jan Hemmi and Daniel Tomsic led the students in an exercise on a coastal mud flat teeming with crabs. Groups of students designed their own behavioral experiments on visually guided-behavior in crabs, and later analyzed data and presented their results to us all in powerpoint format. The students learned that designing experiments in the field can be challenging, but fun!

At the end of the week, we had a very heart-felt discussion about doing science in developing countries and careers in science. The week was capped off by a party with intense conversation, dancing, and Brazilian rum drinks. We all went back to BA at the end of the week and, con muchos abrazos, the visiting faculty said our "Good byes" as the students prepared for the second, lab-based portion of the course at the University of Buenos Aires. A very important element of the course was the bond created among the students from the different Latin American countries, and between them and the faculty.



In the second week, students had lectures from local Argentine and Uruguayan faculty in the mornings and worked on their lab projects during four long afternoons. On the fifth day the students presented and discussed their results. Students chose to participate in one of five exercises: *in vivo* intracellular recording of visual interneurons in crabs to study visual processing and formation of visual memory (Daniel Tomsic), video and electrical recordings of social interactions in electric fish (Ana Silva), behavioral experiments and molecular correlates of memory reconsolidation in mice (Arturo Romano), intra- and extracellular recordings in the leech to characterize

mechanosensory responses and neuronal network interactions (Lidia Szczupak), or behavioral and molecular experiments on circadian rhythms in *Drosophila* (Fernanda Ceriani). We know the students really enjoyed the second week. As Daniel observed: "The students continued being highly motivated, to the point that even after their frequent explorations into the nocturnal fun of Buenos Aires city, they kept arriving to classes on time." That says a lot!!!

One final indication of the success of the school is that four of the students attended the International Congress of Neuroethology in Salamanca, including Ana Luiza Turchetti-Maia and Augusto Barbosa Jr. from Brazil, Gervasio Batista from Uruguay, and Sung Min Yang from Argentina.

A personal note for me....this trip afforded me the opportunity to find a branch of my family that had emigrated to Argentina about 100 years ago. I spent two wonderful days with my newly discovered cousins and their families. Paul Katz also connected with long-lost family members.



I wish to end by saying that this very successful event could not have happened without the persistence and hard work of Lidia and Daniel. On behalf of the students and faculty of the school, we say to them "Muchas gracias por todo!!!"







ISN Executive Committee and Council Meeting Summary

Friday, Aug 6, 2010, 1:00 pm

Location: Palacio Fonseca, old library room

Present: Fred Delcomyn, Linda Hardwick, Alan Roberts, Bill Kristan, Ron Harris-Warrick, John Simmers, Ansgar Bueschges, Hans-Joachim Pflueger, Harold Zakon, George Pol-

lak, Alison Mercer, Martin Heisenberg, Catherine Carr, Cindy Moss, Cathy Rankin, John Hildebrand, Daniel Tomsic, Alberto Ferrus, Paul Katz

Agenda

1. Financial report – Fred Delcomyn

- o Heiligenberg Student Travel Awards (HSTA), Developing Neuroethology Fund (DNF), Young Investigator (YI) Awards, and Instructional Schools are being paid out of the ISN assets.
- o Discussion of budget need to break even on an annual basis. Income does not match operational expenses. The Budget will be revised and presented to the EC at a later time.
 - o Discussion of accounting and tax returns
 - o Discussion of reserves to back up meetings.
 - Discussion of endowments.
- o Number of applications for DNF fund low; late in getting the notice out.
- o It was recommended that we change ISN Bylaws to make the Treasurer an appointed position rather than an elected position.

2. Membership report – Linda Hardwick

- o 532 paying members with 92 members taking the twoyear membership. With the change to a biennial Congress, we expect more of the members renewing in 2011 will select the two-year membership.
- o Ways to promote membership: Database of papers and teaching materials—we need a place online where members can download materials and papers. The ISN's goal is to promote the science, and this would be a product to obtain this goal. Open to the public but only members can submit.
- o Council approved the 2011 member rates, which would remain the same.
- o Discussion of whether to pay for speakers at meeting. This practice supports and attracts invited non-member speakers to attend, but does it punish the members if we support only non-member speakers? The idea was floated that chairs of Symposia should be given a sum of money to assist in the search for speakers; if not needed, then the sum would remain in the ISN account. This was not approved.
- o It was suggested that the Membership Directory should be open access. Linda will work with getting this open.
- o It was suggested to have an e-mail message that periodically says that you're missing e-mails posted on the listserv site as a way to remind people whose memberships have lapsed.

3. <u>Discussion of policies – Linda Hardwick</u>

- o Policies The IRS requires certain policies be in place and posted online. Sample policies presented and approved by council and will be posted online to keep the ISN within the regulations of the IRS.
- o Insurance Sample policies for Director and Officer as well as meeting insurance were provided. Meeting insurance will be obtained for the upcoming 2012 meeting and

the treasurer will review the Director and Officer Policy and make a recommendation to council.

4. Nominating committee - Paul Katz

o Discussion of Ballot and Polling

5. Report of the 2010 program committee

- o 593 attendees
- o 270 members: 50% of membership
- \circ 160 non-ISN members 27%. There was a 50Euro price difference between a member and non member registration rate.
 - o 99 people had registration waived
- o 280 Dorm rooms were reserved with only 1/3 being used. It was determined there was a glitch in the system making reservations at the dorm that were not required.
- o There was a discussion of the "Participant Symposia". They were unanimously thought to be very successful. It was agreed that we maintain the length as a 20 minute talk.

6. 2012 meeting – Art Popper

- O Discussion of site Dates Begin on Sunday August 5th and end on Friday at noon
- Discussion of nomination of program chairs and committee
 - o Discuss the payment of speakers.

7. 2014 meeting

- o Discussion about Sapporo and Quito proposals Straw vote was close.
- o Discussion about meeting management

8. Future plans for ISN – Paul Katz

- O Web redesign A website committee was appointed (see below) and will determine our needs and if we should send out the website to bid.
- o Hans Hofmann, Eric Fortune, Malcolm Macgiver, Zen Faulkes, Russell Wyeth

9. New Business

- o Council minutes will be sent to EC for final approval and then posted on the website.
- o EC meeting via teleconference In an effort to save both time and money, Paul will look into setting up council meetings via teleconference.
- o Capranica Prize Bob Capranica is no longer able to continue this award. The question was asked: can the ISN take it over and raise an endowment that will generate \$1,000.00 per year for awards. The ISN should guarantee the Prize if enough funds are not raised. It was approved that the ISN will continue to support this award, with the details to be worked out, and it will continue to be called the Capranica Prize.
- o Bill Kristan and Daniel Tomsic were charged with putting together a formal proposal for ISN to provide partial support for selected regional IBRO Neuroscience Schools Some level of financial support would be a worthy investment, as the IBRO Schools are valuable and high-profile. A proposal was submitted by School organizers in Argentina two years ago, and a copy should be sent to Paul. Financial assistance for the Argentina School was approved, but the ISN should pause from providing this type of support until we see understand the state of ISN finances and determine

at the next Council meeting if the ISN can afford to make such contributions.

Catharine moved to adjourn with a second and the meeting closed at 3:35 pm.

Our Treasurer's report August 2010

Fred Delcomyn University of Illinois

Annual Financial Reports for 2008 and 2009 were presented at the Salamanca meeting. Two aspects of these reports are noteworthy. First, ISN came out of the recent economic downturn remarkably well. We had a net loss in investment value of about 7%, but only about a 5% loss in net assets (thanks to a conference grant from 2007 that came through in 2008). For 2009, our net gain in investment value was about 10%, with about a 2% increase in net assets.

The second important aspect of these reports is that our revenue from membership dues, our main stream of income, has been exceeded by the operating expenses of the society every year for the past several years. We have been able to make up the difference by using investment and other income, but over the long term this is not a sustainable situation. The Executive Committee will keep an eye on this to see whether our new membership dues and moving to a two-year Congress cycle will reverse this trend, as it is expected that it will. Our objective will be to cover operating expenses through membership dues so that investment income can be used to fund other activities we consider worthwhile, such as our HSTA and DNF programs.

South East Neuroscience Conference, March 4-6 2011

We are happy to announce that the South East Neuroscience Conference, a merger of the former Georgia/South Carolina Neuroscience Consortium and the South East Nerve Net meetings, will be held in St. Augustine, Florida, at the Whitney Laboratory for Marine Bioscience of the University of Florida.

Please mark your calendar for March 4-6 2011

We hope that this newly merged venture will now cover the breadth of the field, from cellular to systems, and from comparative to translational neuroscience. Following the tradition of SENN, the meeting will be explicitly geared towards giving students and postdocs an opportunity to present their results in

front of a critical but friendly audience. For many it will be the first experience in speaking publicly outside of their own institution. That being said, there will also be 2 or 3 keynote speakers and, if time allows, some faculty talks.

The Whitney Laboratory is located 18 miles south of St. Augustine in the town of Marineland, on a narrow barrier island bounded by the Atlantic Ocean and the Intracoastal Waterway, both of which are just a few hundred feet away. This beautiful location also houses the famous dolphin conservation center, and is close to a number of other attractions, like the historic downtown, the Alligator Farm, and of course the beautiful St. Augustine Beaches.

Details about accommodations and registrations will follow at a later date.

Local Organizers

Peter A. Anderson, email: paa@whitney.ufl.edu
Dirk Bucher, email: bucher@whitney.ufl.edu
James C. Liao, email: jliao@whitney.ufl.edu

Steering Committee
Peter A. Anderson, Whitney Lab, UF
Darrell W. Brann, MCG
Dirk Bucher, Whitney Lab, UF
Gaylen L. Edwards, UGA
Debra A. Fadool, FSU
Paul S. Katz, GSU
Astrid A. Prinz, Emory
Marlene A. Wilson, USC
Larry J. Young, Emory

Positions in Neuroethology

Tenure Track Faculty Position Animal Physiology

The Department of Biology at Tufts University invites applications for a tenure-track Assistant Professor in Animal Physiology to begin in September, 2011. We seek a creative scholar whose research program focuses on elucidating the mechanisms by which animals (vertebrates or invertebrates) interact with, or adapt to, their environment. Possible research areas include neuroethology, endocrinology, biomechanics and physiological ecology. Applicants should employ an integrative approach that addresses how systems function across multiple levels of biological organization.

The successful candidate is expected to develop an active externally funded research program involving graduate and undergraduate students. A clear commitment to teaching excellence at the undergraduate and graduate levels is essential. Doctoral degree and a record of research productivity are required. Postdoctoral experience preferred.

Applicants should submit the following in a single PDF file: 1) a cover letter, 2) curriculum vitae, 3) statement of research interests and plans and 4) statement of teaching experience and philosophy. Submission of 1-3 select reprint pdfs is encouraged, but not required. Applications and three letters of reference should be sent to karin.murphy@tufts.edu.

Review of applications begins November 30, 2010, and continues until the position is filled.

Tufts University is an Affirmative Action/Equal Opportunity employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups are strongly encouraged to apply.

Case-Hooper Professorship of Zoology:

Neurobiology

We seek an outstanding researcher in Neurobiology, for appointment at the level of tenured Associate Professor or tenure-track Assistant Professor, as the inaugural holder of the endowed Case-Hooper Professorship of Zoology at the University of Oklahoma, beginning in fall 2011. This professorship offers a unique opportunity to combine research and teaching in neurobiology with a leading role in an active interdepartmental Cellular & Behavioral Neurobiology Graduate Program (www.ou.edu/cbn). The successful candidate will have a Ph.D. degree and a demonstrated ability to conduct significant independent research as evidenced by publications. The candidate will be expected to establish and maintain a distinguished, externally funded research program and contribute to undergraduate and graduate teaching in the Department of Zoology. Applicants should submit a cover letter, complete curriculum vitae, selected reprints/preprints, research and teaching statements, and names and contact information for three references, as PDF files to Chair, Case-Hooper Professorship Search Committee, at casehooper@ou.edu. Further information is available at http://zoology.ou.edu. Screening of candidates will begin December 15, 2010, and will continue until the position is filled.

Department of Zoology, 730 Van Vleet Oval, Room 314, University of Oklahoma, Norman, OK 73019, USA

The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.

Women and minority candidates are encouraged to apply.

The Department of **Mathematics and Statistics at Georgia State University** invites applications for up to four anticipated tenure-track positions in mathematics beginning August 2011 pending budgetary approval. The ranks of these positions will be at Assistant or Associate Professor lev-

el. Postdoctoral experience is expected and a PhD in Mathematical Science is required. First consideration will be given to candidates in bioinformatics and biomathematics. Otherwise, consideration will be given to exceptional candidates in all areas of mathematics with evidence of success at obtaining external funding. Successful candidates will be expected to develop a vigorous, externally-funded research program and contribute to teaching at the undergraduate and graduate level. Salary will be commensurate with qualifications and experience. Applications should consist of curriculum vitae, including a list of publications, a summary of future research least three letters plans, of , transcripts of all graduate work and evidence of teaching interest and abilities. Applications should be submitted directly to http://www.mathjobs.org. If a candidate cannot submit an application electronically, then it may be sent to the Tenure-Track Hiring Committee, Department of Mathematics and Statistics, Georgia State University, P.O. Box 4110, Atlanta, GA, 30303-3083, USA. For full consideration, applications should be received by December 1, 2010. An offer of employment will be conditional upon background verification. Georgia State University is a Research University of the University System of Georgia and an EEO/AAA institution that values the diversity of its faculty, staff and student body. For information please visit website our http://www2.gsu.edu/~wwwmat

We have a very strong contingent of faculty who work with dynamical systems in both the Math & Stats department and in the Neuroscience Institute.

https://www.mathjobs.org/jobs/jobs/2507

Postdoctoral Fellowship in Sensory Physiology

Department of Physiology and Biophysics, Dalhousie University

A position is available for a Postdoctoral Fellow to work with Dr. Andrew French and Dr. Päivi Torkkeli for a period of one year (renewable up to a total of 3 years), funded by the Canadian Institutes of Health Research.

Our laboratory investigates fundamental mechanisms of mechanotransduction, using a variety of techniques, including single‑electrode current and voltage clamp, tissue culture, intracellular dye imaging, electron microscopy and immunohistochemistry.

The position would suit people with a recent Ph.D. in neuroscience, biological science, physiology, entomology, etc. Previous experience in some area of electrophysiology would be an asset, but is not essential. Further information about our work, including publications, posters from recent meetings and photographs of the laboratory can be seen at: http://asfpht.medicine.dal.ca

Please enquire by email to:

andrew.french@dal.ca or paivi.torkkeli@dal.ca

Dr. Andrew S. French Professor of Physiology and Biophysics Professor of Biomedical Engineering Dalhousie University 3-B1 Tupper Bldg., 5850 College Street Halifax, Nova Scotia B3H 1X5,

Canada Phone: 902-494-1302 http://asf-pht.medicine.dal.ca

Post-Doctoral Position at Cornell University

An NSF funded post-doctoral position is available working on motion vision of visually-guided predatory beetles. They run so fast after their prey that they go blind and have to stop (Gilbert, 1997, J Comp Physiol 181:217-230). There are several aims that could be pursued. One involves using sharp electrodes to record from photoreceptors and motion-sensitive neurons of the optic lobe; another involves training beetles to run on a track ball and pursue targets presented on a CRT. Programming skill in Matlab will be beneficial for either aim. Starting appointment will be for 1 year at a salary of 40K \$US plus benefits. This is a 3 year award with opportunity for reappointment based on annual performance. Contact me at:

Cole Gilbert, (cg23@cornell.edu), Department of Entomology, Cornell University, Ithaca, NY, 14853, USA

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