**Upcoming Events**

- **Spring Quarter Begins – March 29**
- **OSUMC Research Day – April 8**
  
  For more information visit http://researchday.osu.edu/
- **Hunt-Curtis Frontiers in Neuroscience Seminars – 3:30 pm in 115 Biomedical Research Tower with a reception following the seminar**
  
  April 12 – Nahum Sonenberg, PhD, James McGill Professor in the Department of Biochemistry and the McGill Cancer Centre, McGill University and Investigator, Howard Hughes Medical Institute
  
  May 17 – Lawrence Goldstein, PhD, Professor in the Department of Cellular and Molecular Medicine, University of California San Diego and Investigator, Howard Hughes Medical Institute
- **Neuroscience Seminars – 12:00 pm in 105 Biomedical Research Tower**
  
  April 19 – Oswald Steward, PhD, University of California at Irvine
  
  May 3 – Reggie Edgerton, PhD, University of California Los Angeles
  
  May 24 – Anthony van den Pol, PhD, Yale University
  
  June 6 – Jeremy Rich, MD, Lerner Research Institute
- **Annual Student Reviews – Date TBA**

**Directors Chair**

Spring is upon us as we recover from a cold and snowy winter. Luckily, the weather did not impact our recruitment events in January. We invited 27 students for interviews and offered admission to 15 of those students. We wish to thank all the faculty and students who made our recruitment events a success. The weather did not deter over 200 people from attending the Hunt-Curtis Frontiers in Neuroscience Seminar on Feb. 8th. The NEURO group had to cancel some events during the winter but as you will read they have been very active this year. During the fall and winter quarters we focused our attention on the upcoming quarter-to-semester switch. Dr. Georgia Bishop, Curriculum Committee Chair, is working with course instructors to overhaul our core courses in preparation for the switch in 2012. The committee has already made great strides in updating the current curriculum.

In addition to warm and sunny days, spring quarter also brings annual student reviews, resubmission of our training grant, and more exciting seminars.

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**This issue**

Nobel Laureate P.1

**NeuroTransmitter** Issue 06 Winter/Spring 2010

**Graduate Studies Program**

Neuro Transmitter

Ohio State University

4500 Greene Hall

333 W. 10th Avenue

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614.292.2379 ph

www.ngsp.osu.edu

**Professional Development**

June 8-9: 18th Biennial Conference of the International Society for Developmental Neuroscience. For more information go to www.isdn-conference.siteevent.com

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Dr. Martin Chalfie presented his seminar Differentiation and Transduction in C. elegans Mechanosensory Neurons to an audience of over 200 faculty, staff, and students from various colleges and departments across campus. Dr. Chalfie received his PhD from Harvard University in 1976. In 1977 he moved to Cambridge, England to work as a postdoctoral fellow in Sydney Brenner's lab at the MRC Laboratory of Molecular Biology. Brenner's lab pioneered the use of the nematode C. elegans as a simple system to study the genetics of organ and nervous system development. In Brenner's lab, Chalfie worked with John Sulston and Bob Horvitz on a project to understand the developmental genetics of the touch-sensitivity circuitry of C. elegans. Brenner, Horvitz, and Sulston received the Nobel Prize in Physiology or Medicine in 2002 for their pioneering use of the C. elegans system to study the “genetic regulation of organ development and programmed cell death”. Chalfie continued his work on touch sensitivity in his own laboratory at Columbia University starting in 1982 until the present day, and in a now classic series of studies used a combination of laser ablation to uncover the developmental principles underlying mechanosensory neuron circuitry, and mutagenesis followed by transposon tag and positional cloning to identify a cascade of “Mec” genes that control the development of these cells. Then in 1994, Chalfie published a seminal study on the use of green fluorescent protein as a marker for gene expression in C. elegans. He was awarded the Nobel Prize in Chemistry in 2008 jointly with Osamu Shimomura and Roger Tsien for this work. Dr. Chalfie was elected to the National Academy of Sciences in 2004.
NEURO reaches out to community

In 2005, members of the Central Ohio Chapter of the Society for Neuroscience (SfN) formed the group Neuroscience Education: Urban and Rural Outreach (NEURO) with the intention of bridging the gap between the interdisciplinary field of neuroscience and the standardized science curriculum.

The primary goal of NEURO is to bring neuroscience to the classrooms of K-12 students thereby demystifying science at an age when students are beginning to form lifelong interests. With that, NEURO hopes to contribute to the public education while sparking an interest in basic scientific research. Since its beginning NEURO has been a core participant in the inspirational global campaign, Brain Awareness Week, which is held at COSI in downtown Columbus. This year we had an outstanding interest in this event, and were even visited by the President and CEO of COSI Columbus, David Chesebrough. David wrote the following about his encounter with our exhibit: “One of the toughest tasks I have now at COSI is to stay up on all that is going on. It is not uncommon for me to be walking a supporter around and stumble onto something I never knew was going on. I’m not complaining—this is what we envisioned when we started the shift to the “center of science” model and building all our partnerships, particularly with OSU. So I was pleased, but not surprised, to stumble upon the OSU neuroscience department set up outside our Labs in Life. It turns out that last week was Brain Awareness Week. Checking online I found that Brain Awareness Week (BAW) is an inspirational global campaign that unites those who share an interest in elevating public awareness about the progress and benefits of brain and nervous system research. What better place than COSI to get the public interested and get them to want to help with that awareness.

So there were graduate students from OSU with cognitive activities, brain models and even actual animal brains and human brain slices that they were using to help explain brain structure and function. The public was finding it interesting—and so did I! Just another one of the pleasant surprises I find in my walk abouts.”

In addition to BAW, for the past two years we have hosted 8th grade students from around Columbus for “Breakfast of Science Champions” an event which takes place campus-wide, and enables students to learn about the brain while getting the chance to meet our graduate students and ask career-focused questions. All in all, NEURO has been a success this year. We have two more events planned for the spring, in which we will be visiting schools around Columbus, giving our brain demonstrations, and reaching more and more young minds. We are looking forward to a great finish!

“...and so did I!”

Student Publications


NGSP Committee

Committee Members:
John Oberdick – Co-Director
Dana McTigue – Co-Director
Christine Beatlie
Georgia Bishop
Anthony Brown
Andy Fischer
Jonathan Godbout
Lyn Jakeman
Brian Kaspar
Balseen Kaur
Stuart Mangel
Dana McTigue
Randy Nelson
Katie Karolina – Student Rep
Bart Naughton – Student Rep

Activities during Winter 2010:
- Approved student requests
- Reviewed 78 applications
- Interviewed 27 applicants
- Nominated 8 applicants for fellowship awards
- Made admission decisions for Autumn 2010 class
- Appointed a curriculum committee for the quarter to semester switch
- Reviewed faculty requests to join program

Anyone interested in receiving brochures to distribute to prospective students, please contact Keri Bantz at keri.bantz@osumc.edu.

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Announcements

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Article written by:
Amy Haakney – President
Ryan Smith – Treasurer
Dr. Georgia Bishop - Advisor

EYE ON IT

Candidacy Exams
Amy Haakney – 9/04/09
Lynnette Montgomery – 11/30/09
Hayyan Peng – 1/14/10

Awards
Anahita Almad received the following awards:
1. Travel award for the 13th International Symposium on Neural Regeneration
2. United Spinal Association poster finalist award at the 13th International Symposium on Neural Regeneration
3. Young Investigator Educational Enhancement travel award for the American Society of Neurochemistry

Thomas Hirschauer and Dylan Nelson both received a University Fellowships from the OSU Graduate School.

Ryan Smith received a poster award at the OSU Neurosciences Signature Research Day

Jessica Alexander received the following awards:
1. Travel award for the 13th International Symposium on Neural Regeneration
2. Neurosciences Signature Program Research Day Poster Award
3. 13th International Symposium on Neural Regeneration Poster Award
4. Scientific Excellence Award from the OSU Dean of Research Education & Graduate Studies

Rulleng Ca and Yuan Lin were both awarded an Alumni Grant for Graduate Research and Scholarship from the OSU Graduate School.

NGSP Graduates
- Autumn 2009
  - Kanika Ghai – Postdoctoral Researcher at Emory University
  - Robin White – Postdoctoral Researcher at Stanford University
- Winter 2010
  - Emily Hirschauer – Instructor at Columbus State Community College
  - David Schonberg – Postdoctoral Researcher at Duke University

Ryan Smith gave an oral presentation at the Society for Research on nicotine and Tobacco confernce in Baltimore, MD on 2/26/2010, which discussed his work on genetic variants in the alpha5 nicotinic receptor subunit.

NGSP welcomes the following faculty into the program:
- Rene Anand – Professor, Department of Pharmacology
- Matthew During – Professor, Department of Molecular Virology, Immunology, and Medical Genetics
- Michael Knopp – Professor, Department of Radiology
- Joe Steenmetz – Executive Dean and Vice Provost of Arts and Sciences and Professor, Department of Psychology

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Hunt-Curtis Frontiers in Neuroscience Seminar invitations are sent to prominent researchers in the field of neuroscience who are members of the Howard Hughes Medical Institute and/or the National Academy of Sciences. Past speakers include:

• Sol Snyder, MD, Johns Hopkins University (5/14/07)
• Richard Palmiter, PhD, University of Washington (4/13/09)
• Michael Ehlers, MD, PhD, Duke University (5/18/09)
• Michael Saber, MD, PhD, The Hospital for Sick Children (10/5/09)