



UNIVERSITY of  
**ROCHESTER**  
 MEDICAL CENTER  
 MEDICINE of THE HIGHEST ORDER

## Notes from the NGP Director



Dear colleagues,

We have had a busy year in the Neuroscience Graduate Program. We held a successful Neuroscience retreat,

started the Rochester chapter of the Society for Neuroscience, made improvements to our graduate students recruitment process, recruited an excellent entering class, expanded our outreach efforts and so much more. Please read on to hear exciting news about our students and faculty.

This year we said goodbye to Kim Fernandez, Danielle DeCampo, Michele Saul and Irina Statnikova, and are looking forward to the defenses of Imran Puneekar and Helen Wei. While we are sad to see them go, we are excited about the new opportunities that lie ahead of them. We also said goodbye to our first year student Michael Chen and we wish him luck on his new path to an MD/PhD degree at Penn State.

We have 5 students who will be starting in the Fall of 2014. Read on to learn a little more about them. Patrick Miller-Rhodes will be starting a summer rotation in my lab this July. Laura Duclos will be spending the summer in the OLABs. Please introduce yourself if you see them around this summer. I want to especially thank the steering committee and the admission committee for all the efforts that went into our recruitment this year. Our graduate students were instrumental in planning and executing our recruitment, and I want to especially thank Ryan Dawes, Becca Rausch, Julie Feola, Jennifer Stripay and Rebecca Lowery. Doug Portman,

who is chairing the admissions committee, put in a tremendous amount of time leading the effort to improve our recruitment process. This year we had our first ever booth at the recruitment fair at the annual SFN meeting in San Diego. This allowed us to get the word out about the program and get a number of new applications (plus Doug made really cool NGP logo giveaways and brochures – ask him for one next time you see him). We also participated in minority and local recruitment fairs. We enhanced our recruitment visits to showcase more of our research strengths and give prospective students a better feel for the graduate program. This allowed us to cut costs while showing off the program in the best possible light. The results speak for themselves. Our entering class is impressive and I want to thank all the students and faculty who put time and effort into their recruitment.

We also expanded our outreach efforts with a prolonged and enhanced Brain Awareness Week. We partnered with PONS, our SFN chapter (which provided funding through a grant from SFN – thanks to Krystal Huxlin!) and the Brain and Cognitive Science undergraduate council. Over 50 volunteers participated! We reached an incredible 1500+ children in grades K-5. Check out the cute pictures of kids learning how the brain works. A special thank you to Jennifer Stripay, Rebecca Lowery and Julie Feola for the mammoth task of coordinating these events.

There are new changes to the rules for defenses, as well as for the formation of advising committees for NGP students. You can read about these below and please also check out our webpage:

<http://www.urmc.rochester.edu/education/graduate/phd/neurosciences/> where you can find lots of information about the program, including the make-up of our committees. We are constantly updating the website and welcome any suggestions for further improvements. We also have a Facebook page which has listings of upcoming and recent events. Click on the icon on our webpage to get there.

I want to thank all the faculty who participated in our last NGP faculty meeting in November. Your input on recruitment efforts was very much appreciated and helped us with recruiting an excellent first year class. Please look for announcements for the next faculty meeting. Lastly, I want to thank Patricia White and Julie Fudge, as well as all of our students and faculty, for a successful 2013-2014 weekly student seminar series. We are taking a break for the summer, but please look for e-mails in the Fall and support this series. I also want to thank the Portman, Noble, Opanashuk, Huxlin and Gelbard labs for sponsoring our monthly happy hour. If you did not get a chance to join us for this fun and relaxed event, you won't want to miss it next year.

As always, I'd love to receive feedback and suggestions for the program from faculty, students and community members at any time. Feel free to e-mail, call or come by my office. Your input is important!

### Did you know.....

Last November the University introduced a new policy that changed:

#### 1. Appointment of Chairs for Oral Defenses

With over 250 PhDs granted each year at the University, it was no longer feasible for the University Dean of Graduate Studies to appoint the Chair for each oral defense. As of January 1, 2014, the Program director, with input from a candidate and advisor identifies **3 individuals** to serve as a Chair. *(continues on page 5)*

# Newsletter - Spring 2014

## Neuroscience Graduate Program



# Neuroscience Graduate Program Newsletter - Spring 2014



## Student Admission for Fall 2014



Thanks to lots of effort from our faculty and students, the Neuroscience Graduate Program had a successful recruitment season this year. From the over 100 applications we received, the admissions committee interviewed 17 candidates from across the US during two very full interview days. While some of these candidates were seniors in college, many had spent several years as lab techs or in Masters programs.

After much deliberation, we were able to extend 12 offers to a very competitive group of applicants, four of whom accepted. One of these students, Laura Duclos (SUNY Geneseo), was awarded a Sproull Fellowship, a very competitive honor awarded by the University Dean of Graduate Studies to the University's most promising incoming PhD candidates. Along with one student who deferred an admission offer last year, this means that this fall we'll have a terrific class of five new first-year PhD students and so far one MD/PhD student. More information about these students is below.

In addition to the hard work put in by members of the admissions committee (Ben Hayden, Chris Holt, Amy Kiernan, Ania Majewska, John Olschowka, and Chris Pröschel), special thanks goes out to Ania Dworzanski and to current NGP students, who tirelessly escorted, entertained, and evaluated candidates -- these efforts were really important in attracting the best students to our program.

Doug Portman  
Chair, NGP Admissions Committee



**Laura Duclos** graduated from SUNY College at Geneseo, NY where she majored in Biology. In Geneseo, she worked closely with Dr. Duane McPherson on gene expression of the 5-HT<sub>2</sub> receptor in *Aplysia californica* and in *Helisoma trivolvis*. Although Laura's research experience lies heavily in the field of genetics, she is excited to apply her knowledge to neuroscience. Laura was awarded a Robert L. and Mary L. Sproull Fellowship, the most prestigious graduate fellowship awarded by the University of Rochester.

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**Joshua Hinkle** joins the NGP with a Bachelor's degree in Biomedical Engineering from SUNY College at Stony Brook, NY. After graduating from Stony Brook University, Josh started a research fellowship at the National Institute on Drug Abuse, NIH, Baltimore, MD, with "our own" Dr. Brandon Harvey. Josh is interested very much in the interdisciplinary opportunities the University of Rochester offers. He plans to unravel the mystery of neuron-glia interactions.

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**Jessica Hogestyn** completed her Bachelor's degree in Brain and Cognitive Sciences Department at the University of Rochester. She is interested in studying the brain areas whose dysfunction is key to manifestation of abnormal behavior. She wants to do research on a systems neuroscience level, focusing on networks such as the mesolimbic dopamine system and their roles in mental illness.

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**Patrick Miller-Rhodes** graduated from SUNY College at Geneseo, NY with Bachelor's degree in Psychology. His passion for research comes from the idea that science is just as much creative enterprise as it is an investigative one. The most enticing aspect of doing research is not only what is gained from the endeavor, but rather how it is obtained. Patrick is primarily interested in development of animal models of neuropsychiatric disease and the use of advanced biophysical chemistry techniques to explore issues related to both drug delivery and disease etiology.

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**Aimee Morris** was an undergraduate student at the Eastman School of Music but also completed the required pre-medical course work to pursue a medical doctor degree. Aimee spent last year in Dr. Mink's lab pursuing a combined MD-MS degree and researching dystonia in musicians. Recently she was accepted to the MSTP at the University of Rochester Medical Center and will continue her research as an MD/PhD student.

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**Rianne Stowell** received her Bachelor's degree in Neuroscience and Spanish from the Moravian College. She is interested in neurological and neurodegenerative disorders. She would like to study neurogenetics and the molecular and cellular mechanisms associated with the pathogenesis of disorders and diseases. She also wants to find better treatments for the nervous system disorders. Rianne is coming to us after spending one year in Spain on Fulbright scholarship.



## **Milestones - Spring 2014**

### **Qualifying Exams**

.....

**Evan McConnell**, *"The Role of Astrocytes in Noradrenaline Mediated Attenuation of Motor Tics"*

### **PhD Thesis Defenses**

.....

**Michele Saul** (PhD), *"Changes in Exploratory Behavior and Cell Proliferation in the Amygdala Following Repeated Variable Stress in Male Rats: Focus on adolescence"*

**Irina Statnikova** (PhD), *"GPi is involved at multiple levels in selection and inhibition of competing motor behaviors"*

### **NGP Preliminary**

#### **Examinations (Part 1)**

.....

- Heather Natola
- Matthew Cavanaugh
- Berkeley Fahrenthold
- Rebecca Rausch
- Aleta Steevens

## **MD/MS Graduates in NBA**

**David Paul**, *"Rapid Remyelination in the Human Brain: A Diffusion Tensor Imaging Study of Neural Plasticity in Patients with Pituitary Tumors"*

**Catherine O'Leary**, *"The Effect of Visual Field Motion on Subsequent Perception of Self-Motion"*

## **Events - Mark Your Calendars**

### **Other Events**

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- **NGP Boot Camp, August 21-24, 2014**
- **Undergraduate Research Day, October 24, 2014**
- **SFN Annual Meeting, November 15-19, 2014, Washington, DC**
- **NGP Holiday Party, December 2014**
- **Neuroscience Retreat, April 17, 2015**  
Keynote speaker, Dr. Valina Dawson from Johns Hopkins

### **PhD Thesis Defenses**

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June 19, 2014

**Imran Punekar**

*"Impulsivity in Parkinson Disease"*

June 24, 2014

**Helen Wei**

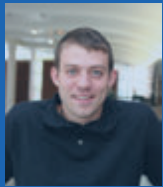
*"Activity dependent cortical hyperemia is initiated in capillaries"*



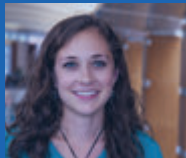
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## Student Awards



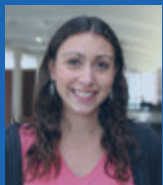
**Grayson Sipe**, a fourth-year student in Dr. Ania Majewska's lab, won a travel award from the Schmitt Program on Integrative Brain Research. Grayson used this award to attend the EMBL Conference: Microglia: Guardians of the Brain, held on 26-29 March 2014 in Heidelberg, Germany.



**Heather Natola**, a second-year student in Dr. Christoph Pröschel and Margot Mayer-Pröschel lab, received a travel award from the Schmitt Program on Integrative Brain Research. It helped Heather to travel to the 45th annual American Society of Neurochemistry meeting in Long Beach, CA, March 8-12, 2014.



**Adrienne Chesser**, MD/PhD fourth-year student in Dr. Gail Johnson-Voll's lab, received a travel award to attend the Alzheimer's Association International Conference in Copenhagen, Denmark, on July 12-17, 2014 where she will be presenting a poster.



**Julianne Feola**, a fourth-year student in Dr. Gail Johnson-Voll's lab, received a travel award from Graduate Women in Science to attend the Gordon Research Conference in Italy from June 29 – July 4, 2014.



**Ryan Dawes**, a third-year student in Dr. Ed Brown lab, was awarded a Trainee Scholar Award from the Psychoneuroimmunology Research Society.



**Laura Duclos**, an incoming student starting in Fall 2014, was awarded a Robert L. and Mary L. Sproull Fellowship, the most prestigious graduate fellowship awarded by the University of Rochester.



**Jennifer Stripay**, a third-year student in Dr. Mark Noble's lab, was appointed to the Society for Neuroscience Trainee Advisory Committee in the Fall of 2013.

She also was awarded a leadership travel award from the Graduate Student Society to support her trip to the 2013 SfN Annual Meeting in San Diego, CA.

## Faculty Honors

### INTERNATIONAL AWARDS



**NOVO NORDISK FOUNDATION LAUREATE RESEARCH GRANT**

**Maiken Nedergaard**, Frank P. Smith Professor of Neurosurgery



**NOVO NORDISK FOUNDATION LAUREATE RESEARCH GRANT**

**Steven Goldman**, Distinguished Professor of Neuroscience and Neurology

### NATIONAL AWARDS



**ELSEVIER/VSS YOUNG INVESTIGATOR AWARD 2014 Winner**

**Dujie Tadin**, Associate Professor  
Department of Brain and Cognitive Sciences,  
Center for Visual Science,  
Department of Ophthalmology



**THE NATIONAL ACADEMY OF SCIENCES Member Elect**

**David Williams**, Allyn Professor of  
Medical Optics and Director of Center for  
Visual Science



• **AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY Associate Member**

• **BRAIN & BEHAVIOR RESEARCH FOUNDATION (NARSAD) AWARD**

• **KLINGENSTEIN-SIMONS FELLOWSHIP IN NEUROSCIENCE**

**Ben Hayden**, Assistant Professor  
Department of Brain and Cognitive Sciences

### UNIVERSITY OF ROCHESTER FACULTY TEACHING, MENTORING & DIVERSITY AWARDS



**NAMED GEORGE EASTMAN PROFESSOR**

**Greg DeAngelis**, Professor and Chair  
Department of Brain and Cognitive Sciences

# Neuroscience Graduate Program Newsletter - Spring 2014



## Neuroscience Organizations

### (PONS) PREDOCTORAL ORGANIZATION FOR NEUROSCIENCE

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The Predoctoral Organization for the Neurosciences (PONS) was founded in the Fall of 2013 by Neuroscience Graduate Program students Jennifer Stripay and Ryan Dawes in conjunction with MD/PhD student Kyle Koster and medical student Elizabeth Saoinz. PONS is committed to fostering neuroscience awareness in Rochester and Western New York.

PONS launched a successful luncheon series that brings clinicians and basic science researchers together with graduate students and medical students in an informal setting to discuss current topics in translational neuroscience. Glial Biology and Stroke were the first two topics in the series, and future topics include Neuro-Oncology, Neurodegenerative Disease and Movement Disorders. PONS also plans to initiate its philanthropic efforts this summer and will work closely with the Rochester Chapter of the Society for Neuroscience to establish community outreach events throughout the year.

### ROCHESTER CHAPTER OF THE SOCIETY FOR NEUROSCIENCE

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The Rochester Chapter of the Society for Neuroscience (SFN) is establishing its presence in Rochester. It was re-activated in the beginning of 2013, and its inaugural meeting took place on September 13th, 2013 during the Neuroscience Retreat. The Chapter's bylaws were established and officers were elected. Krystal Huxlin is the Chapter's President, Laurel Carney is the Chapter's Secretary/Treasurer, Doug Portman and Liz Romanski are the Faculty Councilors, and Jennifer Stripay is the Student Councilor. The Chapter was successful in securing its first grant from SFN for \$1,515 to enhance neuroscience-related endeavors. The Chapter plans to use the funds to expand the Neuroscience Retreat by including participants from the region, support an expanded Brain Awareness Month, and sponsor student related activities such as the Graduate Student Boot camp. More information about the Chapter's mission, Council and activities is available at the [Rochester Chapter of the Society for Neuroscience](#) website.

### Did you know.....

*(continued from page 1)*

The chair's role is to monitor and promote fairness and rigor in the conduct of the defense and chairs should distance themselves from previously established judgments on the candidate's work. For NGP and NBA students, the chair must hold a primary appointment in a department other than the advisor's and co-advisor's primary departments. A [Nomination Form for PhD Defense Chairperson](#) listing these nominees is submitted to the Senior Associate Dean **at least 4 months prior to scheduling a defense**. The Senior Associate Dean appoints the Chair who is then included in the planning for specific defense dates.

**2. Dissertation Committee Authorization of PhD Defenses.** According to the new rules, the thesis committee must approve the final thesis at least two weeks before the planned defense date. Due to the changes, the calendar of deadlines for registration and defense has been revised. Black-out dates (on which defenses may not be held) will now occur only during the December holiday period.

The new timeline is as follows:

At least **6 weeks prior to the defense** the candidate notifies a graduate program coordinator of defense plans so that they can prepare the necessary forms for thesis registration.

At least **4 weeks prior** to the date of **registration for defense** a candidate provides the printed thesis for committee member review (not including the appointed Chair). The committee members have 2 weeks to review the thesis and sign off on the [Appointment Form](#) so the candidate can proceed to the PhD Final Oral Examination. The sign off can occur at any point well in advance of defense, as long as each member has at least 2 weeks to read the work. After the sign-off a candidate registers the thesis in person **at least 10 full working days prior** to the date of defense and provides the Chair with the final defense version.

Detailed information about scheduling a PhD defense is on our [NGP website](#).

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## Student Publications

**Saul ML, Helmreich DL, Callahan LM, Fudge JL**, (2014 Apr 01). Differences in amygdala cell proliferation between adolescent and young adult rats *Dev Psychobiol.* 56, 517-28.

Proschel C, **Stripay JL**, Shih CH, Munger JC, Noble MD, (2014 Apr 01). Delayed transplantation of precursor cell-derived astrocytes provides multiple benefits in a rat model of Parkinsons. *EMBO Mol Med.* 6, 504-18.

Tong J, Ren Y, **Wang X**, Dimopoulos VG, Kesler HN, Liu W, He X, Nedergaard M, Huang JH, (2014 Mar 03). Assessment of NgR1 Function In Vivo After Spinal Cord Injury. *Neurosurgery.* In press.

**Balasubramanian R**, Bui A, Ding Q, Gan L, (2014 Jan 01). Expression of LIM-homeodomain transcription factors in the developing and mature mouse retina. *Gene Expr Patterns.* 14, 1-8.

Au E, Ahmed T, Karayannis T, **Biswas S**, Gan L, Fishell G, (2013 Dec 04). A modular gain-of-function approach to generate cortical interneuron subtypes from ES cells. *Neuron.* 80, 1145-58.

Szpunar MJ, Burke KA, **Dawes RP**, Brown EB, Madden KS, (2013 Dec 01). The antidepressant desipramine and  $\alpha$ 2-adrenergic receptor activation promote breast tumor progression in association with altered collagen structure. *Cancer Prev Res (Phila).* 6, 1262-72.

Ding F, **O'Donnell J**, Thrane AS, Zeppenfeld D, Kang H, Xie L, Wang F, Nedergaard M, (2013 Dec 01),  $\alpha$ 1-Adrenergic receptors mediate coordinated  $Ca^{2+}$  signaling of cortical astrocytes in awake, behaving mice. *Cell Calcium.* 54, 387-94.

Riley KE, Murray JS, Fanfrlík J, Rezáč J, Solá RJ, Concha MC, **Ramos FM**, Politzer P, (2013 Nov 01). Halogen bond tunability II: the varying roles of electrostatic and dispersion contributions to attraction in halogen bonds. *J Mol Model.* 19, 4651-9.

Collage RD, Howell GM, Zhang X, **Stripay JL**, Lee JS, Angus DC, Rosengart MR, (2013 Nov 01). Calcium supplementation during sepsis exacerbates organ failure and mortality via calcium/calmodulin-dependent protein kinase signaling. *Crit Care Med.* 41, e352-60.

Xie L, Kang H, Xu Q, Chen MJ, Liao Y, Thiyagarajan M, **O'Donnell J**, Christensen DJ, Nicholson C, Iliff JJ, Takano T, Deane R, Nedergaard M, (2013 Oct 18). Sleep drives metabolite clearance from the adult brain. *Science.* 342, 373-7.

## Student Fellowships

**Revathi Balasubramanian**, predoctoral NYSTEM training grant (July 2012-June 2014)

**Adrienne Chesser**, NIEHS F30 Individual Predoctoral Fellowship, "Mitochondrial Dynamics Underlie Gene-Environment Interactions in Parkinson's" (July 2011-June 2015)

**Kelli Fagan**, F31, NIH Individual Predoctoral Fellowship, "Genetic control of a sexually dimorphic neural circuit" (September 2013-August 2016)

**Julianne Feola**, F31 NIH (NRSA) Individual Predoctoral Fellowship, "The Role of Astrocytic Transglutaminase 2 in Mediating Ischemic Stroke Damage" (September 2012-September 2015)

**Training grant in Hearing, Balance, and Spatial Orientation**, 5T32DC009974, current NGP appointee: **Christina Cloninger** (July 2013-June 2014)

**Neuroscience Training Grant**, T 32NS07489, current appointees: **Matthew Cavanaugh, Heather Natola, Felix Ramos-Busot, Rebecca Rausch, Aleta Stevens** (September 2013-August 2014)

**Rebecca Lowery, and Brianna Sleezer**, Center for Visual Science (CVS) fellowship for research support (January 2014-June 2014)

**Grayson Sipe**, F31 NIH (NRSA) Individual Predoctoral Fellowship, "Role of P2Y12 and Purinergic Signaling in Microglia-Mediated Synaptic Plasticity" (March 2014-August 2016)

**Jennifer Stripay**, F31 NIH (NRSA) Individual Predoctoral Fellowship, "Identifying c-Cbl as a critical point of intervention in glioblastoma multiforme" (September 2013-August 2016)

**Wei Sun**, Individual Predoctoral Fellowship from the American Heart Association (July 2012-June 2014)

**Helen Wei**, HHMI Med-Into-Grad Fellowship (September 2013-June 2014)

**Laura Yunes-Medina**, F31, NIH Individual Predoctoral Fellowship to promote diversity in health-related research, "Defining CHOP-10 Dependent Adaptive ER Stress Pathways in Neurons" (August 2013-July 2017)



# Neuroscience Graduate Program Newsletter - Spring 2014



## NGP Initiatives



### Brain Awareness Campaign 2014 Activities for Grades Kindergarten to 5th



#### A Brief Introduction...

The University of Rochester Neuroscience Graduate Program, inspired by the success of its inaugural event last year, embarked on an ambitious expansion of its involvement in the 2014 Brain Awareness Campaign. Students and faculty from across the University's neuroscience community took part in two months of outreach events at local elementary schools. This year, children in Kindergarten through 5<sup>th</sup> grade were engaged in activities that taught them about how the brain controls the processing and perception of our senses of touch, balance, smell, hearing and vision. The expansion more than doubled our efforts, visiting eight different local elementary schools and reaching over 1500 students! Fifty dedicated volunteers committed 90 hours of in-class time to carry out the activities and lessons designed by a core planning committee. Our traveling caravan of scientists set up shop in each classroom, executing a huge logistical feat and demonstrating remarkable flexibility. We received glowing feedback from students, teachers, and administrators alike. This year's Brain Awareness Campaign proved to be another incredibly rewarding experience for our volunteers!

#### Brain Awareness Campaign by the Numbers

Volunteers	In-class Hours	Schools	Children
 x50	 x90	 x8	 x1500

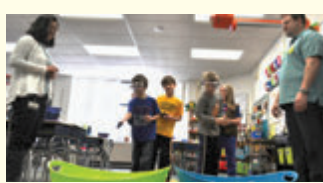
#### Presenting the Brain...

We started each session by introducing students to Freddy, our model brain. We talked about why our brains are important and all the things they help us do every day. Once we finished the activity stations, we reviewed what we learned about our senses and the brain. Students had an opportunity to ask questions and also provided some great ideas as to how we can keep our brains safe. To inspire continued conversations about the brain at home, we handed out pencils with fun brain erasers, buttons, stickers and activity workbooks!



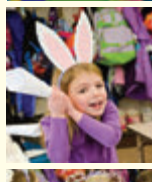
#### Seeing Things...

Our "vision" station showed us what happens when our eyes and brains play tricks on each other. We found our blind spots, witnessed holes in our hands and were awed by some optical illusions. We also experimented with prism goggles and learned how bending light can distort our perception. Tossing bean bags into our buckets was pretty tough when our eyes were sending skewed information to our brains!



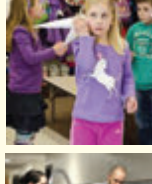
#### Can You Feel It?

Our "touch" station was comprised of several activities tailored to different grade levels. We learned that our fingers contain a large number of receptors that provide detailed information and allow us to read! We investigated how our receptors can desensitize, and how that changes the way we perceive temperature. We also discovered that discriminating between objects of similar shape is much easier when our receptors have access to tactile information. Gloves make it much harder to find the matching pairs in the mystery box!



#### All About Ears!!!

Our "vision" station showed us what happens when our eyes and brains play tricks on each other. We found our blind spots, witnessed holes in our hands and were awed by some optical illusions. We also experimented with prism goggles and learned how bending light can distort our perception. Tossing bean bags into our buckets was pretty tough when our eyes were sending skewed information to our brains!



#### Critical Acclaim!

Overall our 2014 Brain Awareness Campaign was a huge success! Not only did our volunteers have a great experience, the students had a blast learning about the brain!

#### Testing Our Sniffers

Our "smell" station allowed us to explore how our brain stores memories of our favorite foods. Chocolate and peppermint were some of our favorites! We also learned that our noses help give our brain more information than just our eyes in a vinegar vs. water smell test.



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## Life Outside Neuroscience



### Mark Halterman plays in a band....

The Mansfield Avenue Band is an alternative/modern rock group established in 2009 and based out of Rochester, NY. With acoustic guitar at the center, the four-piece group has a rock/alternative/indie sound covering songs by DMB, John Mayer, The Decemberists, OAR and others. Now in their fourth year, the chemistry between band members Marc Halterman (lead vocals/acoustic guitar), Jeff Bazarian (lead guitar/vocals), Bill Whitwood (bass) and Mike Mattice (drums) yields a tight, professional mix and continues to evolve as does their reputation for delivering a tight, professional performance. In addition to performing at local clubs for corporate/private functions across Rochester, Mansfield Ave participated in the 2012 First Niagra Rochester Fringe Festival and played in front of 10,000 fans at the WNY Flash soccer championship in 2013. They have also supported several fundraising events including the upcoming URM Benefit for Brain Injury Research being held at the Lovin' Cup on Friday, June 13th, 2014.



You can find more about the Mansfield Avenue Band at <http://www.mansfieldave.com>

### OUR KELLY FAGAN



### ROC CITY ROLLER DERBY

NGP graduate student **Kelli Fagan** plays as the tactical and explosive jammer "Kell'd On Impact" for the Roc Stars. The women of the Roc Stars take part in absolutely exhilarating flat-track bouts at the Dome Arena in Henrietta.

Myrna and Gary Paige's passion is travel & photography. His pictures are available at [www.frontpaige-photography.com](http://www.frontpaige-photography.com).

Grey Whale, Baja, Mexico



Keukenhof Park, The Netherlands



Old Town, San Juan, PR



Volunteer Point, The Falklands



Dr. Harris Gelbard loves sports.

That's him snowboarding in Snowbasin, UT



Mountain biking on Stid Hill, NY





# Neuroscience Graduate Program Newsletter - Spring 2014



## Life Outside Neuroscience



In his spare time Edward Brown raises chickens with his family. Together they have built a massively over-engineered coop with heat, running water, insulation, and a pleasant fenced in area for the chickens to run around in while safe from predators. Right now it is inhabited by several mature “Wyandottes” and a dozen immature “Buff Brahmas” plus two bantams (half-sized chickens) of unknown breed. The ladies lay lots of tasty eggs while the lone rooster (named “Migraine” for obvious reasons) makes a lot of noise and chases the dog around the yard when he gets too close to the ladies.

The photo shows one of the young chickens plus my two helpers Robert and Edward in front of the coop.

## Students' Life

### NGP Plays Sports



Outside the laboratory, members of the Neuroscience community are actively involved in several recreational athletic leagues, including:

**HOTSHOTS VOLLEYBALL** - multiple teams comprised of NGP students, including Cobra Kai and How I Set Your Mother, take to the sands each week in competitive indoor volleyball matches. These NGP-based teams regularly reach advanced playoff games, and even took home a league championship last year.



**URMC/RIVER CAMPUS SOFTBALL** - the **Myoclonic Jerks** are set to begin another season with the first pitch being thrown in mid-May. Captained by **Dr. Emily Kelly** and **Jack Walters**, the Jerks will seek a return spot in the league playoffs this summer. The team includes over 20 members of the Rochester Neuroscience community on the roster, making the afternoon games a summer entertainment staple. All are invited to attend the weekly games, which are played in the fields adjacent to the Valentine Lot.

**KICKBALL LEAGUE OF ROCHESTER** - the newly-formed **Mud, Sweat, & Beers** will take the field this Spring. Our NGP kickball team consists of Heather Natola, Ryan Dawes, Becca Rausch, Matt Cavanaugh, Berkeley Farenthold, Becky Lowery, Gray Sipe, John O'Donnel and some genetics students. More information about Mud, Sweat, & Beers is available at <https://www.rockickball.net/>

### Students' Outings

Several members of the Neuroscience Graduate Program celebrated Heather Natola's birthday by taking a class at Paint with a Twist. They enjoyed wine and cheese while they created some inspired artwork.



### 2014 ROCHESTER LILAC FESTIVAL



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## Alumni Updates



**Jill Weimer**, NSC alumna, receives her first R01. A grant from the National Institutes of Health (NIH) will provide Sanford Researcher Jill Weimer

with \$1.75 million over five years to study intracellular trafficking in neurological disorders such as the rare pediatric Batten disease. Weimer's study, "Novel mechanisms for distal transport in developing and mature neurons," was selected by the NIH's National Institute of Neurological Disorders and Stroke for funding.

Dr. Weimer received her PhD in 2005. She was co-advised by Drs. Federoff and Pearce.



**Tracy Romano** graduated with PhD from NBA (Dr. Felten's lab) in 1993. She has been interested in the dolphin brain since

college and decided to get a broad background in neuro-biology and apply it to marine animals. While in Rochester, Tracy studied the marine mammal immune system and the impact of stress and the environment on marine mammal health. Today she is the Executive Vice President of Research and Zoological Operations at the Mystic Aquarium, a division of Sea Research Foundation in Mystic, CT.



**Brandon Harvey** got interested in neuroscience when he extracted DNA from calf thymus at a summer science camp in high school and realized that he had the informa-

tion to make cow on the end of glass rod. This sold him on molecular biology and the concept of genetic engineering. Brandon currently works as Director of Optogenetics and Transgenic Technology Core facility and Associate Scientist for Cellular Protection and Repair Lab at the National Institute on Drug Abuse Intramural Research Program in Baltimore, MD.

Dr. Harvey earned his PhD degree in 2003 working in Dr. Federoff's lab.



**Carolyn Tyler** received her PhD diploma in NSC in 2009. Last January, Carolyn and her husband, Mark Bauter, had twins (Aislyn & Easton). They are 4 months old now and doing great!



**Renee M. Miller**, Ph.D. earned her doctoral degree in neuroscience in 2005. As a graduate student Renee worked in Dr. Federoff's lab. Currently, she is a Lecturer in the Department of Brain and Cognitive Sciences where she teaches several neuroscience courses to undergraduates. Her research is focused on sex differences in behavioral choices. Dr. Miller is an avid fantasy player, enjoying seasonal as well as daily fantasy NFL, NBA, and MLB.

Recently, Dr. Miller published a book entitled "*Cognitive Bias in Fantasy Sports: Is Your Brain Sabotaging Your Team?*"



**Michael Pesavento** graduated in 2010 from Dr. Pinto's lab. He is currently working for NeuroSky as an Algorithm Development Scientist, where he develops new EEG, ECG, and motion-based analysis techniques used in wearable technology. In his spare time, Mike climbs rocks, sails, travels the world, and tries to find new adventures where he can.



**Mark Basham** received his Ph.D. in Neuroscience from the University of Rochester in 1997. He is currently the Director of the Neuroscience Program at Regis University as well as Chair of the Department of Psychology and Neuroscience. Regis University is a Jesuit Liberal Arts institution in Denver, CO offering a B.S. degree in neuroscience. They currently have approximately 70 undergraduate neuroscience majors.

# Neuroscience Graduate Program Newsletter - Spring 2014



## Alumni Updates

We are asking your assistance with updating our alumni database. Information we need is marked in **RED**. Please contact Ania Dworzanski at [ania\\_dworzanski@urmc.rochester.edu](mailto:ania_dworzanski@urmc.rochester.edu) with updates. Information in **BLUE** has been recently updated.

**David Gooler**, PhD, 1982, NSC, Instructor, Dept. of Speech and Hearing Science, University of Illinois at Urbana-Campaign, 901 S. Sixth Street, Campaign, IL

**Mark Basham**, PhD, 1997, NSC, Associate Professor, Chair of Psychology and Neuroscience Department, Director of Neuroscience Program at Regis University, Denver, CO

**Caroline Little (Cribari)**, MD, PhD, 1998, Neurobiology & Anatomy, Women's Hospital, Mountain View, CA

**Scott Ng-Evans**, PhD, 1999, NSC, Department of Psychiatry and Behavioral Sciences. University of Washington, Seattle, WA

**Russel Ferland Jr.**, PhD, 2000, NSC, Associate Professor and Associate Director, Center for Neuropharmacology and Neuroscience: Albany Medical College, Albany Medical College, 47 New Scotland Avenue, MC-136, Albany, NY

**Tim Mhyre**, PhD, 2000, NBA, Analyst in the Office of Sponsored Programs, Washington State University, Pullman, WA

**Nikolaus McFarland**, MD/PhD, 2001, NBA, Assistant Professor of Neurology, University of Florida, Gainesville, FL

**Jay Nierenberg**, MD/PhD, 2001, NBA, Assistant Professor, Dept. of Psychiatry, NYU Longone Medical Center, New York, NY

**Mary Maida**, PhD, 2001, NSC, Medingen Group, LLC, Clerisy Corp., Rochester, NY

**Randall Hayes**, PhD, 2001, NSC, Assistant Professor, Biology Education, North Carolina A&T, State University, Greensboro, NC

**Tina Huang**, PhD, 2001, NSC, Director of Research, Transparent Corporation, Columbus, OH, 43202; Scientist III, Nutritional Immunology Laboratory, Jean Mayer USDA HNRCA at Tufts University, Medford, MA

**Adnan Siddiqui**, MD/PhD, 2003, NBA, Associate Professor of Neurosurgery and Radiology, University at Buffalo, the State University of NY, Buffalo, NY

**Andrew Custer**, PhD, 2003, NSC, Patent Attorney, Blue Ocean Enterprises, Inc., San Diego, CA; J.D., University of Florida, Levin College of Law (2009)

**Michael Froehler**, MD/PhD, 2004, NSC, Clinical Assistant Professor, Dept. of Neurology, University of Iowa, Iowa City, IA

**Michael Hanna**, PhD, 2004, NSC, Assistant Professor, Dept. of Biological & Environmental Sciences, Texas A&M University-Commerce, Commerce, TX

**Seth Perry**, PhD, 2004, NSC, Research Assistant Professor, Biomedical Engineering, URMC, Rochester, NY

**Luisa Scott**, PhD, 2004, NSC, Research Associate, Section of Neurobiology, University of Texas, Austin, TX

**Patricia Sheridan**, PhD, 2004, NSC, Research Assistant Professor, Dept. of Nutrition, University of North Carolina, Chapel Hill, NC

**Renee Miller**, PhD, 2004, NSC, Lecturer, BCS, University of Rochester, Rochester, NY

**Rebecca Sappington**, PhD, 2004, NSC, Assistant Professor of Ophthalmology & Visual Sciences, Vanderbilt University Medical Center, Nashville, TN

**ChiaWen (Kitty) Wu**, PhD, 2005, NSC, Pipeline & Portfolio Planning at Genentech, San Francisco, CA

**Zhenhua Wu**, PhD, 2005, NSC, Senior Research Scientist, Merck, Boston, MA

**Chiayu Chiu**, PhD, 2005, NSC, Associate Research Scientist, Dept. of Neurobiology, Yale University, New Haven, CT

**Jill Weimer**, PhD, 2005, NSC, Associate Scientist, Sanford Research/USD and Assistant Professor, Department of Pediatric at University of South Dakota Sanford School of Medicine, Sioux Falls, South Dakota

**Min Zhu**, PhD, 2006, New England, Neurological Associates, Lawrence, MA

**Kuei-Cheng Lim**, MD, PhD, 2006, NSC, Instructor in Epilepsy, Neurology, University of Pennsylvania Health System,





## Alumni Updates

**Zhiyong Yang**, PhD, 2006, NSC

**Jason Hamilton**, PhD, 2007, NSC, Senior Scientist, Regenerative Medicine department at Athersys, Inc., Cleveland, OH

**Charles Wuertzer**, PhD, 2007, NSC, Faculty, Biology Dept., MCC, Rochester, NY

**Roberto Fernandez-Romero**, MD/PhD, 2007, NBA, Assistant Professor, Neurology Dept, University of Virginia, Charlottesville, VA

**Solomon Shaftel**, MD/PhD, 2007, NBA, in 2013 graduated from residency program in Ophthalmology Dept., UCSD, CA; He was accepted into a two year oculoplastics fellowship at the University of Washington, Seattle, WA (2013-2015)

**Xiaohai Wang**, PhD, 2007, NSC, Senior Research Biologist, Dept. of Neuropharmacology, Merck Research Laboratories, Boston, MA

**Daniel Zaksas**, PhD, 2007, NSC, Scientific VP, Dudnyk, Horsham, PA

**Ziye Sui**, PhD, 2007, NSC, Post-doctoral Fellow, Peking University, Peking, China

**Karthik Venkatesh**, PhD, 2008, NSC, Sr. Medical Writer, MMS Holdings Inc., Detroit, MI

**Erin Johnson Venkatesh**, PhD, 2008, NSC, Post-doctoral Fellow, University of Michigan Medical School, Molecular and Behavioral Neuroscience Institute, Ann Arbor, MI

**Yasser Elshatory**, MD/PhD, 2008, NSC, Resident, Dean McGee Eye Institute, Department of Ophthalmology, Oklahoma, OK

**Pushkar Joshi**, PhD, 2008, NSC, Post-doctoral Fellow, Stanford University, Dept. of Biology, Stanford, CA

**Ling Pan**, PhD, 2008, NSC, Research Scientist, Picower Institute for Learning & Memory, MIT, Cambridge, MA

**Xiaoyan Lin**, PhD, 2008, NSC, Research fellow at National Institutes of Health, Washington D.C. Metro Area

**Matthew Bellizzi**, MD/PhD, 2008, NSC, Sr. Instructor in Neurology, Division of Neuroimmunology, URMC, Rochester, NY

**Yanan Guo**, PhD, 2009, NSC, Post-doctoral Fellow, Harvard Medical School, Brigham and Women's Hospital, Boston, MA

**Onanong Chivatakarn**, PhD, 2009, NSC, Post-doctoral Fellow, Salk Institute, La Jolla, CA

**Laurie Robak**, MD/PhD, 2009, NSC, Resident, Medical Genetics/Pediatrics, Baylor College of Medicine, One Baylor Plaza, Houston, TX

**Nancy Oberheim Bush**, MD/PhD, 2009, NSC, Neurology Resident, Class of 2015, UCSF, San Francisco, CA

**Irah King**, PhD, 2009, NSC, Assistant Professor, McGill University, Department of Microbiology and Immunology, Montreal, Canada

**Grace Vangeison**, PhD, 2009, NSC, Market Manager, Millipore Corporation, Billerica, MA

**Verginia Cuzon**, PhD, 2009, NSC, NIH, Bethesda, MD

**Aaron Cecala**, PhD, 2009, NBA, Assistant Professor of Physiology, Elizabethtown College, PA

**Bernard Gee**, PhD, 2009, NSC, Faculty, Dept. of Psychology, Western Connecticut State University, Danbury, CT

**Sarita Kishore**, PhD, 2009, NBA, 2010-internship through University of Washington in Boise, Idaho, 2011-residency in Ophthalmology in Louisville, KY

**Qi Cui**, MD/PhD, 2009, NBA, Ophthalmology Resident, UCSF, San Francisco, CA



## Alumni Updates

**Qi Cui**, MD/PhD, 2009, NBA, Ophthalmology Resident (Class of 2015), UCSF, San Francisco, CA

**Carolyn Tyler**, 2009, NSC, Post-doctoral Fellow, Princeton University, Dept. of Molecular Biology, Washington Rd., LTL 123, Princeton, NJ

**Ditte Lovatt**, PhD, 2009, NSC, Post-doctoral Fellow, University of Pennsylvania School of Medicine, Fellow at Center for Technology Transfer, University of Pennsylvania, Philadelphia, PA

**KyungWha Lee**, PhD, 2009, NSC, Post-doctoral Fellow, City College of New York, Itzhak Mano lab, NY, NY

**Yuriy Shapovalov**, MD, PhD, 2010, NSC, Preventive Cardiology Fellow at the Heart Research Follow-up Program, Division of Cardiology, Department of Medicine, mentor Dr. Wojciech Zareba, URMC, Rochester, NY

**Lynette Desouza**, PhD, 2010, NSC, Post-doctoral Fellow, Tata Institute of Fundamental Research, Mumbai, India

**I-Chen Yu**, PhD, 2010, NSC, Research Fellow at Indiana University School of Medicine

**William Mowrey**, PhD, 2010, NSC, Post-doctoral Fellow, HHMI, Anthony Leonardo's lab at Janelia Farm, Chevy Chase, MD

**Sarah Bliss Matousek**, PhD, 2010, NBA, Freelance Editor at BioScience Writers, currently studies Health Management at Boston University School of Public Health

**Deborah Ryan**, PhD, 2010, IGPN, Post-doctoral Fellow, Portman Lab, Box 645, URMC, Rochester, NY

**Michael Moravan**, MD/PhD, 2010, Resident physician in radiation oncology, URMC, Rochester, NY

**Marina Dobрева**, PhD, 2010, NBA, Bulgaria

**Michael Pesavento**, PhD, 2010, NBA, Algorithm Development Scientist, Neurosky, San Jose CA

**Arnulfo Torres**, PhD, 2011, NSC, Medical Writer at Freelancer - Medical Communications

**Stephen Raiker**, PhD, 2011, NSC, research fellow in Thomas Schwarz's Lab affiliated with Children's Hospital Boston/Harvard Medical School, Boston, MA

**Susan Lee**, MD/PhD, 2011, NSC, Resident Physician, Child Neurology at Cincinnati Children's Hospital Medical Center, Cincinnati, OH

**Michael Jacob**, MD/PhD, 2011, NBA, Resident in Psychiatry, UCSF, San Francisco, CA

**Kathleen McAvoy**, PhD, 2011, NSC, Post-doctoral Fellow, Harvard Stem Cell Institute, Amar Fahay Lab, Boston, MA

**Cory Hussar**, PhD, 2012, NSC, Senior Medical Writer at The Curry Rockefeller Group, LLC, Tarrytown, NY

**Zhuoxun Chen**, PhD, 2012, NSC, Post-doctoral Fellow, Jeff Rothstein's lab, Johns Hopkins Hospital, Baltimore, MD

**Crystal McClain**, PhD, 2012, NSC, Research Associate, Ben Simons and Robin Franklin lab, University of Cambridge, UK

**Sally Duarte**, PhD, 2012, NBA, Post-doctoral Fellow, Max Planck, Institute, Jupiter, FL

**Youngsun Cho**, MD/PhD, NBA, 2012, Psychiatry Resident, Yale School of Medicine, Anticevic Lab, New Haven, CT

**Katherine Selzler**, PhD, 2012, NBA, Associate Consultant, Scientific Communications, Indianapolis, IN

**Maria Diehl (Faryna)**, PhD, 2012, NSC, Postdoctoral Fellow, University of Puerto Rico, Quirk Lab, San Juan, PR

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## Alumni Updates

**Michael Wu**, MD/PhD, 2012, Resident physician in anesthesiology (2014-2017), UCSF

**Ethan Winkler**, MD/PhD, 2012, Resident physician in neurosurgery(2014-2020), UCSF

**Sarah McConnell**, PhD, 2012, Course Coordinator, Human Anatomy at Ithaca College, Adjunct Faculty, Monroe Community College, Rochester, NY

**Phillip Rappold**, MD/PhD, 2013, Resident physician in urology (2014-2019), URM, Rochester, NY

**Danny Rogers**, MD/PhD, 2013, Resident physician in pediatrics and child neurology (2014-2017), University of NM, Albuquerque, NM

**Veena Ganeshan**, PhD, NSC, 2013, Post-doctoral Fellow, Schor Lab, URM, Rochester, NY

**Daniel Marker**, MD/PhD, 2013, MSTP student, 4th year of medical school, URM, Rochester, NY

**Nathan Smith**, PhD, NSC, 2013, Research Scientist, Department of Pharmacology and Toxicology University of Utah, Salt Lake City, UT

**Anasuya Das**, PhD, NSC, 2013, Post-doctoral Fellow, Marisa Carrasco's lab, Center for Neural Science at NYU, NY

**Danielle DeCampo**, MD/PhD, 2014, MSTP student, 3rd year of medical school, URM, Rochester, NY

**Kimberly Fernandes**, PhD, NSC, 2014, Post-doctoral Fellow, Libby Lab, URM, Rochester, NY

**Simantini Ghosh**, PhD, 2014, Post-doctoral Fellow, David Brody Lab, Department of Neurology, Washington University School of Medicine in St. Louis, St. Louis, MO

**Michele Saul**, PhD, 2014, Post-doctoral Fellow, Fudge Lab, URM, Rochester, NY

**Irina Statnikova**, PhD, 2014, Rochester, NY



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