FUN Newsletter
January 15, 2016

RECAP from SfN Chicago October 17-21

Inside this issue:

HOW TO....

INCORPORATE UNDERGRADUATES SUCCESSFULLY INTO RESEARCH

BY DOROTHY KOZLOWSKI, DEPAUL UNIVERSITY

1. How to select students? Be very selective in choosing students. Ask for a resume and a career statement (which asks them to include how research fits in) and do an interview prior to accepting them into the lab. If they get this far, you know they're serious about it. Many students ask to be in the lab but don't bother moving forward when I ask for a resume and statement. You know these aren't the serious ones. Designate a "probationary period" during which you can decide if this student is a good fit (this works well for the student too because it gives them an out if they don't really like working in the lab after all).

2. How do I create projects that undergraduates can succeed in? This depends on techniques used in the lab. However, in general, compartmentalize your research questions into subcomponents and have students pick a subcomponent that they're interested in. For example in my lab, we may be interested if "Drug X is therapeutic following TBI". To answer this question I may have 3-4 different behavioral tests, and 3-4 different immuno stains to run and examine. I typically will assign one student per outcome measure. They then are responsible for everything including statistical analysis, writing a methods and results section, creating graphs etc. This gives them ownership and a better understanding of the research process from start to finish.

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DO YOU WANT A JOB AT A PRIMARILY UNDERGRADUATE INSTITUTION (PUI)?

BY TRACIE PAINE, OBERLIN COLLEGE

I often get contacted by graduate students and post-docs that are interested in pursuing a career at a primarily undergraduate institution (PUI), but they are not sure exactly what that career will look like. For example, I am asked questions such as "How will I know if I am cut out for a career at a PUI?", "What are the teaching loads like?" or "How do you get any research done?" At the SfN information session titled "Do I want a job and how would I prepare for a job, at a primarily undergraduate institution (PUI)?" we discussed some of the answers to these questions, focusing on the teaching and research expectations at PUIs. This article shares some of the highlights of that discussion.

TEACHING CONSIDERATIONS

A passion for neuroscience and a desire to share that passion with students is fundamental for everybody considering a neuroscience job at a PUI. Teaching is the heart of all faculty positions at PUIs and pervades all aspects of working at a PUI from teaching in the classroom to academic advising. That said, the formal teaching requirements differ quite substantially across institutions. For example, some institutions have teaching loads on the heavier side (i.e., a 4:4 course load; 4 courses per semester), while other institutions have teaching loads on the lighter side (i.e., a 2:2 course load). Moreover, what is considered a "course" can differ between institutions with some programs counting both laboratory classes and research towards ones' teaching load while these types of teaching experiences are not counted towards the teaching load at other institutions. It should be noted that teaching loads are frequently inversely related to the time one has to dedicate to research. Thus, heavier teaching loads typically are associated with smaller research programs.

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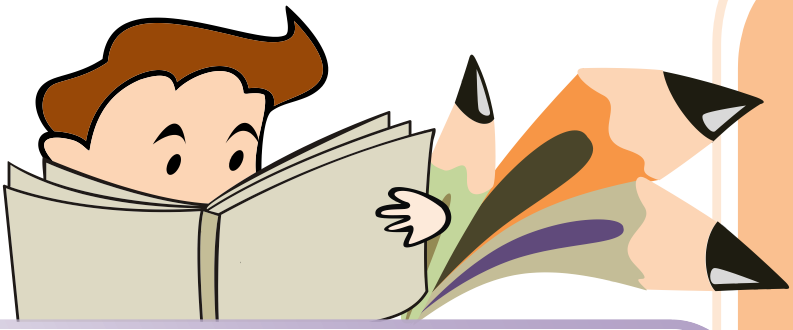
HOW TO… continued

3. How do I make the most of summer students? Summer research students are difficult because you only have them for a very short time. You have to decide what your goal is with these students. They can't have the same type of experience as students who are with you for an entire academic year. Typically summer students are there to get a taste of what research is like. So assign them to learn one technique and gather some data with a more senior member of the lab or yourself. Don't expect them to contribute as significantly, especially if your experiments are long-term or use complicated techniques. However, they can be helpful in gathering small chunks of data or running a small pilot study.

4. Other general tips:

Try to get undergrads engaged in the literature to give them a more rich research experience. This can be done with journal clubs with you in charge or another student in charge.

Assign them to a more senior student in the lab for shadowing/training. This gives the senior student experience mentoring too.



2015 FUN EQUIPMENT LOAN WINNERS

Karen Parfitt, Pomona College

"Treatment of learning and memory deficits with a fragment of secreted APPα in a mouse model of Alzheimer's"

Award: A 2-year loan of an Any-maze Tracking System from **San Diego Instruments**

Erin Clabough, Hampden-Sydney College

"Detection of Motor Abnormalities in a Chronic, Mild Fetal Alcohol Spectrum Disorder (FASD) Model in Swiss Webster Mice"

Award: A 2-year loan of a Roto-Rod Motor Skill Measurement System from **San Diego Instruments**

Elizabeth Becker, Saint Joseph's University

"Influence of Early Life Exposure to Prozac on Neurodevelopment and the Reparative Role of Oxytocin Treatment in the California Mouse"

Award: A 2-year loan of a Place Preference System from **San Diego Instruments**

Lauren A. Makuch, Ursinus College

Establishing a Behavioral Neuroscience Research Methods Course in Undergraduate Curriculum

Award: A 2-year loan of a SR-LAB Startle Response System from **San Diego Instruments**

WANT A JOB? continued

RESEARCH CONSIDERATIONS

Like teaching expectations, research expectations can also vary drastically across PUIs. In all cases, research is viewed as an extension of teaching. Enthusiastic, curious, ambitious and talented undergraduate students conduct research. However, undergraduate students have little, if any, first-hand experience with research and thus need to be taught all aspects of research from the rationale for the experiments, to the skills need to complete the experiments, to the interpretation of data. Moreover, despite their enthusiasm for research, undergraduate students do not have the time to devote to research that graduate students and post-docs do. Thus, some care must be taken to devise a research program and individual experiments that are amenable to the schedules and skills (which can be quite sophisticated!) of undergraduate students. The financial and/or equipment resources available to faculty at PUIs are not, generally, as great as they are at research institutions; this may add some additional constraints to the types of techniques that can be used. That said, smaller amounts of funding for research can frequently be obtained via internal funding mechanisms and larger grants are also available through specific PUI-directed mechanisms via federal agencies such as the National Institutes of Health (NIH) and National Science Foundation. Importantly, despite some of the constraints, it is possible to maintain a sustainable and productive research program at a PUI.

CLOSING REMARKS

A career at a PUI is fulfilling and rewarding for individuals committed to both teaching and research. This article describes some of the factors to be considered, but the best way to determine if working at a PUI is the correct career path for you is to go visit one. On your visit, talk to different faculty members about their job experience, attend some classes and witness student-faculty research collaborations in action.

FUN EQUIPMENT LOAN WINNERS continued

Annaliese Beery, Smith College

"Stress and Sociality: Effects of environment on heart rate and heart rate variability in social voles"

Award: A 2-year loan of a DSI Implantable Telemetry System from **Data Sciences International**

Abigail Kerr, Illinois Wesleyan University

"Mechanisms of compensatory limb use following stroke: The role of the neurovascular niche in functional outcome"

Award: A 2-year loan of a Nikon Eclipse E400 Microscope System from **Nikon Instruments**

Divya Sitarama, University of San Diego

"Dopaminergic circuits underlying sleep and behavioral arousal in Drosophila"

Award: A 1-year loan of an EthoVision XT Software with additional modules and CCD camera from **Noldus Instruments**

FUN Faculty Awards

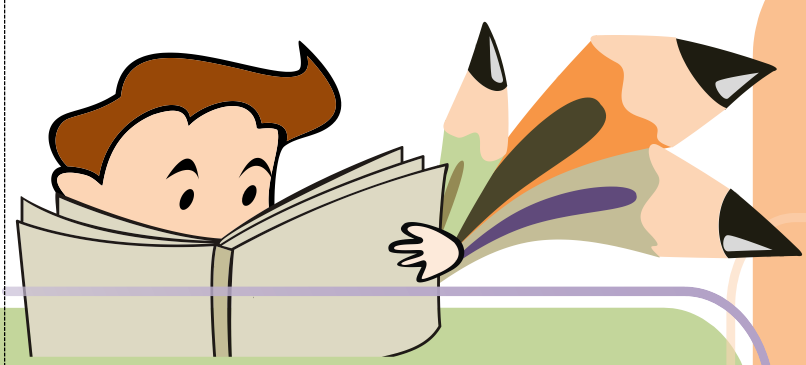
The Faculty for Undergraduate Neuroscience annually recognizes members who have made outstanding contributions to undergraduate neuroscience. These awards are based on peer nominations and are announced at the FUN Social and Poster Session at the Society for Neuroscience Annual Meeting.

FUN Career and Lifetime Achievement Awards

The Career and Lifetime Achievement awards are FUN's highest honor. The Career and Lifetime Achievement Awards will be given from time to time, to recognize individuals who have made outstanding efforts on behalf of undergraduate neuroscience education and research. Outstanding efforts may include singular achievements that have provided wide benefit to the undergraduate neuroscience community, or sustained efforts across years.

Lifetime Achievement: Steven Zottoli, Co-Director of Education at Marine Biological Laboratory and Howard B. and Nan W. Schow '50 Professor of Biology, Emeritus at Williams College

Career Achievement: Lee Coates, Professor of Biology, Neuroscience and Global Health Studies at Allegheny College



FUN FACULTY AWARDS continued

FUN Educator of the Year Award: Mary Morrison, Assistant Professor and Chair of Biology at Lycoming College

The Educator Award is given annually to a regular member or fellow of FUN in recognition of notable efforts related to promoting effective teaching of neuroscience at the undergraduate level.

FUN Service Award: Jennifer R. Yates, Assistant Professor of Psychology and Director of Neuroscience Program at Ohio Wesleyan University

The Service Award will be given from time to time, to recognize individuals who have made outstanding efforts towards the continuing development of FUN as an organization.

FUN Mentor Award: Anthony Kline, Associate Professor in the Department of Physical Medicine & Rehabilitation and Associate Director of Rehabilitation Research at the University of Pittsburgh

The Mentor Award will be given from time to time, to recognize individuals who have made outstanding contributions as mentors for young neuroscientists.

Congratulations to these deserving members of the FUN community!

Have these awardees got you thinking about a colleague who is worthy? Start thinking now about nominating a member in 2016. You'll need to write a short letter of nomination explaining your reasons for nominating to the FUN president elect. You've got plenty of time, the deadline for 2016 nominations is September

HOW TO GET A JOB AT A PUI

BY KATHERINE STEINMETZ, WOFFORD COLLEGE

Have decided that a career at a PUI is right for you? Then read the following article on the highlights from the SFN information session on the topic. The conversation at this information session centered around setting yourself up to be an attractive applicant and the job application and interview process. Please note that this article just scrapes the surface of the intricacies of a job search. Whole books can (and have!) been written on the topic. A list of resources is included at the end of the article.

Setting yourself up for Success!

In order to get a job at a PUI, it is important to have teaching experience as well as a line of research that is feasible at a PUI.

Teaching Experience. As early as possible, it is helpful to get experience mentoring and teaching undergraduates and to show that you value undergraduate education. In some graduate programs it is difficult to get independent teaching experience at your own institution, but it may be possible to teach as an adjunct at another local intuition. These positions often aren't advertised, but you can contact department chairs directly and see if they are looking for adjuncts. You can also start by giving guest lectures in colleagues' classes. This is a great way to get your feet wet and to solicit feedback from other instructors. You also want your CV to make it abundantly clear that you care about teaching. You can do this by writing an article for the Journal of Undergraduate Neuroscience Education (JUNE), writing an article for this very newsletter, or presenting a teaching poster at SfN.

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GET A JOB continued

Research. Many people at the information session had a question about how to make sure their research area is feasible at a PUI. This is a good thing to think about before you start applying for jobs at PUIs, as most schools care deeply about how you can involve undergraduates in your research. For some research methods that use very pricy methods, this may require doing a post doc in which you learn a new method that is feasible at a PUI. However, you might be surprised about what you can do at a PUI with a little creativity. I recommend contacting people in your research area who are at PUIs and asking them how they do it. For example, if you have worked primarily with fMRI data, it may be helpful to add another method to your tool belt, but you may also be able to continue this research in the classroom and the lab through collaborations or by analyzing open source data (see Hurd & Vincent, 2006; Mickley Steinmetz & Atapattu, 2010). If your methods are very pricy, it is worth addressing these concerns directly in your research statement, perhaps in a section that focuses on how undergraduates will be involved in your research.

The Application and Interview Process

This has been written about in great detail, and there are lots of great resources for each part of the application and interview process (see below). I will give an overview of the entire process. Start preparing early. Job ads usually come out late summer and early fall. I recommend using the spring semester and summer to prepare for you job search.

Spring and Summer Before Your Job Search

1. This is an ideal time to work on your application materials. Of course, you will tailor your materials to each school to which you apply (especially the cover letter), but it helps to have a template, especially for the teaching and research statements. Show these to as many people as possible and revise extensively.

2. Work on your job talk. You will almost certainly give a job talk if you get an interview. Now is a good time to write the talk and give it to a number of different audiences. Remember that it is unlikely that there will be someone in the audience who is in your exact area, so you want to make it a clear talk that scientists and undergraduates who are not in your area can understand. At the same time you don't want to water it down or over simplifying things. This is tricky, but it is the exact challenge that we face in the classroom, so it is very important! Also keep in mind that some schools ask you to "teach your research," so you may want to think about how you would do that as well. For example, is there any way that you could make your talk more interactive, have clear learning objectives, etc.?

3. Start to think about your teaching demonstration. There is some variety in what PUIs ask of their interviewees. If they don't ask you to teach your research, you will likely be asked to give a teaching demonstration on another topic. Often you can pick the topic and you will give it to an audience of random undergraduates and faculty who are available at that time, including the search committee. Other times you may be assigned a topic, or you may step in to give a guest lecture in a class. The variety of different types of teaching demos makes it difficult to prepare too much before you get the interview, but it is helpful to start thinking about what you would do. This might be a good time to survey your students: what was their favorite lecture of the semester and why?

GET A JOB continued

4. Ask your recommenders to write your letters. Make sure that you have letter writers who can speak to your teaching and mentorship of undergraduates as well as your research skills and general character. Have most (if not all) of your letter writers seen you teach? If not, invite them to observe your class or send them a video of you teaching. This will allow them to make concrete comments on your teaching instead of having to say, "I've never seen her teach, but I'm sure she'd be great."

Late Summer/Early Fall

This is when the job ads start to come out. I recommend organizing them into a spreadsheet that includes deadlines, how applications are submitted, etc. It may be helpful to share this spreadsheet with your recommenders. Now you can carefully read the job ad and research the school, before tailoring your application materials to each school.

Mid to Late Fall

Most phone interviews will happen within this window. Many schools will also conduct on campus interviews with the aim to finalize the search process by the end of the fall semester. Now you can do mock interviews and prepare your specific teaching demonstration as the requirements become more concrete. You may also want to plan to attend the Society for Neuroscience meeting, as some schools may conduct formal or informal interviews there. It's also a great time to pick the brains of/commiserate with your FUN colleagues at the booth or poster session and browse the teaching posters to get creative ideas for labs that you can bring up in your interview! Now is also the time to put into practice whatever stress reliever works for you because no matter if you get a ton of interviews or none at all, it is a stressful time!

Spring Semester

While many job searches have wrapped up, some schools will conduct on campus interviews in the early to mid spring semester.

Good luck and happy job hunting!

RESOURCES ON GETTING A JOB AT A PUI:

Council on Undergraduate Neuroscience's: "How To Get A Tenure-Track Position at a Predominantly Undergraduate Institution"

http://www.cur.org/publications/how_to_series/

American Society of Cell Biology: How to get at Teaching Job at a Primarily Undergraduate Institution by A. Malcolm Campbell, Biology Department, Davidson College
http://www.ascb.org/newsfiles/teaching.pdf

Getting the Faculty Position in Higher Ed That You Want - Presentation by Alton Campbell, Associate Dean College of Grad Studies University of Idaho
file:///Users/steinmetzkr/Downloads/getting_the_faculty_position.pdf

fMRI Resources Cited Above:

Hurd, M. W., & Vincent, D. J. (2006). Functional magnetic resonance imaging (fMRI): a brief exercise for an undergraduate laboratory course. *Journal of Undergraduate Neuroscience Education, 5*(1), A22.
http://www.funjournal.org/wp-content/uploads/2015/09/HurdJUNEf06.pdf

Steinmetz, K. R. M., & Atapattu, R. K. (2010). Meeting the Challenge of Preparing Undergraduates for Careers in Cognitive Neuroscience. *Journal of Undergraduate Neuroscience Education, 9*(1), A36.
http://www.funjournal.org/wp-content/uploads/2015/09/mickley_etal_91_a36-a42.pdf

2015 FUN Travel Award Winners – Chicago

Since 1992 the Faculty for Undergraduate Neuroscience has provided travel awards to help our top undergraduate neuroscientists present their original research at the annual Society for Neuroscience meeting. The winners are enrolled at a variety of academic institutions - from small liberal arts colleges to large research intensive universities. What ties them together is a dedication to the pursuit of high quality research in the neurosciences. FUN has kept in contact with our winners and an amazing 68 percent of them have gone on to enter PhD or MD/PhD programs. These students are truly our next generation of neuroscientists. Our awards are sponsored by FUN member dues and generous contributions from our sponsors.

Deanna Acs, St Marys College of MD (Dr. Anne Marie Brady); Award Sponsor: Kinder Scientific

Nathaniel Bohm-Levine, Oberlin College (Dr. Jan Thornton); Award Sponsor: Nu Rho Psi

Weelic Chong, Oberlin College (Dr. Gunnar Kwakye); Award Sponsor: Nu Rho Psi

Rastko Ciric, Pomona College (Dr. Ajay Satpute); Award Sponsor: Data Sciences International (DSI)

Matthew Davenport, Cincinnati Children's Hospital (Dr. Tori Schaefer); Award Sponsor: Leica Microsystems

Abigail Dove, Swarthmore College (Dr. Christopher Vecsey); Award Sponsor: Wellesley College

Nathaniel Elia, UC Davis (Dr. Christoph Lossin); Award Sponsor: ADInstruments

Jillian Faustino, Bay Path University (Dr. Princy Quadros-Mennella); Award Sponsor: the Grass Foundation

Austin Ferro, Skidmore College (Dr. Sarita Lagalwar): Award Sponsor: the Faculty for Undergraduate Neuroscience (FUN)

Sarah Hamilton, Davidson College (Dr. Julio Ramirez); Award Sponsor: the Hubel memorial fund

Taylor Hendershott, College of Holy Cross (Dr. Alo Basu); Award Sponsor: Noldus

Ernesto Hernandez, U Arizona (Dr. Lynne Oland); Award Sponsor: Nu Rho Psi

Laura Keller, Bowdoin College (Dr. Patsy Dickinson); Award Sponsor: Harvard Biosciences and Sinauer Associates

Therese Kenny, Memorial University (Dr. Charles Malsbury); Award Sponsor: Lafayette

Molly Jeanne Eiko Larson, Concordia College (Dr. Krys Strand); Award Sponsor: Campden Instruments Ltd

Ellen Lesser, Wesleyan College (Dr. Mike Robinson); Award Sponsor: Med Associates

Daniel Lowes, Oberlin College (Dr. Tracie Paine); Award Sponsor: Nu Rho Psi

Kathleen Luckett, Ithaca College (Dr. Jean Hardwick); Award Sponsor: Carnegie Mellon University

Kimberly Meerschaert, Saginaw Valley (Dr. Jeffrey Smith); Award Sponsor: San Diego Instruments (SDI)

Monica Murray, Regis University (Dr. Ashley Fricks-Gleason); Award Sponsor: the Grass Foundation

Jordan Reasor, University of FL (Dr. Sara Burke); Award Sponsor: SDI

Audrey Torrest, UC Davis (Dr. Kyle Fink); Award Sponsor: FUN

Trevor Towner, Cal State San Marcos (Dr. Keith Trujillo); Award Sponsor: Sinaeur Associates

Thomas Voigt, Skidmore College (Dr. Rebecca Howard); Award Sponsor: Nu Rho Psi

Jacob Westerberg, St Olaf (Dr. Jeremy Loebach); Award Sponsor: the Grass Foundation

STUDENT SNIPPETS

The following are excerpts from personal reflections from FUN travel awardees on what attending the SfN meeting meant to them.

"Receiving tips about applying to schools and discussing with them my goals increased my confidence about being a future applicant. My overall experience at the conference left me feeling that I was supported by the community. As an aspiring neuroscientist this has fueled my desire to pursue further schooling and contribute to this wonderful field of research."
Deanna Acs, St. Mary's College of MD

"One of the first people to approach my poster was a woman who was especially interested in my work looking at luteinizing hormone and spatial memory. It suddenly dawned on me that this woman was Dr. Victoria Luine, a leader in the field of estrogen and cognition; I had pored over several of her papers throughout my project. I was star-struck."
Nate Bohm-Levine, Oberlin College

"The greatest take-away from the whole event is knowing that there are actually people behind the papers that I wrote, and that these people are alive and they are not robots or people on a page (or a computer screen). Often journals can be very verbose or terse, and it is good to actually meet the person and obtain a better sense of what the research is about.

At the graduate school booths, I was able to ask students about what they liked about their programs and what advice they might have for people interested in applying. Personally, I learned that the best place to be is to be at a place where you will thrive, working with people in a lab and environment where I will be happy and productive, and working with people who care about training the next generation."
Weelic Chong, Oberlin College

"The SfN conference was also a meaningful reunion with many of my undergraduate mentors and colleagues from the Pomona College Department of Neuroscience, whom I had not seen since I graduated last spring. I enjoyed meeting with the professors who had first inspired me to pursue neuroscience as a career and catching up with them regarding the progress of their research."
Rastko Ciric, Pomona College

"The seminars available at SfN were terrific. My favorite was the seminar on tissue clearance to allow for thick section or whole brain imaging. I already use PACT clearing of Thy1-EGFP reporter tissue to quantify dendritic spine density and morphology, but I wasn't aware of the variety of tissue clearance and deep tissue immunostaining techniques available to me. I've begun to work up protocols for staining PACT cleared Thy1-EGFP sections to look at the density of various synapse elements are the spine and assess if alterations in these elements contribute to the changes I see in spine density."
Matthew Davenport, Cincinatti Children's Hospital

"As a student involved in the microbiological aspects of neuroscience, it was new and exciting to attend and learn about the enormity of sub-disciplines in neuroscience. I was introduced to fields I didn't know of previously in neuroscience, such as neuroeconomics, while diving further into fields I am familiar with, such as ion channels."
Nathaniel Elia, UC Davis

"Presenting gave me practice of presenting my own work to colleagues which is a skill that will be useful in my future career and in graduate school. Being able to present my research is an amazing opportunity that not all undergraduates have the chance to experience. This experience certainly increased my chances for acceptance into graduate school…"
Jillian Faustino-Gallagher, Bay Path University

"Veteran SFN attendees recommended that I choose one thing to learn about while attending the conference rather than try to learn about everything Neuroscience has to offer in just a few short days. I graduated this past May and started working in a neuroimaging lab that focuses on Parkinson's disease (PD) so I took my time at the poster sessions to learn about the latest research on PD and dopamine.

Although I was initially overwhelmed by the sheer amount of people and science available to me in Chicago, the experience was both personally and academically enriching. Being able to talk with established scientists, as well as other aspiring young neuroscientists gave me more insight with what is happening at several different levels of neuroscience research and provided me with useful feedback and insight into my own projects. I hope to see you all next year in San Diego!"
Taylor Hendershott, College of Holy Cross

STUDENT SNIPPETS continued

"I was able to share what my research group and I had discovered to people that were either experts in my particular field of neuroscience or people that were new to that particular topic. Regardless of their backgrounds, people would always ask insightful questions about my research and either directly or indirectly, those people were able to inspire new questions or perhaps suggest better methods to troubleshoot some problems in the methods."
Ernesto Hernandez, U Arizona

"Even though I have always appreciated that good science involves a lot of benign and unexciting observations, it was hard as a relative newcomer to the field to not feel that somehow the uninteresting data were my own fault. I was reassured by the people who stopped by my poster and told me that they had observed similar results but had not been able to come up with a "spin" for the data in which a journal would be interested."
Ellen Lesser, Wesleyan College

"I think my favorite part of the entire conference was working the booth sponsored by FUN. Not only was it interesting to meet some of my fellow recipients, but also it was so inspiring to meet everyone who stopped by the booth. I was able to interact with such a wide range of people—from those who bought one of the FUN t-shirts for their kids every year, I must say the design was pretty fantastic, to those who had never heard of FUN and wanted to learn more about what the organization does. It was so motivating to see how many people FUN impacts and how important of a role it serves in ensuring the aspirations of the next generation of the neuroscience community, myself included."
Laura Keller, Bowdoin College

"I had the chance to present the work I have done to multiple audiences: once in the main meeting and once at the FUN social. At the main meeting presentation, I chatted with a researcher who also works with System Lupus Erythematosus (SLE) in a mouse model. He asked challenging questions, pushing me to think outside the box and apply what I know and am learning in my research to other areas of the disease pathophysiology and symptomology. At the FUN social I presented to a wider range of individuals with many different backgrounds which gave me the opportunity to practice communicating my work to those with different levels of familiarity and expertise."
Molly Larson, Concordia College

"…it is easy to forget that there are hundreds if not thousands of other people who are asking questions about the brain that are similar to your own. Instead of remaining oblivious about these other scientists, it is beneficial for everyone to meet people from around the world who are conducting similar research in order to help each other ask the right questions and make logical conclusions about their results."
Dan Lowes, Oberlin College

"Performing research and sharing the findings with other scientists is what being a scientist is all about. Being able to have discussions about my research with other professionals in the field was a great opportunity. Having professionals see the research I have been doing and tell me that it's good work and impressive just validates that all the hard work I put into doing research is worth it."
Kim Meerschaert, Saginaw Valley

"This conference also allowed me to apply and realize how important taking and understanding my science classes really are. I felt very accomplished, being a neuroscience major and taking upper division neuroscience classes I was able to follow and understand much more than I thought.

I was very fortunate to have the professor that I have been doing research with to show me around and introduce me to as many people as she could. I also had a surreal moment when presenting my poster on the main floor – I was able to talk to and meet one of the authors of a couple of the research articles that I have cited for my own research. This was a humbling experience that gave me a profound respect for all of the researchers who are dedicated to broadening our understanding of what it means to be human, and realizing that I am also one of them."
Monica Murray, Regis University

"I found that getting to walk around to other posters and talk to other scientists about their work was also thrilling. I have never been so awed as I was at this conference to see the variety of posters from laboratories all over the world. It is incredible just how broad neuroscience reaches and the impact these scientists are having on not just our professional community, but our society as well."
Jordan Reasor, University of Florida

STUDENT SNIPPETS continued

"…I attended various poster sessions and presentations and greatly expanded my understanding of current research findings related to Huntington's disease (HD), metabolic dysfunction, and other important topics relevant to my current work. It was fascinating to hear about the vast array of targets that different researchers are focusing their efforts on in order to find a cure for this complex disorder."
Audrey Torrest, UC Davis Med

"My poster presentations also gave me a significant amount of experience in how to properly present at a national conference and how to be prepared for questions that may be outside my scope of research. During my poster sessions, I was honored to have some of the biggest names in my field of research come by and talk with me about my poster. To be able to meet and have an intellectual conversation with some of the researchers that I have read so much about was a great experience. Meeting and discussing research with some of my research idols also opened up doors of potential opportunities for future research and PhD programs."
Trevor Towner, Cal State San Marcos

"The final aspect that was of great significance to me through the conference was exploring the hugely interdisciplinary field of neuroscience. From posters, to symposia, to vendor booths, various applications or topics within the field were being promoted and telling stories about how the nervous system functions. It was quite possibly the best way by which to explore every topic that you have interest in and narrow down what really drives you. I even found some areas that I had never heard of, but were particularly interesting and will keep in mind as my career advances. This truly has been a highlight of my undergraduate career and is something that I will look back on as instrumental in my development as a scientist. The connections I have made and the areas I was able to explore will influence me for years to come, and I look forward to pursuing neuroscience throughout my life."
Jake Westerburg, St. Olaf College

Do you know of an exceptional student who desires to present their work at SfN, but probably will not have enough resources to fulfill their dream? Well, then, look no further! The FUN Undergraduate Student Travel Award is in place just for them. These awards offer aid for expenses associated with attending the Society for Neuroscience 2016 meeting for undergraduate students who are presenting a poster at the main SfN meeting. Get moving, though! **Abstracts for SfN are due by Thursday May 5, 2016**. …Be on the lookout for announcements regarding the travel awards (students must submit an SfN abstract to be eligible for award).

CALL FOR SUBMISSION: April 1 deadline

Make your voice heard! Submit to the next issue of the FUN newsletter.

We welcome submissions on any topic suitable for the FUN membership including:

- Editorial – an opinion piece on an issue or topic relevant to the advancement of FUN's mission
- I wish I'd known then – advice you wish you'd been given related to teaching neuroscience, career development, managing research or other topics relevant to FUN membership
- Resource Pointers/Reviews – summary and review of a teaching resource you find useful (book, article, video, website, etc.)
- Ask FUN – a question on which you seek feedback from the FUN community (e.g. grading dilemma, managing work-life balance, etc.)
- Other – submitted articles directly relevant to FUN membership may be solicited or accepted for publication

Please submit your article via email to the current newsletter editor at newsletter@funfaculty.org

- Submissions should be in a common word-processing format (e.g. MSWord, Open Office Writer, rtf format, etc.). Font size should be 12 New Times Roman
- Please carefully proofread before submitting, as there will be no copy-editing or proofing stage.

The statements and opinions contained in newsletter articles are solely those of the individual authors and contributors and not of FUN. FUN does not endorse, warranty, ir approve of any products being reviewed or advertised in the newsletter.

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Carlita Favero, Ursinus College

Charles Weaver, Saginaw Valley State University

FREE NSF-FUNDED WORKSHOP, MAY 22-27: MIZZOU'S 10TH ANNUAL SUMMER NEUROSCIENCE WORKSHOP

The University of Missouri-Columbia Colleges of Engineering and Biological Sciences will host a 6-day interdisciplinary workshop focused on active learning in neuroscience using virtual (software) labs from Sunday-Friday, May 22-27, 2016 on the Columbia campus. This workshop is targeted to undergraduate faculty (your can also bring one student with expertise in computers/software during 2015-16) from biological sciences, psychological sciences and engineering and to high school teachers with an interest in teaching and learning more about neuroscience using software-based instructional modules. The workshop was initiated in 2007 as
part of a National Science Foundation grant to MU to develop undergraduate curriculum in the area of computational neuroscience, and continues to be offered free beyond the duration of the grant.
In recent years, Computational Neuroscience has developed tools to abstract and generalize principles of neural function using mathematics. These tools have proven powerful for research in a wide neuroscience spectrum including molecular, cellular, and systems levels. However, computational methods also provide valuable tools for teaching neuroscience. Several comprehensive, yet easy to use software packages to model neurons and networks, which can be used in teaching, are available at low costs. Neural models can be used alone, or together with simple biological experiments to demonstrate basic neurobiological concepts, and give students hands-on experience, to significantly improve the student's learning experience.

The workshop will introduce one hardware and seven software experiments in the form of 'virtual labs' which can be directly
incorporated into existing neurobiology or physiology courses, or used for the development of new courses. The hardware experiment covered in the workshop can be custom build locally at low cost (all instructions to build it will be provided). Workshop participants are supplied with 'ready to use' electronic versions of all hardware and software experiments, and of all the lectures.

Eligibility & Application process: Faculty at 2-year and 4-year colleges and universities, and high school teachers with interest in teaching neurobiology are eligible to apply. To apply, just complete the on-line application form at the site - http://engineering.missouri.edu/neuro/outreach/neuroscience-workshop/

For further information about the workshop, contact Drs. Satish S. Nair (573-882-2964; nairs@missouri.edu), David J. Schulz (573-882-4067; schulzd@missouri.edu), or David Bergin (573-882-1303; bergind@missouri.edu)