EDITORIAL
Best Practices for Developing, Assessing, and Sustaining Inclusive Curricula: Proceedings of the 2017 Faculty for Undergraduate Neuroscience Workshop

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Every three years for the past 23 years the Faculty for Undergraduate Neuroscience (FUN) has organized a summer workshop and conference. These events have brought FUN members together to learn new lab techniques, collaborate in the development of neuroscience curricula, share best practices and pedagogical innovations, and renew their passion for teaching through the camaraderie of the FUN community (Figure 1). This issue of *JUNE* presents *some* of the highlights of the 8th FUN workshop, which was held in July 2017 at Dominican University in River Forest, Illinois. Additional resources are posted to an internet archive of conference materials (https://funfaculty.org/conference/fun-2017/; see below).

At the end of the previous workshop (2014 at Ithaca College), founding FUN member Julio Ramirez gave a rousing closing address, exhorting participants to remember that FUN is our home, our place to find inspiration, mentorship, and abiding friendship within a community of scholars and teachers. It is fitting, then, that the theme for the 2017 conference was *inclusion*—on working to make sure the sense of welcome and belonging that helped each of us find a place in the world of neuroscience is extended as warmly, equitably, and broadly as possible to our colleagues and students. This was an inspiring and timely topic. It was especially fitting that this theme was explored in partnership with Project Kaleidoscope, the division of the AAC&U dedicated to transforming STEM education for the betterment of all students. Project Kaleidoscope has been a partner in the development of the FUN workshops since their inception.

In this issue, the theme of inclusion is represented by editorials and articles on inclusive teaching techniques (Penner), fostering diversity and inclusion at the administrative level (Martinez-Acosta and Favero), and reimagining faculty development with a foundational focus on cultural responsiveness (Mack). FUN members have often been at the forefront of efforts to broaden participation and success in the neurosciences (e.g., Ramirez and Tonidandel, 2009). The commentaries in this issue encourage us to continue and expand these efforts at every level. We hope their example in this issue will lead to more *JUNE* submissions related to this vital topic. Possible contributions include investigating equity of pedagogical outcomes, sharing best practices in student mentorship and professional development, and reporting on innovative programs that help promote inclusion.

Figure 1. What is it like attending a summer FUN workshop? This is a word cloud produced from responses of 2017 participants to the prompt: "Give three words that describe your overall experiences at FUN 2017."

Curricular issues were also at the forefront of the workshop with an investigation of the Neuroscience major and minor in its different forms (stand-alone or housed primarily in Psychology or Biology). Discussion leaders from various institutions supported some exciting and meaningful conversations. It is exciting to share this work in this issue, with an updated set of curricular blueprints (Wiertelak and colleagues).

Another important strand of every FUN workshop is hands-on training in innovative lab techniques. In this issue, you'll find a treasure-trove of exciting lab activities to try out, some of which were also presented at the FUN Pre-Workshop Laboratory Exercise session before the main Workshop. These were: introduction to NeuroBytes, a remarkable new network-construction kit (Burdo), an innovative but accessible learning lab with *C. elegans* optogenetics (Rose), behavioral and physiological optogenetics exercises with fruit flies (Vilinsky and

colleagues) a low-cost approach to recording EMG signals directly from a laptop soundcard (Crisp), an out-of-the-box and very engaging comparative anatomy lab (Grisham and colleagues), a tutorial on using the Allen Brain Atlas with undergraduates (Gilbert), a beginners guide to kinesthetic illusions (Schiller and colleagues), a set of simulations in NEURON (Latimer and colleagues), and a neural network simulator that can interface with a cheap USB robot (Calin-Jageman).

Rounding out this issue is a set of articles reporting on some of the professional development sessions from the workshop. This includes a practical guide to writing specific aims (Kozolowski and Rose), a perspective on using addiction science as a lens for undergraduate neuroscience education (Napier), tips for undergraduates considering graduate studies (McLoon and Redish), a guide to educational funding at NIH and NSF (Carpenter), a review of the empirical literature on how to help motivate your students to actually read what you've assigned (Cressman), a guide to electrophysiology resources (Wyttenbach and colleagues), and an editorial on fostering collaboration between SfN's Neuroscience Training Committee and FUN (Dunbar and Symonds).

A new aspect of the 2017 FUN workshop was the inclusion of two sessions of teaching demos—these were brief, rapid-fire presentations of useful pedagogical tools and tricks. The sessions were a blast, and participants were furiously taking notes on all the excellent ideas that were put forward. Most of these nuggets were too brief to be expanded into full-length articles for this issue, but you can browse these in the online archive of conference materials. You'll find resources on using first-person narrative case studies to teach neuroscience conferences (Leah Roesch and Kristen Frenzel, Emory), a practical guide to using a flipped classroom (Alo Basu, College of the Holy Cross), tips and materials for implementing within-class peer review for term projects (Matt Carter, Williams College), a guide to using understanding checkpoints (Jennifer Schaefer, College of St. Benedict / St. John's University), a complete lab using archival MRI data to measure hippocampal volumes in psychiatric patients (Bill Grisham, UCLA), materials for incorporating team-based projects into lab courses (Jennifer Taylor, Michigan State), and a tutorial to using ZipGrade and Socrative (Margaret Gill, North Central College).

There was even more at the conference that did not make it into this issue. We continue to encourage conference presenters to submit their work for future issues of *JUNE.* In the meantime, you can browse the archives (https://funfaculty.org/conference/fun-2017/) for additional outstanding materials, including presentations on off-campus programs for neuroscience (Michael Ruscio and Chris Korey, College of Charleston), establishing a chapter of Nu Rho Psi (Mike Kerchner, Washington College), assessment issues (Gary Muir, St. Olaf College), the FUN Program and Department Consultations Service (Eric Wiertelak, Macalester College), fostering diversity and inclusion (Karen Parfitt at Pomona college and Barbara Lom at Davidson College) troubles with animal rights activists (Philips), advancing neuroscience through understanding policy (Clinton), and securing tenure at a primarily undergraduate institution (Ramirez, Davidson College). In addition, many of the posters presented at the conference have been deposited in the archives.

We hope you'll find this issue and archive useful. We also hope it inspires you to think about what you will contribute to the 2020 meeting at Davidson college (hope to see you there). Remember that presenters and authors love to receive emails letting them know you found their materials useful; the conversations we have within FUN often lead to amazing things.

2017 FUN Conference

Online Archive of Materials:
- http://www.conference.funfaculty.org/

Organizing Committee:
- Veronica Martinez Acosta, University of the Incarnate Word
- Irina Calin-Jageman, Host, Dominican University
- Robert Calin-Jageman, Host, Dominican University
- Jean Hardwick, Ithaca College
- Bruce Johnson, Cornell University
- Eric Wiertelak, Chair, Macalester College

Sponsors:
- ADInstruments
- Backyard Brains
- Dominican University
- International Neuroinformatics Coordinating Facility
- NeuroTinker
- Society for Neuroscience

Host:
- Dominican University, River Forest, IL (with special thanks to president Donna Carroll, senior event coordinator Dolores Carrizosa and director of dining services Claressa Padilla).

REFERENCES

Ramirez JJ, Tonidandel S (2009) SOMAS-URM : the evolution of a mentoring and summer research program. J Undergrad Neurosci Educ 8:A69–A72.

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