

Psyched About Research

From concussions to childhood anxiety, psychology and neuropsychology students and faculty collaborate on research

Wednesday, March 27, 2019

⋮



PSYCHOLOGY STUDENT, RIGHT, RESEARCHES CHILDHOOD ANXIETY WITH PROFESSOR NICK MIAN, CENTER, IN THE CHILD PSYCHOLOGY LAB AT UNH MANCHESTER

Traumatic brain injury has been a hot topic in the news in recent years, largely brought to light by its prevalence among athletes. And while the conversation has centered on

football players, [Daniel Seichepine](#)'s research tackles a wider audience: What are the effects of repeated concussions on the average young, healthy person?

Seichepine, assistant professor of [neuropsychology](#), could have taken that question back to his lab and studied it independently, gotten himself published and basked in the accolades. Instead, he brought this notion to his undergraduate students to research and examine.

Through their extensive research, the students discovered that non-football players experience the same sorts of ill effects of repetitive concussions as professionals getting knocked around the field on a regular basis. Their research was accepted for publication in the journal *Frontiers in Neurology*, and they had the chance to present their findings at a national conference in Atlanta.

“Publication in a peer-reviewed medical journal almost never happens at an undergraduate level,” Seichepine says. “It rarely even happens in a graduate program. Many people graduate and it’s a long time before they get their work published in a peer-reviewed journal.”

This is a remarkable accomplishment for his students, Seichepine continues, because there is fierce competition for graduate school admission as well as careers in psychology research. This kind of practical experience can help undergraduates stand out when applying to post-secondary programs or jobs.

“One of the ways that students can really set themselves apart is to have a research project and have success in that research project, a presentation or a paper,” Seichepine says. “Our students are doing that.”

It is with this understanding that the faculty members in UNH Manchester’s [psychology](#) and [neuropsychology](#) programs—who have published more than 20 journal articles over the past few years between the four of them—not only offer students the opportunity to do hands on, real-world research as undergraduates, but also encourage them to get that work out into the scientific community.

Another such example is the work that Assistant Professor [Nicholas Mian](#) and his students are doing. Mian, who teaches courses related to clinical and child psychology, is working on a study that measures emotions in young children, namely anxiety and fear.

As part of his research, children ages 3 to 6 come into the lab and do activities meant to cause worry, fear or anxiety. Their behavioral reactions are video recorded and their emotional reactions are recorded via a wristband that measures changes in perspiration.

While Mian is the principal investigator on the project, he has taken more of a behind-the-scenes approach to allow his students to work directly with the child and parents and conduct the visits. He says this gives students a way to apply what they’ve learned in class to real-life scenarios.

“From a clinical perspective, students are getting a sense of how to identify behavioral manifestations of anxiety symptoms,” Mian said. “It also allows students to explore their own interest in this area and decide if it’s something they want to pursue down the road, in graduate school or professionally.”

Seichepine says he has found that to be true of his students as well. For example, a student who worked on the concussion study decided she wanted to go into higher education and ended up in graduate program at the University of Connecticut.

“She did her thesis on the effects of concussion in learning disabilities within the school,” Seichepine says. “So she continued the same line of research but applied it to her long term career interest, which always makes the professor feel good.”

For Alison Paglia’s students, the skills they are learning have a direct correlation to the fields they are likely to get into, and in the community they may end up working in. Paglia, program coordinator and associate professor of [psychology](#), created an entire class around students conducting community-based research for nonprofit organizations.

Before the semester begins, Paglia works with a community partner to determine their research needs. For one of their previous projects, the class partnered with the New Hampshire Hospice and Palliative Care Organization, which was interested in investigating their staff’s and volunteers’ comfort with spirituality and end-of-life care.

To gather data, Paglia’s students conducted focus groups and developed and administered surveys among staff and volunteers. As a result of the project findings, the organization created a conference presentation and education materials to address the issue.

“The whole class is about doing primary research,” Paglia says. “In addition to finding journal articles and writing a paper, they’re doing data collection, analysis and interpretation.”

Paglia says the students build skills in research, writing and giving presentations, which prepares them both academically and professionally. She says these skills are invaluable for the careers students will be looking at after graduation, since many of them will go into human service lines of work.

“Program evaluation is only one small part of the job, but it’s often the part that other prospective employees don’t have experience in,” Paglia says. “Through this course, I am giving students exposure to what they will likely be doing as part of their job.”

Associate Professor [John Sparrow](#) says in addition to the hands-on experience students take with them when they graduate, the small class sizes at UNH Manchester allow him to get to know his students, which benefits them in the long run.

Sparrow, who studies the psychology of visual perception, and his students worked on a project last year that examined a visual phenomenon known as motion-induced blindness. Sparrow’s students have been conducting experiments and collecting data related to this phenomenon for several years. Last year, they started analyzing that data

to look for differences among the test subjects. While the participants all experienced the phenomenon, some of them experienced it differently than others. Sparrow and his students presented their findings in a paper that was published in the British journal *Vision Research* in 2017.

While that is an impressive accomplishment to put on a resume on its own, Sparrow says doing this project alongside his students allows him to create, for example, more individualized and substantial recommendation letters.

“A letter that says, ‘Student X worked with me in the lab, we did a project together, we presented our research at a local conference’—that’s a powerful recommendation,” Sparrow says. “That experiential part of the learning process is really important.”

There is one specific thing, Sparrow says, that makes UNH Manchester’s [psychology](#) and [neuropsychology](#) programs unique: Each faculty member has his or her own lab.

“We all do very different things, we all cover different slices of psychology, but the common theme is that we have students helping us out with the research, some of whom get published over time and a lot of them do presentations,” Sparrow says. “That’s really important, because at a bigger college with larger programs, it’s easy for students to get lost and kind of fade into the background—and that’s really hard to do here.”

INTERESTED IN HANDS-ON LEARNING AND RESEARCH IN THE CLASSROOM AND IN THE FIELD?

Learn more about UNH Manchester’s [psychology](#) and [neuropsychology](#) programs.

UNH MANCHESTER



University of New Hampshire

UNH Today is produced for the UNH community and for friends of UNH.

The stories are written by the staff of [UNH Communications and Public Affairs](#).

Email us: unhtoday.editor@unh.edu.

[MANAGE YOUR SUBSCRIPTION](#) [CONTACT US](#)

Like us on Facebook

Follow us on Twitter

Follow us on YouTube

Follow us on Instagram

Find us on LinkIn

UNH Today RSS feeds

UNH Today • UNH Main Directory: 603-862-1234

Copyright © 2021 • TTY Users: 7-1-1 or 800-735-2964 (Relay NH)

[USNH Privacy Policies](#) • [USNH Terms of Use](#) • [ADA Acknowledgement](#)