

Columbia University Department of Psychology



Progress Report on Diversity, Equity, and Inclusion Activities 2021-2022

Progress Relevant to Undergraduate Education

• <u>Revisions to Psychology Honors Program.</u> We have revised the structure of the Psychology Honors Program to be more inclusive of all talented and motivated students. The new 3-semester *Senior Thesis Research Intensive* (STAR) program includes a seminar series providing training in developing research questions and designing studies, data collection and analysis, and science communication, as well as a new course (*The How-Tos of Research*) that equips students with a research skills toolbox through a hands-on, flipped classroom approach. This new program draws on a cohort and near-peer mentorship model to establish a sense of community among undergraduates pursuing research. It provides an intensive learning experience about every aspect of the scientific research process through formal classroom and research mentorship.

In its first semester (Spring 2022), 22 juniors (or junior equivalents) enrolled in the STAR Program and completed the first of a 3 semester sequence. In addition, several other students enrolled in the How-Tos class. *Davachi, Tottenham, Marvin, DiGiovanni, Vannucci*

- <u>Laboratory in Justice Data Science</u>. Taught in Spring 2022, this is the second in the threesemester Frontiers of Justice sequence. The course provides rigorous data science training and core content knowledge students need to use data science to effect meaningful policy change in the direction of a more just society. The course leverages the academic expertise of psychologists, lawyers and data scientists, the perspectives and experiences of community members and students affiliated with the Center for Justice, and policymakers from government agencies and community organisations. The focus is on collaborating with community and government organisations to propose research-and-data-informed solutions that center problem-solving on those most impacted by the problem. <u>Syllabus</u> Bolger, Downey, Jacob Edwards (TA)
- <u>Revisions to Introduction to Psychology Course.</u> We have been working to develop this course to better serve the needs of our student body. Versions of this course have been taught virtually during Spring 2021 and Summer 2021. The course will continue to be offered in Summer 2022 and beyond. Themes include: a. inclusive and anti-racist content; b. active learning strategies c. opportunities for engaged scholarship; d. opportunities for graduate teaching; and e. an emphasis on creating pathways to STEM by directing students to research in laboratories in the Psychology Department. *Marvin, Thieu, Lindemann, Ochsner, trainee members of the DEI Committee*
- <u>Summer Internship Program in Psychological Sciences (SIPPS)</u>. SIPPS will launch in 2022 and is designed to formally support summer intensive research experiences for undergraduate students. This project is a chance for students to explore their own research interests in laboratories, while formally supported by individual mentors, formal content and professional

development workshops. "Pilot SIPPS" was completed in summer 2021. The main components of SIPPS included: workshops on coding skills in R, general research skills, and alternating journal club and professional development sessions. In 2021, a total of 37 students participated in the workshop component of the program, and 29 students additionally completed an independent research project with an assigned mentor. Most of these students were from Columbia, with a handful of other students participating internationally. Pre- to post-program assessments showed increases in a multitude of general research and coding skills; students also reported high levels of satisfaction with the program in general. SIPPS will run again in summer 2022 - we had over 200 Columbia students apply for the program, and have approximately 28 spots for students to complete the independent research + workshop track. This year, we are making an explicit attempt to provide opportunities for students who have not previously had access to research or positive research mentorship opportunities, and for students from backgrounds historically underrepresented in STEM such as those who identify as first-generation and/or come from a low-income background or marginalized community. Through the URF (Undergraduate Research Funding) mechanism, we will be able to fund 5-10 students to engage in SIPPS workshops + independent research track. SIPPS is almost exclusively designed and run by DEI Committee Trainee Group.

<u>Revision to Behavioral Neuroscience course</u>

We have been working to re-design one of our Intro to Neuroscience courses (Behavioral Neuroscience - PSYC UN 2450) to improve the effectiveness of instruction in this large (n > 100) lecture course. Behavioral neuroscience research investigates the nature of the relationship between behavior and neurophysiology through interdisciplinary approaches from fields such as psychology, pharmacology, physiology, and genetics. This multifaceted nature combined with the large roster composed of undergraduate students coming from very diverse knowledge backgrounds (i.e., Psychology Majors, Neuroscience and Behavior Majors, Computer Science Majors, Pre-Med track students) pose a significant instructional challenge. Because of the vastness of the field and these differences in the students' background knowledge, it is difficult to target the instruction to provide a strong foundational knowledge to students with less exposure to behavioral neuroscience while simultaneously engaging advanced students with more high-level content. Therefore, we needed to restructure the course content and delivery method, by particularly focusing on bridging the theoretical and practical approaches of this field.

<u>Solution to Challenge #1 "Breadth of Knowledge":</u> Benefiting from the resources at the CTL "Do-It-Yourself Media Production Spaces", we created high-quality videos of the course content that explain key concepts related to each class's topic. Videos are accompanied by multiple-attempt low-stakes quizzes posted on Canvas intended to help students learn each week's course material more deeply.

Devoting more offline time to student-paced acquisition of foundational knowledge via these videos and quizzes ensured a much deeper understanding of core content, and free up in-class time to develop critical thinking, innovation, practical experience and training.

Solution to Challenge #2 "Students with Diverse Background Knowledge": After building foundational knowledge through online videos and weekly quizzes, we will then increase student engagement through writing assignments, laboratory visits, group work to devise experiments, data collection, and in-class student presentations. Requiring students to work on such experiential and practical learning activities and to prepare for multiple assessments throughout the semester will (1) provide a level playing field for all students, (2) improve learning acquisition, and (3) help retain more students in STEM fields, including those from underrepresented minority groups. In order to prepare for these alternatives to traditional exams and to increase scientific literacy, we contacted various behavioral neuroscience laboratories

at Morningside and Medical Center campuses and Zuckerman Institute created. with the support of the CTL Media Production Team short videos featuring grad students and post-doctoral researchers explaining the type of tasks they routinely perform while at work. *Spagna, Akdogan, Alvarez, Wang, Lindsay, Huddock.*

Progress Relevant to Increasing Diversity in Graduate Education

- <u>2022 Incoming Graduate Class Recruitment.</u> The Psychology Department has recruited six new Ph.D. students to start in September 2022. Of those six, four are women and two of these women are underrepresented minorities. In addition, one extended offer was to a person from the LGBTQ community but, after deliberation, he decided to join another program.
- <u>Bridge to PhD Program in STEM.</u> The Bridge to the Ph.D. Program in STEM is designed to increase the participation of students from underrepresented groups in Ph.D. programs in STEM disciplines. The Bridge Program is an intensive research, academic, and mentoring experience for post-baccalaureates seeking to strengthen their graduate school applications and to prepare for the transition into Ph.D. programs. Psychology Department faculty supervise Bridge students (*Tottenham, Davachi, Ochsner, Aly*) and *serve* on the Bridge to PhD Advisory Council (*Shohamy*).
- <u>Psychology Department/Columbia Graduate School of Arts and Sciences.</u> Columbia will join a national multi-university consortium on equity in graduate education. Columbia faculty will work within a multi-university consortium whose goal is to improve practices in support of equity in graduate education. *Amso*
- <u>Beyond Our Walls.</u> We recognize that the need to support access and opportunity for graduate education in STEM broadly and Psychology specifically goes beyond our walls.

<u>1. Podcast and YouTube Series:</u> *"The Psychology PhD"*. We have launched an inclusive content series targeted at prospective PhD students that (a) demystifies the graduate school application process and (b) explores a diverse group of students' pre-PhD backgrounds and their experiences in graduate programs. Current plans include three seasons, each of which contains six monthly episodes. Season 1 (July – December 2021) made accessible the "hidden curriculum" of successfully applying to graduate programs in psychology, with episodes covering why a person might pursue graduate studies in psychology, the different types of graduate degrees in psychology, getting organized to apply, developing a CV, writing an effective statement of purpose, and preparing for interviews. Season 2 (February – July 2022) is currently in progress, and it features conversations with current PhD students about their unique backgrounds and graduate school experiences. As of mid-April 2022, the podcast has attained 4,400+ video views and 3,100+ audio downloads. For more details, see the podcast hub on the department's website: https://psychology.columbia.edu/podcast. DEI Committee Trainee Group, spearheaded by Emily Nakkawita

<u>2. Developmental Discovery Days.</u> In August 2021, we (Larisa Heiphetz, Dima Amso, Nim Tottenham, and associated lab members) organized a two-day workshop that provided students from underrepresented groups with a behind-the-scenes view of graduate admissions in developmental psychology. The workshop included panels on topics such as funding, creating a CV, writing a personal statement, and interviewing. Participants were also paired with current trainees who served as their mentor during the workshop itself and throughout the application season. We received ~125 applications and were able to offer slots to ~22 applicants. Planning is currently underway for the Summer 2022 version of this event.

Heiphetz, Amso, Tottenham with involvement of developmental psychology graduate students and lab members.

<u>3. Reviewer Zero</u>. Mariam Aly is on the organising committee of a pre-review mentorship network called Reviewer Zero — a partnership with Spark Society, an NSF-funded non-profit organisation that establishes a society of cognitive scientists of color. The purpose of Reviewer Zero is to provide under-represented minoritized (URM) graduate students with feedback on manuscripts prior to submission to a peer-reviewed journal. As the Trainee Coordinator, Aly works with URM trainees to make sure their pre-review needs are met. Reviewer Zero has made much progress since it was launched in 2020, including receiving funding; holding focus groups with editors to learn how to improve peer review; forming an advisory board of experts on systemic racism and its effects on trainees (advisory board includes Valerie Purdie Greenaway); creating and analysing a survey (filled out by ~1000 individuals) about the peer review experiences of early career researchers, and how these experiences vary for white individuals vs people of color; and running a program to provide URM students with feedback on NSF Graduate Research Fellowship applications prior to their submission. *Aly, working with other committee members of Reviewer Zero, in consultation with their advisory board (including Purdie Greenaway)*

Progress Relevant to Seminars, Colloquia, Events

- <u>Psychology Department Colloquia, 2021-2022 (*Aly, R. Silver, Tottenham*) The series hosted 14 speakers, of whom 8 were women and 7 were people of color (4 were Black scholars, all women; 1 was an Indigenous man). In terms of topics, 8 speakers (3 white, 5 people of color) covered timely and important issues related to racism, political attitudes, and economic inequality. Examples of such talks include:</u>
 - 1. Fighting Phantoms: Political Disagreement vs. Disdain in the American Body Politic — Eli Finkel
 - 2. *Re-imagining Mental Health Services for American Indian Communities: Centering Indigenous Perspectives* Joseph Gone. This was the inaugural Frontiers of Justice Distinguished Lecture Series, funded by the Center for Justice, Columbia and Barnard Psychology, and the Office of the Vice Provost for Faculty Advancement.
 - 3. *How behavioral sciences can promote truth, autonomy and democratic discourse online* Ralph Hertwig
 - 4. *Open-mindedness predicts racial and political diversity of real-world social networks* — Kate Turetsky
 - 5. Parenting in Context among African American parents Stephanie Rowley
 - 6. Economic Inequality and Young People's Views About Self and Society Rashmita Mistry
 - 7. The *Mamie Phipps Clark and Kenneth B. Clark Distinguished Lecture Award* to Jennifer Parker and Jeanne Theoharis (moderated by Carl Hart)
- <u>Center for Justice Panels (Downey, Coppola, Dunlea)</u>

 How Can Injustices Within the Criminal Legal Context Be Attenuated?- Kayla Burd (University of Wyoming), Federica Coppola (Max Planck Institute for the Study of Crime, Security, & Law), Jarrell Daniels (Columbia), Juan Del Toro (Univ. of Pittsburgh)
Why Do Injustices Within the Criminal Legal System Arise?-Julian Rucker (UNC Chapel Hill), Heather Schoenfeld (Boston University), Pastor Isaac Scott (Columbia University), Danielle Slakoff (California State University, Sacramento)

3. *Changing Lenses: Justice in the Eyes of Science and the People Impacted.* Presidential Scholar in Society and Neuroscience Symposium.

Psychology Department & Community Partnerships

• <u>Center for Justice Programs and Events.</u> Members of the department are participating in programs organised through the Center for Justice, including the Prison Education Program, Justice Through Code, Beyond the Bars. *Downey*

1. *Justice-in-Education Initiative-* The Prison Education Program (PEP) brings Columbia courses to students who are currently incarcerated in city, state, and federal prisons and jails as part of the effort to increase access to higher education for justice-involved individuals. At present, PEP operates in six correctional facilities: Rikers, Queensboro CF, Edgecombe, Brooklyn Metropolitan Detention Center, Taconic, and Sing Sing. In the 2021-22 academic year, 3 Columbia psychology courses were offered to incarcerated students through the PEP. This year Caroline Marvin, Monica Thieu, Geraldine Downey, and Dima Amso taught PEP courses.

2. *Justice-in-Education Scholars*. Provides educational opportunities on campus for people returning from incarceration.

3. *Justice Through Code* - This is a free semester-long coding course founded by Psychology major, Aedan McDonald, that provides opportunities for formerly incarcerated individuals to begin to grow and develop into the technology leaders of tomorrow. It is jointly offered by Columbia University's Center for Justice, and the Tamer Center for Social Enterprise at Columbia Business School and provides teaching opportunities for Psychology students (*Paul Bloom*).

4. *Justice Ambassadors*. Brings young New Yorkers together with city agency leaders in a psychology-based seminar to co-develop policy proposals to improve the lives of New York's most vulnerable youth. Program is supported by undergraduates, several of whom are psychology/neuroscience majors.

- <u>DCNLab Community Engaged Service Projects.</u> The Amso Lab serves child-facing organisations in NY city, offering to provide bespoke evidence-based workshops, write data summaries, and run program assessments in support of their mission. *Amso, Eboigbe, Turbi Hidalgo*
- <u>The Zuckerman Institute's Brain Research Apprenticeships in New York at Columbia</u> (<u>BRAINYAC</u>) program. BRAINYAC prepares today's youth to become tomorrow's scientists. It emphasises opportunities for youth from underserved communities to connect with real scientists, learn key skills required to work in a research environment, and to become part of the Columbia University community. In 2021, 5 (out of 19) BRAINYAC students completed research projects with mentors in the Psychology department. The program is supported by an NIH grant (*PI, Shohamy*).

University DEI Leadership & Service

- Zuckerman Institute DEI Committee, *Shohamy*
- All STEM Departments DEI Committee, Amso
- Chair of the Zuckerman Institute Hiring Priorities Committee, Shohamy
- Provost Junior Faculty Who Contribute to Diversity Goals Grants Review, Amso
- CU Target of Opportunity Faculty Hiring Committee, Tottenham
- Efforts to enhance experience of Neuroscience GS undergraduates. R. Silver, Marvin, Shohamy, Lindemann