

Journal of Diversity in Higher Education

Diversifying the Academy Through a Peer-to-Peer Mentorship Model: Insights and Recommendations From the NextGen Psych Scholars Program (NPSP)

Meriah L. DeJoseph, Katherine A. Carosella, and NextGen Lead Mentors

Online First Publication, September 11, 2023. <https://dx.doi.org/10.1037/dhe0000504>

CITATION

DeJoseph, M. L., Carosella, K. A., & NextGen Lead Mentors (2023, September 11). Diversifying the Academy Through a Peer-to-Peer Mentorship Model: Insights and Recommendations From the NextGen Psych Scholars Program (NPSP). *Journal of Diversity in Higher Education*. Advance online publication. <https://dx.doi.org/10.1037/dhe0000504>

Diversifying the Academy Through a Peer-to-Peer Mentorship Model: Insights and Recommendations From the NextGen Psych Scholars Program (NPSP)

Meriah L. DeJoseph¹, Katherine A. Carosella², and the NextGen Lead Mentors

¹ Stanford Graduate School of Education, Stanford University

² Department of Psychology, University of Minnesota

PhD programs have long struggled to recruit and retain trainees and scholars representative of an increasingly diverse U.S. population. In this practice brief, we describe barriers facing marginalized students in pursuing a PhD and offer recommendations for institutions aiming to provide equitable opportunities across the doctoral training pipeline. Recommendations are informed by the burgeoning success of a graduate student-led mentorship program that offers prospective underrepresented PhD students support in the application process and beyond. We highlight the importance of incentivizing the efforts and assets of graduate student mentors in cultivating and sustaining strong peer-to-peer support networks necessary to ensure the success of the next generation of diverse scholars.

Keywords: doctoral programs, peer mentorship, recruitment and retention

Despite incremental progress over the past several years, PhD programs have struggled to recruit and retain diverse¹ trainees and scholars whose inclusion in the field is intrinsically and scientifically valued, particularly in light of the increasingly diverse U.S. population (Brill et al., 2014; Callahan et al., 2018; Startz, 2023). To achieve truly diverse teams of students, faculty, industry scientists, and practitioners, attention must be paid to strengthening equity, diversity, and inclusion (EDI) efforts across the training pipeline. Prior work has demonstrated the value of student-led initiatives in enacting reform in higher education and serving as a powerful

resource in diversifying academia from the bottom up (Chu et al., 2022; Lantz et al., 2016). Here, we describe the early success of a program founded at the University of Minnesota (UMN) called the NextGen Psych Scholars Program (NPSP; nextgenpsychscholars.com), a virtual graduate student-led mentorship program for

¹ For the purpose of this article and in the context of NextGen Psych Scholars Program (NPSP), we refer to diversity as broadly defined, which includes but is not limited to heterogeneity based on race, ethnicity, nationality, socioeconomic background, gender, sexuality, and ability.

Meriah L. DeJoseph  <https://orcid.org/0000-0002-5086-147X>

The NextGen Psych Scholars Program (NPSP) has been supported through funding awards from the University of Minnesota (UMN) including the Tri Psych Diversity Award and the Ruth Winifred Howard Diversity Scholars Fund. Additional funding is provided by UMN's Institute of Child Development, Department of Psychology, Department of Educational Psychology, and alumni donors. The Departments of Psychology at the Pennsylvania State University and Indiana University Bloomington serve as partners who sponsor mentors at their respective universities. At the time this article was drafted, Meriah L. DeJoseph was supported by the Ford Foundation Predoctoral Fellowship and the UMN Doctoral Dissertation Fellowship.

The authors would like to thank the many faculty and staff who provided thoughtful feedback on this brief and who continue to advocate for the program's success and sustainability including staff members Lucas Havens, Lindsey Jendraszak, Holley Locher, Amanda Schmit, and faculty members Drs. Rachel Barr, Jeffrey Bye, Stephanie Carlson, David DeLiem, Alicia Drais Parrillo, Jed Elison, Megan Gunnar, Karin James, Jessie Kember, Bonnie Klimes-Dougan, Melissa Koenig, Richard Lee, Kristen McMaster, Koraly Pérez-Edgar, Anita Randolph, Jeff Simpson, José Soto, Moin Syed, Kathleen Thomas, and Amelious Whyte Jr. They also thank trainees Alicia Vallorani, Marisa Lytle, Clin Lai, Camilo Posada Rodriguez, and Tobi Abubakare for their efforts establishing and coordinating the logistics of NPSP partnerships. They wish to extend their sincere gratitude to the NextGen lead mentors from Year 1 to Year 2 (named as consortium coauthors of this brief), in addition to the Year 3 lead mentors and incoming codirector who participated in NPSP while this brief was under review: Sara

Albrecht-Soto, Vanessa Anyanso, Jasmine Banegas, Joseph Burey, Carlos Chavez, Ekom Eyoh, Norwood Glaspie, Miglena Ivanova, Vanessa Kim, Sanju Koirala, and Katsumi Yamaguchi-Pedroza. They deeply appreciate all the mentees and mentors who contributed and continue to commit their time and rich perspectives to the NPSP community.

The NextGen Lead Mentors (from the first 2 years of the program for which data in this article reflect) include Paul D. Caldo, Romulus J. Castelo, Andrew C. Deckart, Jasmine R. Ernst, Rachel A. Foster, Bria L. Gresham, Anita N. D. Kwashie, Adrienne B. Manbeck, Alyssa R. Palmer, Sarah E. Pan, Andrea Wiglesworth, and Danruo Zhong from the University of Minnesota.

Our positionality statements follow: In recognition of the importance of acknowledging our positionalities and diverse perspectives, we present the following statement to provide transparency regarding the identities and experiences of the authors and contributors involved in this brief. At the time this article was drafted, all authors on this article were psychology PhD students. Meriah L. DeJoseph (NPSP founder) identifies as a White cis het female first-generation college graduate from a low-income background. Katherine A. Carosella (NPSP cofounder) identifies as a White cis het female with a chronic illness. The NextGen lead mentors, who approved the final version of this article, represent a range of identities including Black, Asian American, Native American, White, disabled, lesbian, gay, bisexual, transgender, queer (LGBTQ+), first-generation immigrant, and low-income first-generation college graduate.

Correspondence concerning this article should be addressed to Meriah L. DeJoseph, Stanford Graduate School of Education, Stanford University, 482 Galvez Mall, Stanford, CA 94305-3096, United States. Email: meriahd@stanford.edu

underrepresented and historically marginalized (e.g., BIPOC, first-gen, lesbian, gay, bisexual, transgender, queer, intersex, asexual [LGBTQIA+], disabled)² undergraduates and postbaccalaureates interested in applying to psychology PhD programs.

This brief begins with a short description of some of the barriers hindering underrepresented students from pursuing a PhD and why traditional recruiting and retention approaches fall short. In doing so, we illuminate the often-overlooked efforts of underrepresented trainees who disproportionately take on EDI efforts and call on institutions to acknowledge, formalize, and fund these efforts via sustainable support structures. We then describe the central tenets and early outcomes of NPSP and provide three practice recommendations for graduate students, faculty, staff, academic societies, and institutions looking to diversify academia. Supporting materials referenced in the practice recommendations below can be found on the Open Science Framework (OSF) at <https://osf.io/mfcz4> (DeJoseph & Carosella, 2022).

Barriers Facing Underrepresented Prospective PhD Students and Why Traditional Recruitment Initiatives Fall Short

The path towards a PhD is highly and increasingly more competitive (5%–27% acceptance rate; American Psychological Association, 2019; Stapleton, 2023) and requires a myriad of expected skills and accolades for admittance. Many successful applicants have a high undergraduate grade point average, a demonstrated knowledge of research methods and statistics, strong interviewing and networking skills, recommendation letters from faculty members of high esteem in their respective fields, conference posters, and even coauthored or first-authored publications. For students with intersecting marginalized identities, navigating this path is especially challenging and includes numerous barriers (Kitchen et al., 2021; Swanson et al., 2021). We note that historical and systemic forms of racism, classism, ableism, and sexism underlie such barriers (Barber et al., 2020; Brown & Leigh, 2018), but a thorough discussion of these is beyond the scope of this brief. Thus, we focus on the experiences of first-generation³ low-income (FGLI) students as an illustrative example highlighting key obstacles along the training pipeline.

First, FGLI students may lack financial or educational support, as economically disadvantaged students are often unable to work as unpaid research assistants, inhibiting their ability to build professional networks from which to seek guidance and request letters of recommendation. Second, FGLI students may suffer from chronic stress stemming from financial hardship and experiences of racism or discrimination, guilt over leaving families behind, and/or the responsibility of taking care of family members while in school (Duran et al., 2020). Third, academia includes many unspoken rules on professionalism and strategies underlying successful applications largely hidden to those with nondominant sociocultural identities—broadly termed the “hidden curriculum” (Calarco, 2020). Such academic norms were developed for and by those from the most privileged backgrounds and continue to be largely unchallenged given the lack of representation of underrepresented scholars in leadership positions and the complacency on behalf of those currently in positions of authority (Brunsma et al., 2017; Ledgerwood et al., 2022). Last, FGLI students may be discouraged to apply upon realizing that to begin and sustain an academic career,

there is pressure to move frequently while earning a meager salary. For many whose families rely on them for financial support, this is a nontrivial sacrifice. They similarly face the difficult decision to leave their communities behind to pursue a path where there are even fewer individuals like them in their new academic spaces (Brunsma et al., 2017; Morton, 2019).

Certainly, a growing number of programs and initiatives aim to recruit underrepresented students and provide professional development resources. For example, a common recruitment approach that many PhD programs offer is “diversity days” where underrepresented students are invited to campus or virtual space to gain more knowledge about the program. There are also summer research programs often sponsored by the National Science Foundation and other external funders, which pair underrepresented students with a lab to be exposed to research and build their curriculum vitae through poster presentation opportunities at the end of the summer. Despite the lack of formal evaluation research, these programs anecdotally seem to be effective in increasing the number of applicants from traditionally underrepresented groups. However, we argue these initiatives are too brief to appropriately support underrepresented scholars as they contend with challenges along their academic journey. For one, traditional initiatives may be inaccessible if in person, as well as too transient to facilitate a prospective graduate student’s application process (Borrego, 2018). Applying to PhD programs involves identifying potential institutions, paying for and taking standardized tests, writing application statements, interviewing, and waiting to receive offers, taking almost a year to complete notwithstanding the months to years of research experience needed beforehand. Compounded by the aforementioned day-to-day stressors underrepresented applicants face, a short-term diversity day fails to help prospective students through the majority of the application process. Given the recent move to virtual spaces and access to various online tools to foster social connection, it is an opportune time to expand PhD preparatory programs to be more sustainable, accessible, and scalable. In the sections that follow, we highlight how adopting a long-term, virtual, peer-to-peer mentorship program may better support efforts to diversify academia from the bottom up.

Cultivating Sustainable Peer-to-Peer Support Structures in the NextGen Psych Scholars Program

Cultivating sustainable peer-to-peer support structures serves as the foundation for NPSP and is presented here as a case study for highlighting recommendations for programs and institutions seeking to address the academy’s long-standing diversity issues. NPSP is a year (plus)-long virtual graduate student-led mentorship program that offers prospective psychology PhD students from underrepresented backgrounds support in the application process. It was created in 2020 by UMN graduate students and has served over 550 national

² BIPOC represents Black, Indigenous, and racially minoritized people of color. First-gen represents those who are first in their family to earn a college degree. LGBTQIA+ represents lesbian, gay, bisexual, transgender, queer, intersex, asexual, and those who identify with a sexual orientation or gender identity that is not included within the LGBTQIA acronym.

³ Here, we refer to the U.S. Department of Education’s definition, which defines a first-generation student as an individual whose parents did not complete a 4-year college or university degree.

Table 1
Self-Reported Identity Characteristics of NPSP Scholars From Year 2 (2021–2022)

Identity categories	n (%)	
	Mentees (N = 307)	Mentors (N = 198)
BIPOC	164 (53.4)	69 (34.9)
LGBTQIA+	105 (34.2)	53 (26.8)
First-generation college	152 (49.5)	63 (31.8)
Low-income background	147 (47.9)	55 (27.8)
Neurodiverse	32 (10.4)	26 (13.1)
Disabled	27 (8.8)	17 (8.6)
International student	74 (24.1)	33 (16.7)
Parent	9 (3)	10 (5.1)
Veteran	1 (.32)	1 (.5)
Other (miscellaneous responses)	50 (16.3)	19 (9.6)
Not underrepresented	7 (2.3)	40 (20.2)

Note. That scholars were permitted to select multiple identities. NPSP = NextGen Psych Scholars Program; BIPOC = Black, Indigenous, and racially minoritized people of color; LGBTQIA = lesbian, gay, bisexual, transgender, queer, intersex, asexual.

and international undergraduates and postbaccalaureates (250+ in Year 1; 300+ in Year 2) and included approximately 200 diverse graduate students and postdoctoral mentors (Table 1). Recruitment takes place every May, and mentorship pairings are based on mentee preference for matching with a mentor with a shared identity or in a subfield of psychology they intend to apply to. Uniquely, NPSP annually funds two graduate student directors and a coordinator to manage logistics and up to 12 underrepresented PhD students each year to serve as “lead” mentors, who cocreate and lead virtual workshops and panel discussions (Table 2). Additional graduate student mentors from UMN and sponsored partner universities are paid a smaller fee to mentor at least one mentee and participate in panels and workshops as needed. Materials and resources curated by NPSP can be found on the OSF page for this article.

The primary goal of NPSP is to build multigenerational support networks between current and prospective underrepresented psychology PhD students to inspire and empower the next generation of scholars while enhancing feelings of belonging in academia (Duran et al., 2020). Through a combination of regular virtual panels/workshops and monthly one-on-one mentorship meetings, NPSP focuses on creating and sustaining strong mentoring relationships, demystifying the hidden curriculum of academia, and building an inclusive community of diverse scholars that advocate for themselves and others with the goal of innovating academia from the bottom up. In addition, NPSP employs Slack, a messaging application accessible on mobile and desktop devices, to answer application questions and facilitate discussions for scholars who have shared interests and identities.

In NPSP’s latest survey (during the writing of this brief; 2021–2022) assessing program effectiveness, approximately 46% of mentees participated in the program to gain more information about doctoral psychology programs and used their mentorship time to strengthen their curriculum vitae or apply for postbaccalaureate research positions. The remaining 54% of mentees applied to psychology PhD programs and over 95% of those mentees were invited to attend at least one interview. Of those who interviewed,

78% received at least one offer. Over 94% of mentees reported having a positive experience in the program and many offered quotes sharing how the program supported their success. One mentee wrote,

This space allowed me to listen and communicate the struggles [and] success of people in a similar position as myself. Before I joined this program, I had very few connections to people pursuing careers in clinical psychology. It is so helpful to witness the progress of others’ journey and the new experiences [and] challenges encountered at different stages of the application process. All of the workshops and panels were very unique and super relevant.

Below we expand on the approach and structure of NPSP while outlining several practice recommendations for graduate students, faculty, and administrative advocates in academic societies or institutions who wish to develop or build off similar programs that support collective efforts to diversify their field. We end with a brief discussion about the challenges associated with executing and sustaining programs like NPSP. See Table 3 for an overview of key components, recommended timeline, and metrics to assess the success necessary for replicating and adapting NPSP across multiple contexts.

Practice Recommendations

Invest in Trainee-Led Programs That Leverage and Properly Incentivize the Strengths of the Next Generation of Diverse Scholars

Recent work addressing the need to diversify the academy emphasizes the critical role that faculty play in recruiting underrepresented students and guiding them as they move through the academic pipeline (Borrego, 2018; Petridis, 2015; Thomas et al., 2007). We agree with this point yet assert that current PhD students play an underacknowledged role—especially those students who hold underrepresented identities—in recruiting and retaining diverse trainees. As recent data have shown, current PhD students are increasingly more diverse than faculty (American Psychological Association, 2021; Griffin, 2020; Morgan et al., 2021), can draw more readily from lived experiences after recently navigating the application process themselves, and are likely able to devote more time to mentees than faculty. Indeed, most research labs rely on the mentorship from graduate students to facilitate undergraduate research engagement and many PhD students already spend additional time guiding research assistants through the PhD application process (Fernandes, 2021). Underrepresented PhD students dedicate even more time to mentorship efforts, as mentees from similar backgrounds disproportionately seek out their advice because of the shared social capital (see Yosso, 2005) and increased safety they feel in asking questions that may pertain to a sensitive topic from their shared lived experience (Chester et al., 2012; Harris & Lee, 2018; Pike & Kuh, 2006). As one NPSP mentee shared, “I felt so much support from my mentor. I was able to share personal past experiences and get honest and genuine feedback on how to shape my story and convey it in the strongest way possible.”

Psychology programs can better leverage and recognize the assets of current underrepresented PhD students (see Figure 1; Yosso, 2005) by developing and/or maintaining internal funding opportunities that directly support their ideas for improving recruitment and retention efforts. One example is UMN’s Tri Psych Diversity Fund, which is a pooled funding source across three psychology

Table 2*Overview of NPSP Virtual Workshops and Panels Offered in a Typical Year*

Month	Topic	Description
June	Mentee Welcome Session	Directors and lead mentors provide mentees an overview of the mission and values of NPSP, rules of engagement and expectations for sustaining an inclusive and respectful community, and a moderated Q&A with lead mentors about their grad school journeys.
June	Mentor Welcome & Training Session	Directors provide mentors an overview of the mission and values of NPSP, rules of engagement and expectations for sustaining an inclusive and respectful community, a community discussion of best practices for mentorship, and video recordings of culturally sensitive mentorship
July	Application Logistics	Directors and lead mentors provide mentees with a timeline and step-by-step instructions for identifying programs, reaching out to prospective faculty advisors, drafting strong application statements, CVs, and additional resources to scaffold each step.
July	Exploring Different Types of Psychology PhD Programs and Career Paths	Panel discussion composed of graduate and postdoctoral mentors from various psychology subfields; mentors discuss various career paths post-PhD.
August	Academic Twitter and Networking	Panel discussion composed of graduate and postdoctoral mentors about leveraging academic Twitter, conferences, and other forms of contact/outreach to advocate for themselves and build their networks to support their individual goals.
August	The Transition to Grad School	Panel discussion composed of junior graduate student mentors describing timelines, resources, and tips on moving for PhD programs and ways of building community and tools to excel during the transition to a program.
September	Applying to Fellowships	Panel discussion composed of graduate student mentors who have received the National Science Foundation Graduate Research Fellowship and Ford Foundation Predoctoral Fellowship; mentors give an overview of various fellowships, timelines for applying, and strategies for building a strong application.
October	Admissions Q&A With Faculty	Moderated panel discussion composed of three to five psychology faculty from sponsoring institutions who describe the admissions process and tips for building a strong application.
November	R Programming & Stats Basics	Formal workshop led by senior graduate students and postdoc mentors that walk participants through the basics of R programming, data cleaning and aggregating, and beginner statistics; includes large group sessions and smaller breakout sessions.
December	Interview Prep Workshop	Small group sessions in breakout rooms whereby one mentor and three to five mentees review and practice interview questions.
December	Building Your Program of Research	Panel discussion composed of senior graduate students and postdoc mentors describing the steps to identify research interests, develop research questions, and build a scaffolded and cohesive research program.
January	Academic Writing and Creating Posters	Panel discussion composed of senior graduate students and postdoc mentors who provide an overview of academic writing strategies and structure as well as the steps for creating a research poster as a preliminary step to writing an academic article.
February	Assessing & Negotiating Offers	Panel discussion composed of graduate student mentors describing how they assessed their own offers, things to consider when making decisions across multiple offers, how to reject offers, and how to negotiate offers.
March	Dealing with Rejection & Finding Postbacc Jobs	Panel discussion composed of graduate student mentors who have experienced and overcame rejections in a prior application cycle, tips on self-care, and ways forward through additional research experience.
Ongoing	Statement and CV workshops	Small group sessions in breakout rooms whereby one mentor and three to five mentees review and provide constructive feedback on applicant's statements and CVs.
Ongoing	#NextGenStories Series	Monthly panel series whereby three to five mentors and/or mentees from a given identity group discuss their academic and nonacademic paths; lead mentor moderates a Q&A about the challenges and strengths of identity-based lived experiences that influenced their paths.

Note. Topics and offerings vary slightly depending upon communicated needs and ideas from NPSP scholars. For the most updated list of programming, please see nextgenpsychscholars.com. Q&A = question and answer; NPSP = NextGen Psych Scholars Program; CVs = curriculum vitae.

departments that supported the initial year of NPSP. Offering approximately five \$1,000 or \$2,500 awards each year, Tri Psych seeks applications that provide opportunities to support the graduate student community across departments and gain insights from shared and differing experiences. Based on conversations with current graduate mentors in NPSP who do not attend UMN, most psychology programs do not have similar funding initiatives in place. As such, we encourage faculty and graduate students to advocate for the creation of a funding mechanism specifically

targeting diversity efforts in their departments. Such awards do not necessarily need to fund new initiatives; rather, they can go toward paying the many graduate mentors *already* doing unpaid EDI work through established programs like NPSP. A model example comes from Penn State University (PSU). An NPSP graduate student mentor at PSU led efforts in applying for a departmental administrative teaching assistant position to support NPSP and secured funding through a newly launched funding mechanism similar to UMN's Tri Psych award to pay additional NPSP mentors

Table 3

Key Components Recommended for Launching and Sustaining a Peer-to-Peer Mentorship Program to Support Underrepresented Prospective PhD Students

Example timeline from NPSP	Programmatic component and/or action item	Metric for success
Late August	Departmental call for proposals to fund student-led EDI initiatives.	The department chair(s) advertise a well-defined purpose of the funding call and explicit instructions are provided.
September	Department-wide (or multidepartment) networking event for students to discuss their ideas and find collaborators with similar interests and goals.	A significant number of graduate students attend and are given the opportunity to share ideas in large and small groups; small teams are established and they have discussed roles and responsibilities to generate a thoughtful proposal.
Late September	One student or several students draft a funding proposal, which contains an overview of the EDI-related issue needing peer-to-peer mentorship, the proposed initiative to address that issue, metrics for success, and a budget.	Proposals are submitted and awardees are announced by mid-October.
October	Team leads (i.e., founders/directors) recruit a core advisory group of graduate students "lead mentors" via departmental listservs.	Depending on funding, 5–10 lead mentors are chosen shortly after the listserv announcement.
Late October	Directors and advisory team hold the first meeting to discuss the program mission, structure, logistics, programming, materials, and roles/responsibilities.	Each person on the core admin team successfully contributes their assigned duties established in the first meeting; materials are drafted.
Early November	Soft launch of the program: Recruitment materials containing an overview of the program and a Google signup form for mentees and mentors are sent out across various listservs.	A sufficient number of mentees and mentors sign up.
Mid-November	Recruitment closes and mentees and mentors are paired; emails are sent out welcoming the new scholars and outlining the next steps (e.g., joining Slack for future communication, how to reach out to mentees/mentors to schedule a first meeting, where to find resources and additional information); the virtual welcome session is scheduled	Welcome emails are sent through program-specific email, mentees and mentors have scheduled their first virtual meeting, and virtual welcome sessions for mentees and mentors are successfully led by the directors and the core advisory team of lead mentors with a brief visit from department chairs or directors of graduate studies to discuss admissions procedures and tips for ensuring a successful PhD application.
December	First programming sessions take place. Given that many mentees will have applied for programs by December 1, the first programming for Year 1 of the program will be focused on interview preparation.	Interview preparation workshops are completed and mentees continue doing mock interviews with their assigned mentor.
January–April	Programming denoted in Table 2 is offered, and mentors receive their consultant payments from the university.	Panels/workshops on the given topics are completed on time and mentees and mentors are in consistent discussion on Slack and via one-on-one monthly check-ins.
April	Program directors aggregate Year 1 outcome data and compile a detailed funding proposal for continued departmental funding; proposals are presented to department chairs and other stakeholders overseeing EDI-related funding.	Funding stakeholders attend the meeting agree to approve funding for another year of the program, if not more; directors receive summer funding to dedicate time to developing a full year's worth of programming and additional funding applications.
Mid-April	Lead mentors are given the opportunity to return for a second year, and new lead mentors are recruited using a Google form.	Lead mentors are identified.
May	The first full year of the program begins; recruitment for mentees and mentors takes place.	Recruitment is as or more successful than the soft launch the prior fall.
Late May	Sign-up for Year 2 closes; directors and core admin team meet to discuss logistics, programming, new materials, and updated roles/responsibilities.	Year 2 programming is fully scheduled, and lead mentors have agreed to lead at least one panel/workshop listed in Table 2.
June	Mentees and mentors are paired using a revised automated pairing algorithm based on mentee preferences; full-year programming commences as outlined in Table 2	Programming goes as planned and attendance is strong.
Ongoing	Directors continue submitting proposals to calls for EDI-related funding, proactively lobby for sustained funding from department and university as well as alumni donors and partner universities	A diverse array of funding is awarded to complete Years 2 and 3; outcomes each year continue improving, and sustainable funding is secured before the original student founders/directors graduate and new graduate students take their place.

Note. These recommendations are based on the actions taken by the graduate student directors of NPSP and are provided as an example that can be adapted to the needs of various PhD programs and institutional resources available. Additional details can be found in the Practice Recommendations section as well as the OSF page associated with this article. NPSP = NextGen Psych Scholars Program; EDI = equity, diversity, and inclusion.

Figure 1

Yosso's (2005) Model of Community and Cultural Wealth, Depicting Several Strengths and Assets That Students From Underrepresented Backgrounds Offer Academia



at PSU and integrate NPSP programming into PSU's ongoing EDI efforts.

Upon the success of a student-led funded initiative, PhD programs or institutions should consider providing yearly funding to support its continued success and maximize impact. After the first year of NPSP, we used data from our Year 1 outcome survey to write a detailed proposal (see OSF link at <https://osf.io/mfcz4>) presenting a request for yearly funding from UMN to sustain the program and cultivate its growth. Directors across UMN's psychology departments agreed to commit approximately \$10,000 yearly, which allowed us to pay not only our lead mentors but also every UMN graduate mentor a consultant payment (\$150 and \$75, respectively). NPSP has also recently begun working with departmental development offices to acquire alumni donations, the first of which was secured this year in the amount of \$10,000. In addition to mentor payments, collective funds are also used to pay for an in-person end-of-year celebration for all UMN mentors and mentees as well as for honorariums for underrepresented early career researchers invited to be on panels to further enrich connections across training levels. Although this yearly funding was initiated by the NPSP founders, PhD programs and institutions can build in the option of recurring funding to programs demonstrating early success and ensuring sustainability.

Foster a Culture of Inclusivity and Offer Opportunities for Leadership Across Levels of the Training Cycle

In designing a program aimed at recruiting and supporting underrepresented prospective PhD students, it is critical to ensure

that a diverse range of identities and lived experiences are represented and given a voice in the cocreation process (Phillips et al., 2011). We suggest creating a small advisory board with core team members with whom the program founders can formalize ideas and plans. During the creation of NPSP, the 10 paid lead mentors brought rich perspectives across multiple intersecting identities (BIPOC, first-generation, low-income, LGBTQIA+, disabled, and international) to leverage various strengths and cultural capital (Figure 1; Yosso, 2005). They offered their quotes, stories, and example application materials to cocreate the NPSP content consisting of curated resources and a large slide deck with an overview of the application process and aspects of the hidden curriculum (see <https://osf.io/mfcz4>). We worked together to create a working definition of what EDI means in the context of NPSP and how that extends to expectations we have for respectful and grounded discourse among all mentors and mentees participating in the program.

Once the core community values and foundational resources have been solidified, program leaders and core team members should consider the types and frequency of programming to offer mentees. We recommend hosting a welcome session that provides an overview of the goals, mission, and agreed-upon values of the program. NPSP hosts separate welcome sessions for mentees and mentors, with the latter including a training component for ensuring socioculturally responsible mentoring using online resources from Academics4BlackLives (e.g., Teachers College, Columbia University, 2021) and miscellaneous resources (e.g., University of Chicago, 2021) offered by our mentors. Ongoing support and resources for culturally sensitive mentorship are shared through a private Slack for mentors. This training is a critical component for any program like NPSP that includes non-underrepresented graduate student mentors who may be paired with a mentee from a marginalized identity (Antonio, 2001; Atkinson et al., 1991; Brunnsma et al., 2017). One way graduate programs and institutions can further support such training efforts is to provide and pay trained experts in leading graduate student trainees through more formal antiracist and culturally sensitive mentorship training. NPSP is currently in the process of establishing this type of formalized training through partnerships with the UMN Office for Equity and Diversity and the Masonic Institute for the Developing Brain (Randolph et al., 2022). Such training not only benefits the program's goals but also provides much-needed professional development for graduate students.

Alongside monthly one-on-one meetings between mentorship pairs that allow for in-depth discussions and targeted feedback, we recommend one or two panels/workshops a month to iteratively unpack professional development topics (e.g., application logistics, building a program of research, statistical programming) that can be tailored to trainee stage (Table 2). Regular meetings and group sessions help to establish close relationships and skills that promote multigenerational and sustainable mentorship networks. Coordinating and leading these programming sessions takes substantial time and effort, and thus we urge our mentors to include these on their curriculum vitae. PhD programs can further incentivize such efforts by offering mentors gift cards as a small act of gratitude and viewing their leadership as equivalent to conference participation.

In addition to formal programming, regular informal peer-to-peer community-building events are encouraged to provide more intimate spaces to connect on a more human, less academic level

(Duran et al., 2020; e.g., *Growing Up in Science*, 2014). NPSP hosts a semiregular “NextGenStories” series in which three to five mentors representing a given identity share their academic and nonacademic path to their PhD program with NPSP scholars (both mentees and mentors) of the same identity. After sharing their stories, the lead mentor moderates and facilitates a question and answer with attendees or asks the panel of mentors questions about how their identity has brought about unique challenges or strengths. As appropriate, key takeaways and notes from the session are shared with the larger academic community to help amplify their voices, bring light to their strengths and struggles, and ultimately contribute to collective efforts to change the culture of academia and how we discuss our positions within this system. One mentor shared, “I loved the NextGen Stories series. I thought it was a really thoughtful way to connect about common experiences and the ways in which the hidden curriculum has affected underrepresented students.” We hope to see candid and humanistic conversations become a core part of recruitment and retention efforts to foster belonging and connection in the academic community.

Partner With Other Programs and Initiatives to Customize Individualized Goals

To meet the individual needs and goals of PhD programs and trainees, extant and future mentorship programs can partner with existing EDI-related programs to build strong academic networks and opportunities that support the next generation of scholars as they progress through pivotal stages of their training. As mentioned above, NPSP currently includes partnerships with two universities that pay their respective mentors within their own psychology programs to participate in NPSP (see OSF link at <https://osf.io/mfcz4> for a detailed overview of how these were established). In addition, NPSP partners with UMN Tri Psych’s Diversity in Psychology in-person recruitment weekend, whereby several spots are reserved for NPSP mentees, and in turn, NPSP mentors from UMN host a panel using the NextGenStories format. There are also burgeoning online communities and mentorship programs for psychology trainees that students can expand their networks and seek additional guidance, such as BlackinPsych, LatinInPsych, Project Short, Psychin’ Out, and Cientifico Latino. Each one provides a range of resources and varying levels of mentorship opportunities that many NPSP scholars access to meet their needs. New programs in this space should consider filling aspects of the training pipeline (e.g., K–12 community engagement about psychology) not currently available in existing programs to complement what is already available to prospective and current trainees.

Beyond application support, mentorship programs should foster collaborations with academic societies and other institutions that are striving to increase representation in their organizations. For example, NPSP recently partnered with the International Society for Developmental Psychobiology to apply for grants to support shared collaborative efforts. If funded, this collaboration would allow NPSP mentees access to more in-depth programming on creating and presenting a conference poster, while their grad mentor provides additional oversight as a coauthor. Mentees and mentors would mutually benefit from the experience both professionally and financially through free conference registration and a travel award from the society. In turn, the sponsoring society and its members

directly benefit from the enhanced diversity of perspectives that NPSP scholars bring to the academic community.

Challenges Associated With Executing and Sustaining Programs Like NPSP

Several challenges faced in the execution and sustainability of NPSP are worth noting. First, many of the tasks detailed above were and still are a nontrivial time-intensive effort required of the program directors and core admin team. For example, the program directors proactively lobbied to find and secure funding by having extensive conversations with faculty advocates and institutional leaders. These conversations required the need to generate multiple detailed strategic funding proposals of varying lengths with several budgets and aggregated outcome data, as well as accompanying presentations for various institutional stakeholders each year of the program (see the OSF page at <https://osf.io/mfcz4> for examples). Concurrently, particularly in the first 2 years, the core admin team dedicated countless hours to create the programming materials and resources drive (see Table 2). However, such efforts have increasingly become less burdensome in the years following as funding materials become adaptable and existing programming/resources are slightly updated by new lead mentors. Continued coordination of program logistics (e.g., answering emails, Twitter communication, recruitment of mentees and mentors, pairing mentors and mentees, and updating the website) remains an essential time-intensive factor in sustaining the program. We have also increasingly received more requests to support and provide programming to other institutional EDI programs, requiring us to establish boundaries for what we can reasonably offer outside of NPSP. Taken together, the time, organization, and dedication involved in all of these activities is a challenge for graduate students to manage on top of juggling their own program-specific milestones and growing program of research. This reinforces the importance of properly incentivizing graduate students, via financial and institutional support as well as public acknowledgment, to maintain the efforts required to ensure program success and sustainability.

Additional challenges worth noting are related to balancing inclusivity with practicality in making decisions about the size and scope of the program. When launching NPSP, we estimated 50 mentees would sign up. To our surprise, over 250 signed up in the first year, and we have reached closer to 400+ mentees in the years following. While we have historically taken an inclusive approach (i.e., allowing participation for all who sign up), this has presented several ongoing challenges including (a) finding enough mentors to meet the demand, (b) managing mentee requests for pairings (e.g., asking to be paired with a mentor that aligns with specific research interests or specific shared identities), (c) managing the level of support and activism requested of grad mentors, (d) responding to complaints, and (e) managing the consequences of mentees and mentors who withdraw from the program. In response to (a) and (b), we have implemented additional limitations to our pairing algorithms, including options allowing mentees to opt out of getting a mentor if they cannot reasonably meet the monthly meeting requirements and re-pairing mentors and mentees who become unresponsive for longer than a month. In overcoming the challenges presented in (c) and (d), we strive to be explicit in what we can and cannot offer mentees and mentors by communicating these things in the welcome sessions as well as in our website frequently asked

questions (see <http://nextgenpsychscholars.com/faqs/>). We have also sought guidance from our faculty advocates for carefully responding to the rare instances when unique concerns have arisen. Finally, (e) is a challenge that we view more as a trade-off to err on the side of inclusivity but nonetheless raises the possibility of limiting program participants in future years to enhance accountability and community cohesion.

Conclusion

Here, we discussed several action-oriented practice recommendations that aim to support and ensure the success of the next generation of diverse scholars who, in turn, will become the leaders and decision makers our field needs to produce long-term positive change (Ledgerwood et al., 2022). Specifically, we called on institutions to acknowledge and incentivize the unique perspectives that underrepresented PhD trainees offer in mentoring diverse prospective students. Doing so requires advocacy from faculty and staff in positions of authority to support the creation and sustainability of trainee-led programs and initiatives like NPSP. We further outlined ways of establishing scalable peer-to-peer support networks that foster a sense of belonging among traditionally marginalized scholars and offered recommendations for building partnerships with academic societies and other programs. Importantly, establishing a supportive peer community during the transition to PhD programs is only one critical component of many in recruiting and retaining talented scholars from diverse backgrounds. Thus, we especially encourage coordinated efforts across K–12 programs, college psychology departments, academic psychological societies, and EDI-related initiatives to maximize the impact and resources available to young scholars as they progress through their training (Randolph et al., 2022). Through such collective efforts, this next generation of scholars, practitioners, and industry scientists will bring long-overdue representation, connection, and a much-needed voice to the vibrant and diverse communities higher education ultimately aims to serve and support.

References

- American Psychological Association. (2019). *Graduate study in psychology summary report: Admissions, applications, and acceptances*. <https://www.apa.org/education-career/grad/survey-data/2019-admissions-applications.pdf>
- American Psychological Association. (2021). *Graduate study in psychology: Demographics of departments of psychology* [Interactive Data Tool]. <https://www.apa.org/education-career/grad/survey-data/demographics-data>
- Antonio, A. L. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42(5), 593–617. <https://doi.org/10.1023/A:1011054427581>
- Atkinson, D. R., Neville, H., & Casas, A. (1991). The mentorship of ethnic minorities in professional psychology. *Professional Psychology, Research and Practice*, 22(4), 336–338. <https://doi.org/10.1037/0735-7028.22.4.336>
- Barber, P. H., Hayes, T. B., Johnson, T. L., Márquez-Magaña, L., & the 10,234 signatories. (2020). Systemic racism in higher education. *Science*, 369(6510), 1440–1441. <https://doi.org/10.1126/science.abd7140>
- Borrego, J., Jr. (2018). It takes a village for meaningful and sustainable change in diversifying psychology. *Training and Education in Professional Psychology*, 12(4), 297–300. <https://doi.org/10.1037/tep0000224>
- Brill, J. L., Balcanoff, K. K., Land, D., Gogarty, M., & Turner, F. (2014). Best practices in doctoral retention: Mentoring. *Higher Learning Research Communications*, 4(2), 26–37. <https://doi.org/10.18870/hlrc.v4i2.186>
- Brown, N., & Leigh, J. (2018). Ableism in academia: Where are the disabled and ill academics? *Disability & Society*, 33(6), 985–989. <https://doi.org/10.1080/09687599.2018.1455627>
- Brunsmma, D. L., Embrick, D. G., & Shin, J. H. (2017). Graduate students of color: Race, racism, and mentoring in the white waters of academia. *Sociology of Race and Ethnicity*, 3(1), 1–13. <https://doi.org/10.1177/2332649216681565>
- Calarco, J. M. (2020). *A field guide to grad school: Uncovering the hidden curriculum*. Princeton University Press.
- Callahan, J. L., Smotherman, J. M., Dziurzynski, K. E., Love, P. K., Kilmer, E. D., Niemann, Y. F., & Ruggero, C. J. (2018). Diversity in the professional psychology training-to-workforce pipeline: Results from doctoral psychology student population data. *Training and Education in Professional Psychology*, 12(4), Article 273. <https://www.semanticscholar.org/paper/Diversity-in-the-Professional-Psychology-Pipeline%3A-Callahan-Smotherman/a7084a8e636b19eeb6ee03f6225004e1c5ce927a>
- Chester, A., Xenos, S., & Burton, L. J. (2012). Peer-to-peer mentoring: An embedded model to support the transition of first year psychology students. In S. McCarthy, K. L. Dickson, J. Cranney, A. Trapp, & V. Karandashev (Eds.), *Teaching Psychology around the World* (pp. 133–150). Cambridge Scholars.
- Chu, W., Hart, M. J., Kirchner, K. N., Paton, M. J., & Black, C. J. (2022). Addressing race and diversity in graduate education: Practices from student activism. *Journal of Diversity in Higher Education*, 15(1), 7–11. <https://doi.org/10.1037/dhe0000380>
- DeJoseph, M. L., & Carosella, K. A. (2022, June 17). *NextGen Psych Scholars Program (NPSP)*. <https://osf.io/mfcz4>
- Duran, A., Dahl, L., Stipeck, C., & Mayhew, M. (2020). A critical quantitative analysis of students' sense of belonging: Perspectives on race, generation status, and collegiate environments. *Journal of College Student Development*, 61(2), 133–153. <https://doi.org/10.1353/csd.2020.0014>
- Fernandes, S. (2021, May 18). *Mentoring undergraduates as a graduate student | society for personality and social psychology*. <https://spsp.org/news-center/newsletter/mentoring-undergraduates-graduate-student>
- Griffin, K. A. (2020). Looking beyond the pipeline: Institutional barriers, strategies, and benefits to increasing the representation of women and men of color in the professoriate. In L. Perna (Ed.), *Higher education: Handbook of theory and research* (Vol. 35). Springer.
- Growing Up in Science*. (2014). <https://www.cns.nyu.edu/events/growingup/pinscience/index.html>
- Harris, T. M., & Lee, C. N. (2018). Advocate-mentoring: A communicative response to diversity in higher education. *Communication Education*, 68(1), 103–113. <https://doi.org/10.1080/03634523.2018.1536272>
- Kitchen, J. A., Perez, R., Hallett, R., Kezar, A., & Reason, R. (2021). Ecological validation model of student success: A new student support model for promoting college success among low-income, first-generation, and racially minoritized students. *Journal of College Student Development*, 62(6), 627–642. <https://doi.org/10.1353/csd.2021.0062>
- Lantz, M. M., Fix, R. L., Davis, B. L., Harrison, L. N., Oliver, A., Crowell, C., Mitchell, A. M., & García, J. J. (2016). Grad students talk: Development and process of a student-led social justice initiative. *Journal of Diversity in Higher Education*, 9(3), 290–306. <https://doi.org/10.1037/dhe0000033>
- Ledgerwood, A., Hudson, S. K. T. J., Lewis, N. A., Maddox, K. B., Pickett, C. L., Remedios, J. D., Cheryan, S., Diekman, A. B., Dutra, N. B., Goh, J. X., Goodwin, S. A., Munakata, Y., Navarro, D. J., Onyeador, I. N., Srivastava, S., & Wilkins, C. L. (2022). The pandemic as a portal: Reimagining psychological science as truly open and inclusive. *Perspectives on Psychological Science*, 17(4), 937–959. <https://doi.org/10.1177/17456916211036654>

- Morgan, A., Clauset, A., Larremore, D., LaBerge, N., & Galesic, M. (2021). *Socioeconomic roots of academic faculty*. PsyArXiv. <https://doi.org/10.31235/osf.io/6wjxc>
- Morton, J. M. (2019). *Moving up without losing your way*. Princeton University Press. <https://doi.org/10.23943/princeton/9780691179230.001.0001>
- Petridis, H. L. (2015). *Thriving in graduate school: The role of department climate, student-faculty interaction, family-friend support, and a psychological sense of community*. Azusa Pacific University.
- Phillips, K. W., Kim-Jun, S. Y., & Shim, S. H. (2011). The value of diversity in organizations: A social psychological perspective. *Social Psychology and Organizations*, 14, 253–271. <https://www.semanticscholar.org/paper/The-value-of-diversity-in-organizations%3A-A-social-Phillips-Kim-Jun/8e857460abf5878637f57aa9a5d350f6f5920781>
- Pike, G. R., & Kuh, G. D. (2006). Relationships among structural diversity, informal peer interactions and perceptions of the campus environment. *The Review of Higher Education*, 29(4), 425–450. <https://doi.org/10.1353/rhe.2006.0037>
- Randolph, A. C., Henry, A., Hewitt, A., Mejia, A. P., Sethuraju, R., DeJoseph, M., Koenig, M., Elison, J. T., & Fair, D. A. (2022). Creating a sustainable action-oriented engagement infrastructure—a UMN-MIDB perspective. *Frontiers in Integrative Neuroscience*, 16, Article 1060896. <https://doi.org/10.3389/fnint.2022.1060896>
- Stapleton, A. (2023, January 27). *Grad school acceptance rates—Chances of admission*. <https://academiainsider.com/grad-school-acceptance-rates-chances-of-admission/>
- Startz, D. (2023, January 19). Progress on diversity in the doctoral pipeline is slow. *Brookings*. <https://www.brookings.edu/blog/brown-center-chalkboard/2023/01/17/progress-on-diversity-in-the-doctoral-pipeline-is-slow/>
- Swanson, E., Culver, K. C., Cole, D., & Rivera, G. (2021). Promoting at-promise student success in 4-year universities: Recommendations from the thompson scholars learning communities. *Journal of Diversity in Higher Education*, 14(4), 457–462. <https://doi.org/10.1037/dhe0000345>
- Teachers College, Columbia University. (2021, April 16). *Decolonizing psychology training conference* [Video]. YouTube. https://www.youtube.com/watch?v=d0diS_IM12k
- Thomas, K. M., Willis, L. A., & Davis, J. (2007). Mentoring minority graduate students: Issues and strategies for institutions, faculty, and students. *Equal Opportunities International*, 26(3), 178–192. <https://doi.org/10.1108/02610150710735471>
- University of Chicago. (2021). *FLI network*. <https://inclusion.uchicago.edu/student-support/programs/>
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity and Education*, 8(1), 69–91. <https://doi.org/10.1080/1361332052000341006>

Received June 17, 2022

Revision received March 14, 2023

Accepted June 16, 2023 ■