NYU School of Medicine
DIVERSE NEUROSCIENTISTS: DOCTORAL TRAINING SERIES (DENDRITES)
Moses Chao, PhD and Nina Gray, PhD
Many Thanks to Heather and Rachel!
Diversity and Inclusion / Recruitment and Retention

Many Types of Diversity

Thinking Styles  Language  Ethnicity*  Religion  Perspective
Experience  Nationality*  Geography  Race*  Culture  Skills
Gender*  Disability*  Sexual Orientation  Age  Socioeconomic Status*

* Underrepresented Populations in U.S. Biomedical, Clinical, Behavioral and Social Science Research

NIH Scientific Workforce Diversity Toolkit • diversity.nih.gov
• Recruitment of women at the graduate program level and gender diversity is balanced.
• BUT we know retention of women in academic careers remains a major issue.
Nationally, underrepresented minorities make up 32% of the US population. According to SFN, ~20% of neuro grad students are from underrepresented minorities. Why are we only matriculating an average of 12%?
URM applicants and accepted candidates matriculate at the same rate as others

Proportion of Accepted Candidates Who Matriculated

Proportion of Applicants Who Matriculate
But URMs comprise only ~12% of our Applicant Pool

- This led us to focus on increasing the pool of underrepresented minority applicants.
Underrepresented Minority Recruitment

- Faculty, students, and staff host booths at scientific conferences such as SACNAS, ABRCMS, and Society for Neuroscience.
- Faculty and staff attend events at local universities, such as Fordham and Macaulay Honors College, to advertise the graduate program (and SURP).
- SURP programs and collaboration with the Leadership Alliance provide opportunities for students from smaller institutions to do summer research and create a pipeline for applicants with research experience.
- BP-ENDURE program with Hunter College also provides structured research opportunities and mentorship.
- Engagement of current students of Puerto Rican descent through webinars with and campus visits to the University of Puerto Rico to discuss science, graduate studies, community, and training opportunities.
But URMs comprise only ~12% of our Applicant Pool

- Despite these efforts over the years, the proportion of URMs has not really changed.
- Perhaps addressing inclusion would attract more URMs to the program.
DeNDriTeS: Diverse Neuroscientists Doctoral Training Series

• The overall objective of DeNDriTeS is to create a campus-wide program that enhances the support of neuroscience graduate students from underrepresented backgrounds or with disabilities as they prepare for a transition to the next phase of their career by providing:
  – Enhanced mentoring
  – Community building and networking opportunities
  – Skills training
• We aim to build on existing resources at both campuses to create a culturally-aware and supportive community where the importance of inclusion, mentorship, and career planning are promoted to students and faculty.
DeNDriTeS: Specific Aims

- Specific Aim 1: To implement training for program faculty to become culturally aware mentors and assist faculty in articulating a mentoring philosophy.
- Specific Aim 2: To provide mentoring opportunities to help graduate students identify and apply for post-graduate school positions and prepare for independent careers.
- Specific Aim 3: To strengthen the diverse student community through a peer mentoring network.
- Specific Aim 4: To provide diverse graduate students with intensive training in quantitative, communication, and leadership skills.
DeNDriTeS: Training the trainers

• National Research Mentoring Network training session - https://nrmnet.net
  – Foundational mentoring workshops to help faculty be more effective communicators, set expectations, and deal with difficult situations.
  – Training in conscious and unconscious bias and increase awareness of cultural values, beliefs, and perceptions.

• Mentorship champions
  – Current faculty leaders will be chosen to become certified to train others and serve as representatives for university wide diversity initiatives.
DeNDriTeS: Advanced career-focused mentoring

- Provide mentoring outside of the traditional mechanisms available from most graduate programs.
  - Career-focused group mentoring meetings
  - Faculty mentor from program faculty and outside immediate research area. Will use IDP to discuss career goals and needed training
  - Interdisciplinary networking events to emphasize collaborative, translational, and cross-disciplinary neuroscience research
  - Short courses in new technologies
  - Research opportunities in industry through NYC biotech hub
DeNDriTeS: Building a community

• Strengthen the peer network through initiatives that emphasize community and provide leadership and networking opportunities
  – New seminar series that invites alumni to present science and discuss careers. Will be organized by current students and based on SPiNES
  – Alumni and NYC networking events at NYU and SfN
  – Mentoring younger students through SURP, BP-ENDURE, and other programs
  – Virtual network to engage students, alumni, and faculty in topics such as career development, and inclusivity. Students will be encouraged to curate content to make it useful.
DeNDriTeS: Intensive summer skills training

• A summer workshop that focuses on concrete skill development
  – Presentation skills
  – Grantsmanship
  – Academic writing
  – Programming and data analysis
• Initially this workshop will be open to NYU students, but in later years graduate students from local institutions will be encouraged to attend in order to build a larger network
DeNDriTeS: Desired outcomes

- Assess student and faculty perceptions of mentorship and training quality during graduate school
- Increase interactions between current students and alumni to improve sense of community and networking
- Track student accomplishments and career trajectories
- Increase pool of diverse applicants to the program
- Publish program design and results to share with the broader scientific community
- Pipeline for our postdoctoral program (~5% URM) from NYC-area graduate programs?
- Scalable to other graduate programs?
# DeNDriTeS - Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic Year</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>September 1- May 31</td>
<td>June 1- August 31</td>
</tr>
<tr>
<td>1 (this year)</td>
<td>Mentor Training/Facilitator Training, Collect baseline data for Evaluation Plan</td>
<td>Summer Workshop, Networking Reception</td>
</tr>
<tr>
<td>2</td>
<td>New Mentor Training, Bimonthly Meetings, Seminar Series, SFN Networking Reception, Collect Data for Evaluation Plan</td>
<td>Summer Workshop, Networking Reception</td>
</tr>
<tr>
<td>3-5</td>
<td>New Mentor Training, Bimonthly Meetings, Seminar Series, SFN Networking Reception, Partnership Building, Collect Data and Evaluate Success</td>
<td>Summer Workshop, Networking Reception</td>
</tr>
</tbody>
</table>
DeNDriTeS - Resources

- NRMN: [https://nrmnet.net](https://nrmnet.net)
- Leadership alliance: [https://leadershipallianceresources.blog](https://leadershipallianceresources.blog)
- SfN Next Generation Scholars: [https://www.sfn.org/Initiatives/Diversity-Programs/Neuroscience-Scholars-Program](https://www.sfn.org/Initiatives/Diversity-Programs/Neuroscience-Scholars-Program)
- NYU Henry and Lucy Moses Center for Students with Disabilities: [https://www.nyu.edu/students/communities-and-groups/students-with-disabilities.html](https://www.nyu.edu/students/communities-and-groups/students-with-disabilities.html)
- NYU Center for Multicultural Education and Programs: [https://www.nyu.edu/students/communities-and-groups/student-diversity/multicultural-education-and-programs.html](https://www.nyu.edu/students/communities-and-groups/student-diversity/multicultural-education-and-programs.html)