NARST Graduate Student Council

NEWSLETTER

November 2022

Reflections on Mentorship and Creating a Formal Mentoring Document

By Sandhya Krishnan
The University of Colorado Boulder

We've all heard the horror stories of graduate students clashing with their supervisors and then leaving graduate programs because of irreconcilable issues; of grad students saying they regret spending so-many years with a particular advisor because of miscommunication and poor mentorship leading to anything ranging from a strained relationships all the way to toxic relationships. But while we sympathized with those stories, we could never understand them - until we became graduate students ourselves and recognized the enormous impact that mentors would have on our experience.

What's Inside

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Reflections On Mentorship
By Sandhya Krishan

Mentorship is a bewildering aspect of the graduate experience. It's critically important to science learning and developing science identities, yet none of us receive formal training to be any good at it. We're supposed to receive mentorship from our direct research supervisor or senior students, and in turn, we're supposed to mentor early grad students or undergraduate students. It's an aspect of the "hidden curriculum" of graduate education that we aren't informed about before graduate school, and then as grad students, we don't consider it in a proactive way!

So how do we do better - both as mentees and as mentors?

Well, if we think about the mentor-mentee dynamic as just another important relationship in our lives, we can recognize that - at the very least - we would need to build trust, establish boundaries, and learn to communicate effectively. Yes, it's hard as the mentee to advocate for these aspects of the relationship when there is an imbalance between the power wielded by faculty and our perceived role in the research space. Something to help balance that is considering ourselves first and foremost - that we are in our graduate programs for the purposes of furthering our own learning and skills. And so the research we do with faculty in the programs we choose to attend is vehicle steering that growth. In essence, **let's be better advocates for ourselves!**

Advocating for ourselves in the space of our relationship with advisors can take on different forms - we can find many evidence-based recommendations on how to improve mentoring. One such recommendation brings together trust-building, boundary establishment, and effective communication: the creation of a research expectations or culture document or an Individual Development Plan. Then, you'll have a tangible resource that explicitly states the expectations for the grad student in their role as mentee (and mentor), and expectations for the research supervisor, AND is a living, dynamic document that changes in accordance with the needs of the research group. It can include how the research group is meant to operate (e.g., how often do the advisor/mentee meet?) and communicate and set guidelines for professional behavior.

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If you work in a space that is larger than just your advisor and yourself - that is, if there are multiple grad students that your researcher advises across multiple years of graduate study, in a space that you all share, consider creating a "lab expectations" document! Such a document might involve the following elements:

- The responsibilities of:
  - a first year student: going to classes!; learning about the different research projects that their advisor is doing; talking to more senior students about their research; READING!; writing annotated bibliographies and learning how to organize data and their knowledge
  - a second year student: getting experience in writing!; choosing committee members; conducting a pilot study; maybe even some grant writing experience?
  - a third year student: mentoring more junior students... (you get the idea!)
- The expectations that students can have of their advisor:
  - Prompt (business day) communication
  - Timely constructive feedback on writing
  - Weekly or biweekly individual meetings
  - Academic and career support
  - Etc...(work out what works for you both!)
- The group as a whole:
  - How to attend and present at lab meetings
  - How to communicate respectfully and professionally
  - How to manage and resolve conflict

Let's take a first step at improving mentorship: creating a "lab" culture/expectation document that makes you reflect on the mentorship you want and can provide, and creates a safe space for all students in a research space!

Mentoring Resources
By Sandhya Krishan

Universities and scientific professional organizations are invested in changing the current landscape of mentorship, and have even developed podcasts on topics related to mentorship. You can also check out the resources below:

- Tips and Tools for Mentoring Undergraduates as a Graduate Student
- The 2020 edition of the Graduate Student Mentoring Guide - A Guide for Graduate Students to advocate for the kind of mentoring they want! This handbook has been revisited and revised since it was first conceived of in 1999
    - And the partner guide for faculty: How to Mentor Graduate Students
- Questions for Potential Mentors - Office of Intramural Training & Education at the National Institutes of Health - helpful when going for interviews with potential labs
- Ten simple rules for choosing a PhD supervisor | PLOS Computational Biology
- 10 ingredients for a successful supervisor/PhD student relationship
- Culturally Aware Mentoring Resources – CIMER
    - Mentoring Underrepresented Students in STEMM: Why Do Identities Matter?
- The NIH-based National Research Mentoring Network
- Responsible Conduct of Research: Mentoring Module (similarly through the Resources for Research Ethics Education on Mentoring)
- Entering Mentoring - HHMI-funded seminar on mentoring
- Examples of lab culture documents or guidelines on what goes in them:
    - LAB CULTURE
    - How do you create a lab culture (the social kind, not just cells)
    - Lab Culture and Expectations – Meren Lab
    - Hammond Lab Values Statement
    - Lab Values
    - Lab values & expectations
    - The key to a happy lab life is in the manual

Writing Groups

Monday	Tuesday	Wednesday	Thursday	Friday
Theila Smith 5 - 7am EST	Ali Muller 11am -1pm EST	Brock Couch 9 - 11am EST	Ti'Era Worsley 8 -10am EST	Theila Smith 5 - 7am EST
Sandhya Krishan 4 - 6pm EST	Dave Jackson 1 - 3pm EST	Sabrina Stanley 3 - 5pm EST	Sandhya Krishan 5 - 7pm EST	Dave Jackson 1 - 3pm EST

Writing groups will be hosted daily by the Communications and Networking Sub-Committee.

If there is a time you would like to attend writing group, just log into zoom at that time.

https://bit.ly/NARST_writing_group

Call for Jobs

Academic Positions
- Assistant/Associate Professor- George Washington University
- Assistant Professor - New York University

Non-Academic Positions
- Assistant Curator, Science Education - New Jersey State Museum
- Research Associate, Community Partnerships - NYSCI
- Family Learning Research Associate
- Science Program Evaluator and Educator - Caltech

Postdoc Positions
- Education Postdoctoral Fellow - American Museum of Natural History
- Postdoctoral Fellow - The University of Utah
- Postdoctoral Fellow - The University of Michigan

2022 Executive Board

University: Research Associate at Florida International University

Research Focus: My PhD research focus is on children and family science engagement in informal science settings.

Why I Love NARST: I love how supportive the organization is to researchers, especially grad students and early career researchers.

Fun Fact: I am the youngest of 11 kids!

Theila Smith - Chair
GSC Coordinator

University: Ph.D. Candidate at Georgia State University

Research Focus: My research focuses on teachers' knowledge and skill on teaching science with deaf students, scientific-American Sign Language discourse, and Informal STEM programs for deaf students.

Why You Love NARST: the encouragement from other scholars in NARST community have been wonderful support to grow my scholarly work.

Fun Fact: I was told my laugh is contagious!

Scott Cohen - Co-Chair
Research Symposium

University: Postdoctoral Researcher at the University of North Carolina at Greensboro

Research Focus: My research focuses on looking at the role of relationships between Black youth and their educators and how that impacts their STEM engagement.

Why You Love NARST: I love the networking aspect, it is always nice to find others with your interest and put faces with the articles we read.

Fun Fact: I served as a Peace Corps Volunteer in Perú.

Ti'Era Worsley - Co-Chair
Communications and
Networking

Upcoming Events

November
- ISLS - Call for Proposals
- Education Sciences - Call for Papers

December
- AERA - Minority Dissertation Fellowship Program
- Ford Fellowships- Predoctoral (Due 12/15), Doctoral (Due 12/8)

January
- ASTE International Conference

March
- NSTA National Conference

April
- NARST Annual International Conference
- AERA Annual Meeting

Resources

Other Groups to Connect to

- <u>SABER</u>- Biology ED specific network
- <u>ESERA</u>- European Science ED Network
- <u>BE-STEMM-</u> Canadian Black Scientists Network
- <u>ASTC</u> - Informal science museum network
- <u>EARLI</u> - European Association for Research on Learning and Instruction

Professional Development Resources

- <u>DEAI through SABER</u>
- <u>Future Faculty Program @ NCSU</u>
- <u>National Center for Faculty Development and Diversity</u>
- <u>Equity in Graduate Student Education Resource Center</u>

NARST RIGs to Connect To

- Check them out <u>here</u>!

<u>Links to past NARST webinars</u>

Ways to Become Involved With NARST GSC

- Volunteering to help with the sub-committees
  - Communications and Networking
  - Research Symposium
  - Scholarship & Awards
  - Graduate Forum

- Writing a 500-700 word blog for the newsletter
  - <u>Link to submit your idea</u>

Contact Us: narstgradcommittee@gmail.com