**URNCST Journal Research Methods Primer: Guide for Mentors**

Dear Mentor:

First and foremost, thank you for agreeing to volunteer as one of the mentors for the URNCST Journal’s Research Methods Primer. By participating in this initiative, you are directly contributing to undergraduate academic research and writing education. This guide provides some key information aimed at assisting you in having a successful mentor-mentee experience. Should you have any questions or concerns, please do not hesitate to contact the representative URNCST Journal who shared this guide with you.

**Preparing to Mentor**

**Selecting Your Methodology**Many undergraduate mentees may have a minimal understanding of the research method that is of interest to them. The initial application process will test their ability to grasp core scientific concepts and provide them with the opportunity to hone their academic writing skills. One of your initial tasks as the mentor will be to provide 2-4 peer-reviewed research articles that describe your methodology of choice and present them in a simplified way to the mentees. Please note that these should be reporting guidelines or methods primers, not original research articles that utilize the method in question. When selecting your articles, please be mindful of the following:

* When selecting your 2-4 articles, consider the journal in which they are published. The criteria for determining reliable research journals can include determining whether the journal is known for publishing high-quality research.
* The accuracy and completeness of the data presented in the 2-4 articles you choose should be assessed, as well as whether the article authors are methodologists in their field. While this is not necessarily always indicative of a high-quality methods article, you may want to consider whether the contributing authors are well-cited, researched, and/or are renowned authoritative figures with respect to this methodological field.
* Again, while also not indicative of a high-quality article, many well-written methodological articles/reporting guidelines often have high citation counts, which suggests that it is being highly used by other researchers in the field.
* Please consider visiting the EQUATOR Network. This network is a comprehensive library of reporting guidelines for a large number of research methodologies. Mentors are encouraged to first ensure whether or not there is/are (a) reporting guideline(s) on the EQUATOR Network library that have been published and made available for the methodology study type of choice. If yes, this/these article(s) should comprise a subset of the 2-4 articles selected. The library can be accessed at:<https://www.equator-network.org/>

**Selecting Your Mentee(s)**

At the time of receiving this guidance document, a representative from the URNCST Journal should have also provided you with all applications submitted to the Research Methods Primer program, specifically summarizing the research articles you previously provided. You should review each abstract carefully and do the following:

* Assign a score of 0-10 for each application based on the rubric found at the bottom of each application submitted, regardless of whether you will accept them or not (in fact, this exercise may help you to inform your decision)
* Advise the URNCST Journal of which student authors you are agreeing to mentor; you may mentor more than one set of authors for the same research methodology topic. However, it is critical to acknowledge the amount of time associated with each additional commitment over the next ~3 month period

**Preparing for Block 1**Prior to Block 1 (week 1-2), it is expected that you, as the mentor, will prepare a slide deck (15-20 slides) that you will present during the initial meeting with your mentee(s). The slide deck should contain the key points associated with the research methodology of focus. Please consider the following:

* 1-2 slides should be reserved for each section of the paper, and a presentation speed of 1 slide per minute is recommended.
* Ensure that the slide deck is free of technical jargon and easy to understand at an undergraduate student level.
* Encourage active listening and interaction by encouraging the asking of questions from the mentee(s). Slide decks should include 3-4 learning objectives based on the research method to facilitate the learning process. All mentee(s) should prepare questions about the research methodology of focus based off of your selected articles introduced in the application process prior to attending the first meeting with you.

**Your Mentoring Experience**

Once you have informed the URNCST Journal of the students you will agree to mentor, the journal will send out an introductory email connecting the mentor and mentee(s). You will share their slide deck, which they have prepared prior to the first block, consisting of key points associated with the research methodology of focus to present to the mentees in Block 1 (week 1-2). At this point, you should immediately schedule a meeting with your mentees and meet via phone/video call at your earliest convenience. This primary meeting will allow you to meet your mentees, present the slide deck and field any questions, provide initial critical feedback on the mentees’ original submission, discuss expectations and schedule, and create an initial outline for the final primer. Please remember that this mentor-mentee relationship is designed as an activity to develop the mentees’ academic research and writing capabilities, as well as to introduce them to a research methodology that will be unfamiliar to some, if not all mentees. It is important to establish a relationship with your mentee that facilitates both parties being comfortable asking questions and sharing information and ideas. While you are provided the initial choice of which applicants you agree to supervise, you may need to prepare to adjust to your mentees’ writing abilities and research experience or lack thereof. It is not expected that they would necessarily have the ideal research background nor written expertise when applying for this opportunity.

The URNCST Journal was founded in mid-2017, and since this time many of our editorial staff have had the opportunity to provide mentorship to students at many different levels. Please consider the following advice compiled from our collective experiences:

* As the mentor, ensure that you have a good understanding of the URNCST Journal Research Methods Primer Schedule and Agreement and how the blocks are designed, before meeting with your mentee(s); once you meet with them, ensure that they understand it as well, and are willing to commit to achieving every deliverable following each block
* Set ground rules and expectations for the mentee early, and ask if they have any concerns about the process (ideally the first meeting); this allows any potential issues/miscommunications to be flushed out early
* Agree on a meeting/communication schedule (i.e. weekly or bi-weekly) and agree on how you will hold these meetings (i.e. phone, Skype, email, etc.)
* To provide the mentee(s) with the best possible experience, please ensure that you are prepared with comments and feedback, both on your student’s application before the first meeting, and prior to all subsequent meetings where the mentor has provided you with a deliverable
* Encourage students to strive to produce quality work, in a timely manner, throughout the mentorship process; provide gentle but firm reminders if deadlines are missed
* If issues arise with the mentee (i.e. unwilling to take direction, constantly missing meetings, uncommitted to tasks/missing deadlines) please advise the URNCST Journal as soon as possible.

**Preparing for Primer Submission**

During Block 6 (the last block, weeks 11 and 12), your mentee will be expected to complete final revisions/edits to the completed manuscript, format it according to URNCST Journal standards, and submit their finalized primer. Please keep this timeline in mind and advise us immediately if you anticipate that the mentee will need additional time to complete their submission. Prior to submission, ensure that the final manuscript adheres to the URNCST Journal’s “Instructions for Authors” page on our website, which can be found here:

<https://urncst.com/index.php/urncst/instructions_for_authors>

**Conclusion**

The Research Methods Primer initiative was established to provide individuals with the opportunity to gain a deeper understanding of a commonly used scientific research method of their choosing. The program aims to actively support and mentor learners in navigating the complexities of research methodology theory and practice, culminating in the development and publication of an invaluable and accessible educational resource for future early-career researchers. By contributing as a mentor to this initiative, you will provide your mentees with the opportunities to improve a number of their skill sets, namely conducting literature searches, academic writing, and experiencing the peer-review process. Please remember that the overall goal is for each mentee to draft a full-length research paper that is suitable for submission and peer-review in the URNCST Journal.