

Undergraduate Research Assistant Job Announcement: RIME Collaborative

Position Description

- Department: Department of Engineering Education, Research on Identity and Motivation in Engineering (RIME) Collaborative
- Faculty Member Lead: Dr. Rachel Kajfez
- Student Ranks: Freshman – Senior
- Student Majors: Any Major
- Expected Number of Hours per Week: 5-10
- Pay Range: \$10.50-\$12.50 depending on prior experience
- Start Date: Autumn 2019
- Application Deadline: **9/9/2019 at 9am**

Project Descriptions

The RIME Collaborative within the Department of Engineering Education is seeking undergraduate researchers to support one or more of the following projects:

- **Pathways:** Understanding Engineering Pathways and their Impact on Community and Identity, or the Pathways, project is exploring how the choices made in first-year engineering (FYE) programs impact the community and identity development of students who have taken different pathways (for example, transfer students, regional campus students, etc.) to and through their engineering degree. This is a multi-phased project that includes a three-part student survey, longitudinal interviews, and interviews with faculty, staff, GTAs, etc. regarding community development during the first year. This research is being conducted in partnership with Mississippi State University.
- **Inspiring Future Engineers through Girl Scout Leader Training:** This project will explore how the experience of completing a Girl Scout engineering badge or journey impacts girls' views of themselves as future engineers. These experiences will be used to develop training for leaders, in order to help Girl Scout leaders leverage the Girl Scout badges and journeys to support Girl Scout's vision of themselves as future engineers.
- **Convergent Learning from Divergent Perspectives:** The STEAM Factory, OHI/O Informal Learning in Tech Program, and the Center of Science and Industry (COSI) science center are collaborating on an NSF funded grant to advance innovative and create STEM learning in informal learning environments. The project integrates research-based outreach efforts across several Ohio State colleges, connecting researchers from various disciplines to creatively and effectively communicate science to public audiences of all ages as well as evaluate learning outcomes of informal settings. RIME is also studying the effect of participation in this collaborative project on the motivation and identity of researchers in addition to the students, to promote dialogue between researchers and the community.

- **Smartness and Identity:** This project involves a qualitative, exploratory study that will collect interview data to capture the beliefs and identities of first-year engineering students with respect to intelligence and engineering. The study will explore the experiences of students from six different pathways: 1) an honors program; 2) a living-learning or residential program; 3) a general engineering enrollment program; 4) an alternative mathematics starting point program, 5) a regional campus program; and 6) a community college pathway. The study addresses what students on different educational pathways believe about intelligence and engineering and how these students express their identities related to being smart and being an engineer.
- **Other RIME Research Activities:** In addition to the projects above, the undergraduate researcher may support other research activities within the RIME Collaborative such as website design, supporting graduate students' dissertation research, and other tasks.

Undergraduate Research Assistant (URA) Responsibilities:

The responsibilities of the URA will vary based on the project to which they are assigned and their experience. Prior research experience is not required. The URA will expect to:

- Work in teams with faculty members, graduate students, other URAs, and members of other departments and institutions
- Participate in regular RIME Collaborative meetings and other project meetings as needed
- Learn about research within engineering education, particularly motivation and identity research
- Perform qualitative and quantitative research, such as interviewing techniques and survey analysis
- Support the writing of reports, presentations, and publications for conferences and journals
- Learn project management and leadership skills

How to Apply

Submit the following materials to Dr. Rachel Kajfez at kajfez.2@osu.edu by **9/9/2019 at 9am**.

1. Current Resume/CV
2. Responses to the following questions (250 words or less per question):
 - a. Why do you want to do engineering education research?
 - b. Which project do you want to work on and why? See the descriptions above and choose at least two different projects to discuss.
 - c. Share an example of a situation in which teamwork enhanced your ability to accomplish your goals. Consider the following questions: What was your role? What was the outcome? How did teamwork make it successful? What do you wish you would have done differently to improve the success?

Contact

See our website (<https://u.osu.edu/rimetime/>) for more information regarding the RIME Collaborative and our research. Contact Dr. Rachel Kajfez (kajfez.2@osu.edu) with any questions regarding the position or application.