## **IOWA STATE UNIVERSITY**

**Department of Electrical and Computer Engineering School of Education** 

# **Position Announcement**

#### **Postdoctoral Research Fellow in Engineering Education**

Researchers within the School of Education at Iowa State University seek to hire a Postdoctoral Research Fellow to join a collaborative National Science Foundation-funded Revolutionizing Engineering Departments (RED) project on broadening the participation of underrepresented groups in engineering and computer science. This five-year RED project is aimed at developing novel pedagogical approaches for transforming the current Electrical and Computer Engineering (ECE) department into a more agile, less traditional organization. Cross-functional teams (X-teams) will be formed in order to reshape the core technical ECE curricula to: (a) promote design thinking, systems thinking, professional skills such as leadership, and inclusion; (b) contextualize course concepts; and (c) stimulate creative, socio-technical-minded development of ECE technologies for future smart systems. The project includes ECE faculty as well as faculty from psychology, industrial design, political science and education. This Postdoctoral Research Fellowship will focus on the qualitative engineering identity research component as well as the educational evaluation component of this project. More detail on the project can be found at: <a href="http://tiny.cc/tmfsfy">http://tiny.cc/tmfsfy</a>

#### Responsibilities

The successful candidate will be expected to assist the School of Education with coordination, including research design, data collection, analysis, and dissemination of findings associated with the RED project's qualitative engineering identity research component of this project. The candidate will closely work with the School of Education faculty to understand identity development within the ECE department. The candidate will also work closely with the School of Education's Research Institute for Studies in Education (RISE) evaluation component of the project. The candidate will be expected to collaborate with affiliated faculty and staff members, post-doctoral fellows, and graduate assistants to advance research project goals. Through working with this project, the Postdoctoral Research Fellow will help extract and characterize the strategies that are successful in developing and maintaining an engineering identity. As part of the Postdoctoral Fellowship experience, applicants will receive mentoring for developing research proposals; and participation in career development and mentoring activities will be supported and expected. They will also receive support to develop their personal research aligned with the broad goals of our cross-disciplinary project.

#### Qualifications

The successful candidate must have a Ph.D. in one of the following disciplines: higher education, engineering education, or a related field. Desired qualifications include: experience with research on relevant STEM issues in higher education and/or evaluation; expertise in qualitative research design, data collection, and analysis; experience with publishing in peer-reviewed journals; ability to work collaboratively; and ability to communicate effectively.

### **To Apply**

Please submit a single PDF file to Dr. Sarah Rodriguez, <a href="mailto:srod@iastate.edu">srod@iastate.edu</a>, including:

- 1. Cover letter
- 2. Detailed curriculum vita
- 3. Journal/conference paper sample
- 4. Names and email addresses of three references.

Review of applications will commence immediately and will continue until the position is filled. Full consideration will be given to applications received by February 1, 2017. It is anticipated that the appointment will begin in the Fall 2017 (or earlier, if possible).