In an effort not to conflict with yesterday's ASEE deadline, I delayed this week's announcement by 1 day

Dear BED members.

We are quickly coming into the home stretch of the semester - Thank you all for your commitment to our students - in the chaos of today's world -- we often forget to stop and remember that it is the personal interactions that faculty and students have on a daily basis that really shapes the students' higher education experience and sense of belonging. So thank you for the very important role you play -- it is worth it, even if you don't hear it "out loud."

In true form, the postings for faculty positions continue to come in - thanks to those of you who have been sending in announcements. For those of you receiving these newsletters, please feel free to pass these opportunities on to your network and graduate students -- it's an exciting time for our education community.

This week, I'm trying to get a grasp on how to streamline the previously posted announcements versus new incoming announcements. Thus - announcements in RED will not appear next week.

Finally -- for those who anxiously await the latest resource for engineering education research, I wanted to post a great paper that speaks to developing a framework for qualitative resource quality. For some of us, the concept of qualitative research is hard to understand having come from very quant backgrounds (me included), so I have worked hard at understanding how to identify qualitative research quality, so the paper I listed from Walther et al. really helped me think it through. I hope it is valuable to you as well. Be well and in good health!

Aileen Huang-Saad, BED Division Chair

The Roux Institute, Northeastern University



BED Announcements for 11/15/21

General Announcements (e.g. upcoming Webinars, upcoming seminars, upcoming grants, publication opportunities, etc.)

- 1. CALL FOR PARTICIPATION: ASEE Commission on Diversity Equity and Inclusion
- 2. CALL FOR INFORMATION: P-12 Engineering Offerings
- 3. CALL FOR NEWSLETTER CONTENT: ASEE BED Bi-monthly Newsletter
- 4. CALL FOR PARTICIPATION: BEEC Share and Learn
- **5. CALL FOR PROPOSALS:** NSF Professional Formation

BME Education Resources for You

1. INTEGRATING DEI RESOURCE: Venture Well entrepreneurship/innovation DEI

Position Announcements

- **1. POSITION ANNOUNCEMENT:** Tenure-Track Assistant Professor, Mechanical and Materials Engineering, University of Denver
- 2. **POSITION ANNOUNCEMENT:** Assistant or Associate Teaching Professor, Bioengineering, The Roux Institute, Northeastern University
- 3. **POSITION ANNOUNCEMENT:** Assistant or Associate Teaching Professor, Bioinformatics, The Roux Institute, Northeastern University
- 4. POSITION ANNOUNCEMENT: Postdoctoral Associate, Engineering Education, Michigan State
- **5. POSITION ANNOUNCEMENT:** Non Tenure-track faculty, Biomedical Engineering, Rochester Institute of Technology
- **6. POSITION ANNOUNCEMENT:** Lecturer, Oshman Engineering Design Kitchen, Rice University
- **7. POSITION ANNOUNCEMENT:** Faculty Openings: Engineering and Adjacent Fields, Olin College

Engineering Education Research Resources

1. DIVING INTO ENGINEERING ED RESEARCH: Qualitative Research Quality - a great article on how to frame qualitative research "quality"

General Announcements

1. CALL FOR PARTICIPATION: ASEE Commission on Diversity Equity and Inclusion

Awards Committee. (POC: Karen Jensen)

If you are interested in participating with the Awards Committee to review for the DEI Constituent Award and Best DEI Paper Award please contact (<u>kjens@illinois.edu</u>). Reviews will take place in the spring.

Strategic Planning Assessment. (POC Sasha Zephirin)

A sub group is currently working on the draft CDEI strategic plan and will be involving the full committee in developing this further soon. Their committee is also responsible for compiling the annual report of CDEI activities (tkzeph@purdue.edu) - Contact them if interested!

<u>Professional Development Committee</u> (POC: Meagan Pollock, <u>Mp@engineerinclusion.com</u>)

- Join their Committee (and read about teams): http://7ev.co/4AGA
- Submit a Conference Workshop Proposal: http://7ev.co/4AGB
- Submit a Virtual Workshop Proposal: http://7ev.co/4AGB

2. **CALL FOR INFORMATION:** P-12 Engineering Offerings

ASEE Pre-K-12 Engineering Education seeks to aggregate information on P-12 Engineering Offerings. Feel free to submit information on your offering here.

3. **CALL FOR NEWSLETTER CONTENT:** ASEE BED Bi-monthly Newsletter

As of 2021, the ASEE BED has started to share a bi-monthly newsletter with the community. We share general resources, BME Education Resources for Students and Faculty, Upcoming Positions, Engineering Education Research Resources. Information will be shared in consecutive emails. If you have information to share with the community, please send your announcement to the BED listsery, as a a 2-3 paragraph description including any relevant URLs and contact info as well as a subject line. Do not include any attachments. Be sure that the announcement includes the person to contact with questions. Email all of this information to Aileen Huang-Saad at a.huangsaad@northeastern.edu with [BED Announcement] in the subject line to facilitate email sorting. Announcements will be sent out on the 1st and 15th of each month. Each set of announcements will be included in the announcements email twice. Announcements will also be recorded on the BED website (https://sites.asee.org/bed/) and **HUB** (https://aseehub.asee.org/groups/home/34#active-group-members).

4. **CALL FOR PARTICIPATION:** BEEC Share and Learn

We are super excited to share with all of you this month's Share and Learn! The BEEC monthly Share and Learns are meant to serve as networking and collaboration between community members. This month's event will be led by Yanfen Li and Hsien-Yuan Hsu. from University of Massachusetts, Lowell! The topic will be "<u>Entering Research Program:</u>

Aligning Advisor-Advisee Expectations to Form Effective Mentoring Relationships"

If you are interested to be part of this discussion, collaborate, contribute, or just learn something new don't miss it! It will be November 17th, 2021 1:00 PM (EST). Register here.

5. **CALL FOR PROPOSALS:** NSF Professional Formation

The NSF Engineering (ENG) Directorate is continuing a multi-year initiative, the Professional Formation of Engineers, to create and support an innovative and inclusive engineering profession for the 21st Century. The PFE: Research Initiation in Engineering Formation (PFE: RIEF) program has two goals: 1) Support research in the Professional Formation of Engineers (PFE), and 2) Increase the community of researchers conducting PFE research. PIs are expected to have little or no experience conducting social science or education research and will develop the proposal with

an engineering education research mentor. The full proposal deadline date is November 9, 2021 (Second Tuesday in November, Annually Thereafter).

Related information:

Solicitation: https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=503603&ods_key=nsf20558

Program Page: https://beta.nsf.gov/funding/opportunities/pfe-research-initiation-engineering-

formation-pfe-rief

Program Contact: J. Kemi Ladeji-Osias <u>iladejio@nsf.gov</u>

BME Education Resources for You

1. INTEGRATING DEI RESOURCE: Venture Well entrepreneurship/innovation DEI

VentureWell has published an applied resource for integrating DEI in tech-based entrepreneurship/innovation programs, downloadable for free on their site: https://venturewell.org/advancing-equity/

Position Announcements

1. **POSITION ANNOUNCEMENT:** Tenure-Track Assistant Professor, Mechanical and Materials Engineering, University of Denver

The Department of Mechanical and Materials Engineering at the University of Denver is building an academically and culturally diverse faculty and staff with a strong commitment to Diversity, Equity, and Inclusion and invites applications for a tenure-track faculty position.

While applications in all areas related to Mechanical and Materials Engineering will be considered, candidates with proven expertise in one or more of the following subfields are strongly encouraged to apply: biomedical devices, computational fluid dynamics, biomaterials, tissue engineering, surgical robotics, robotic manipulation, additive manufacturing, materials, wearable technology, rehabilitation, artificial intelligence, and data science.

The potential start date of September 1, 2022 is anticipated for this hire, and the position features a competitive start-up package. To apply, please see the full posting here: https://jobs.du.edu/en-us/job/494417/assistant-professor-mechanical-and-materials-engineering.

Questions related to the position may be directed to the search committee chair: Ali Azadani, ali.azadani@du.edu.

2. **POSITION ANNOUNCEMENT:** Assistant or Associate Teaching Professor, Bioengineering, The Roux Institute, Northeastern University

Northeastern University invites applications for full-time, non-tenure track teaching faculty in the field of computational bioengineering and biomedical data science. The Roux Institute Life Sciences and Engineering Programs seek to grow computational programs that support the life sciences and health from genomics to systems.

The Assistant/Associate Teaching Professor will teach up to six (6) courses per academic year in the life sciences, health, and computational medicine programs. This individual will collaborate with teaching and research faculty at the Roux and on the Boston campus to build curriculum to support the expansion of the Boston campus bioengineering computational concentration, focusing on precision medicine. This role will also seek to grow the enrollment in the life science and engineering computational programs, including but not limited to bioengineering and bioinformatics, and work with partner organizations to support the growth of professional opportunities for graduates. This unique position seeks to integrate professional practice into learner education, supporting Northeastern's mission to develop wholly immersive learning and discovery experiences.

Teaching responsibilities include the following: a willingness to support high-quality teaching and standards through preparation of lectures based on course materials provided; effective facilitation of rich, respectful debates and discussions in an in-person or hybrid class; timely review and grading of assignments with appropriate coaching and feedback to the students; consistent connection with students and their performance; adherence to Northeastern's policies.

To apply, please see the full posting here: https://careers.hrm.northeastern.edu/en-us/job/508366/assistantassociate-teaching-professor-bioengineering-roux-institute

3. **POSITION ANNOUNCEMENT:** Assistant or Associate Teaching Professor, Bioinformatics, The Roux Institute, Northeastern University

An Assistant /Associate Teaching Professor is sought to teach full time in the Northeastern University Bioinformatics Professional Science Master's (PSM) Program. This position is located at the Roux Institute, Northeastern University's Portland, Maine campus. The Bioinformatics PSM degree program is designed to allow students to pursue advanced training in bioscience and simultaneously develop highly valued business skills.

The Assistant/Associate Teaching Professor will teach up to six (6) courses per academic year. This individual will collaborate with Roux partners and faculty to improve upon our bioinformatics curriculum that comprehensively integrates real world problems. This individual will play a key role in growing the enrollment in Bioinformatics PSM and in developing relationships with industry partners. This individual will also participate in extending existing programming into an interdisciplinary curriculum that will cross the Roux's computational programming offerings to address Maine's unique needs in the field.

To apply, please see the full posting here: https://careersmanager.pageuppeople.com/879/cw/en-us/job/508457/assistantassociate-teaching-professor

4. **POSITION ANNOUNCEMENT:** Postdoctoral Associate, Engineering Education, Michigan State

Seeking a postdoctoral associate to support the development of research initiatives in engineering education. Dr. Michele Grimm joined Michigan State as the Wielenga Creative Engineering Endowed Professor in January 2019. She is hoping to partner with an enthusiastic postdoctoral associate to identify and implement research opportunities related to engineering education. The position will provide the postdoctoral associate the chance to develop and conduct research related to student success and educational pedagogies, brainstorm and assist with the implementation of impactful pedagogies, and

develop a personalized professional development plan to support their career advancement.

Required Qualifications: Candidates must hold a PhD in an engineering discipline and have a demonstrated interest in pursuing a career that includes a focus on engineering education. Candidates must have strong oral and written communication skills. Candidates are expected to work well in a team setting, be self-motivated, and have experience with working with diverse groups of students and faculty.

Preferred Qualifications: Candidates with background in biomechanics are preferred, either through mechanical engineering, biomedical engineering, or a related field.

Anticipated Start Date: Open to negotiation (initial hire for one year).

For more information, please contact Dr. Michele Grimm at mgrimm@msu.edu. Applications must be submitted through the Michigan State jobs portal (jobs.msu.edu – posting #632530).

5. **POSITION ANNOUNCEMENT:** Non Tenure-track faculty, Biomedical Engineering, Rochester Institute of Technology

Rochester Institute of Technology (RIT) is seeking a passionate nontenure-track faculty to join our team (https://www.rit.edu/engineering/department-biomedical-engineering). See full posting here. We seek candidates with academic, industry, or regulatory experience to implement innovative teaching methodologies and contribute to student-centered activities. The candidate will deliver existing biomedical engineering lecture and laboratory-based courses and establish new electives in their area of expertise. The candidate will serve as a subject matter expert for student projects (senior design or independent study) and provide academic and career guidance advice. Preference will be given to candidates with demonstrated evidence supporting a commitment to diversity, equity, and inclusion in research, teaching, or service activities.

6. **POSITION ANNOUNCEMENT:** Lecturer, Oshman Engineering Design Kitchen, Rice University

The School of Engineering at Rice University seeks unique and energetic applicants for a non-tenure track faculty appointment with a full-time focus on undergraduate engineering design education at the Oshman Engineering Design Kitchen (OEDK). The OEDK provides undergraduate engineering students with ready access to design tools, prototyping equipment, computational facilities, meeting rooms and ample space for prototype design and development. Classes and programs at the OEDK challenge students to solve real-world design challenges brought to them by clients. OEDK offers courses for students from freshman through senior year that are part the Engineering Design minor. Specifically we are looking for an individual who is passionate about undergraduate teaching, has a rich experience in engineering design, and is highly motivated to contribute to a dynamic and growing academic maker-space.

Complete post can be found here: https://apply.interfolio.com/96207

7. **POSITION ANNOUNCEMENT:** Faculty Openings: Engineering and Adjacent Fields, Olin College

Are you passionate about equity and access? Do you want to join us in reframing who can be engineers and what counts as engineering? Do you want to mentor students to better integrate engineering and other fields as they study and tackle complex technical systems and societal challenges? Come join our team. We are looking for individuals (at all ranks) with expertise and experience in engineering (all disciplines) and/or adjacent fields (e.g., applied mathematics, computer science, applied physics). Olin is committed to becoming an increasingly inclusive and diverse learning community that supports equitable learning opportunities for everyone, and we strongly encourage women and individuals from historically underrepresented communities to apply. Please visit https://olincollegefacultysearch.submittable.com/submit to apply.

We plan to hold a number of virtual events during October and early November at which you can connect with Olin faculty and get to know more about our community. If you would be interested in attending any of these events, we invite you to provide us with your email address in this form. We look forward to connecting with you and learning about you!

Engineering Education Research Resources

1. **DIVING INTO ENGINEERING ED RESEARCH:** Walther J, Sochacka NW, Benson LC, Bumbaco AE, Kellam N, Pawley AL, et al. Qualitative Research Quality: A Collaborative Inquiry Across Multiple Methodological Perspectives. J Eng Educ. 2017;106(3):398–430.

To send an announcement to the BED listsery, please prepare a 2-3 paragraph description including any relevant URLs and contact info as well as a subject line. *Do not include any attachments*. Be sure that the announcement includes the person to contact with questions. Email all of this information to Aileen Huang-Saad at a.huang-saad@northeastern.edu with [BED Announcement] in the subject line to facilitate email sorting. Announcements will be sent out on the 1st and 15th of each month. *Each set of announcements will be included in the announcements email twice*. Announcements will also be recorded on the BED website (https://sites.asee.org/groups/home/34#active-group-members).