Dear BED members,

Greetings from BMES 2022 (San Antonio, Texas). As someone who used to live in San Antonio, it was a great opportunity to come home, but it was even more exciting to see how much the engineering education community has grown within BMES. I had a wonderful time seeing old friends and making new ones.

Our community continues to come together and find ways to on board more people into engineering education. Today, I had the opportunity to participate in an exciting workshop led by Ann Saterbak (Duke) and Brian Helmke (UVA) that brought people together to talk about how to incorporate engineering education into their scholarly research and the excitement and enthusiasm was palpable. The exciting ideas and enthusiasm in connecting with others to advance our ideas left me so inspired! I am continuously inspired by Ann Saterbak's lifelong commitment to biomedical engineering education and her patience in bringing this all to bear (am I using the right spelling for bear?...hmm?).

There's a lot more opportunities to get involved over the next few months with ASEE's abstract deadline (October 31) and the numerous programs being launched by the BEEC to keep you engaged throughout the academic year. We will also be launching a campaign to increase our membership in ASEE over the next few months -- be on the lookout for ways we will be trying to connect current BED members with new members to share the \$50 coupons ASEE sent out on 09/12/2022 - where one coupon can be used for the BED member and the other can be shared with a friend or colleague. If you deleted that message by accident -- please go look for it in your email!!!

Finally, I wanted to share my newest favorite article with you all -- when I started to explore engineering education research, I was always perplexed by the comments of - "you need a theoretical framework", "your framework will be your *lens*" - what do those statements really mean? Thus, I wanted to share an article by Kivunja (info below) that does a nice job differentiating the concepts between theory, theoretical framework, and conceptual framework. Enjoy!

Be well and in peace,

Aileen Huang-Saad, BED Past Division Chair The Roux Institute, Northeastern University



BED Announcements for 10/15/22

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

- 1. CALL FOR NEWSLETTER CONTENT: ASEE BED Bi-monthly Newsletter
- 2. CALL FOR SUBMISSIONS: ASEE Abstract submissions open 10/3 and close on 10/31

BME Education Resources for You

- 1. ASEE BED PAPER SUBMISSION PROCESS: The American Society of Engineering Education Biomedical Engineering Division Paper Submission Process Explained Webinar Video
- 2. ASEE 2023: Helpful links and information to support your submission
- 3. CALL FOR PARTICIPATION: Biomedical Engineering Education Community
 - a. New Teaching Tuesdays (Every Tuesday in Slack!)
 - b. **BEEC's Share and Learns** (October 20th / 1 2 pm EST)
 - c. Save the Date for our **Annual BEEC meeting** (January 12th, 2023)

Position Announcements

- **1. POSITION ANNOUNCEMENT:** Cohort of tenure-track faculty to join the Department of Engineering at Harvey Mudd College
- **2. POSITION ANNOUNCEMENT:** Assistant Professor of Engineering, Rockhurst University (Kansas)
- **3. POSITION ANNOUNCEMENT:** Post Doctoral Fellows, BME Education, Cornell University
- **4. POSITION ANNOUNCEMENT:** Tenure Track Faculty Position (focus Engineering Education), Biomedical Engineering, Cornell University
- **5. POSITION ANNOUNCEMENT:** Biomedical Engineering Communications Faculty in the Department of Biomedical Engineering and Mechanics (BEAM) at Virginia Tech

Engineering Education Research

1. **Theory versus Theoretical Framework versus Conceptual Framework:** What does this mean? How do you use them? How are they different -- great paper below!

General Announcements

1. 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/) HUB and (https://aseehub.asee.org/groups/home/34#active-group-members).

2. CALL FOR SUBMISSIONS: ASEE Abstract submissions open 10/3 and close on 10/31

ASEE 2023 Annual Conference

Baltimore Convention Center, MD. | June 25th-28th, 2023

https://www.asee.org/events/Conferences-and-Meetings/2023-Annual-Conference

BME Education Resources for You

1. **ASEE BED PAPER SUBMISSION PROCESS:** The American Society of Engineering Education Biomedical Engineering Division Paper Submission Process Explained Webinar Video

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For those who were unable to join during the live webinar on the ASEE BED submission process, you may refer to the recording link: https://capture.udel.edu/media/Submitting+to+ASEE+BED/1_gl70xgmu. Please feel free to pass along to others in your networks who are interested in biomedical engineering education!

2. **ASEE 2023:** Helpful links and information to support your submission

We look forward to receiving your abstracts by Monday, 10/31. I know you're swamped, and 10/31 is just 3 weeks from today (which is also Halloween). BUT... Remember that abstract submissions are low-stakes, so if you're debating whether to submit this year, just do it! That will give you some time to reevaluate for the draft paper submissions due January 31, 2023. A lot can happen in those 3 months (like completing that data analysis), and you don't want to cut yourself short by not submitting an abstract in the first place. Plus, Inner Harbor, Baltimore in summer is lovely, and we're working on putting together a wonderful conference program for our BED community.

Submit directly on the <u>NEMO platform</u>. Other helpful links as you are preparing your submissions:

ASEE 2023 Conference Webpage, which includes the full submission timeline

ASEE 2023 Conference Call for Papers, where the BED Call for Papers is posted

ASEE 2023 Conference Author's page, which includes the Author's Kit and everything you need to know about how to submit

ASEE PEER publication repository

ASEE Biomedical Engineering Division webpage

3. **CALL FOR PARTICIPATION:** Biomedical Engineering Education Community

a. Teaching Tuesdays!

Over on our slack channel, we are having monthly discussions around one topic. For the month of October, we will be discussing:

How do you implement problem-based learning in your course? Hop over to Slack and join the conversation!

b. BEEC's Share and Learn!

Our monthly Share and Learns are meant to serve as networking and collaboration between community members.

Topic: "The BME Grad Podcast: An Early-Career Podcast Built for those with a Biomedical Engineering Background"

When: October 20th, 2022, 1-2 pm EST.

Leads: Allie Mitzak - UNC Chapel Hill & Brian Kim - North Carolina State University

c. Annual BEEC Meeting 2023!

Exciting news! Our upcoming meeting (January 12th, 2023) will be a little different. We will still host a keynote, but will **focus more on presentations!** Our goal is to have enough presentations to be able to **award three authors** an invitation to go through the peer-review process in the Biomedical Engineering Education Journal (BIEE)! Stay tuned for more details!

Abstract template: LINK

Position Announcements

1. **POSITION ANNOUNCEMENT:** Cohort of tenure-track faculty to join the Department of Engineering at Harvey Mudd College

We are currently conducting a search for a cohort of tenure-track faculty to join the Department of Engineering at Harvey Mudd College. Because you have been recognized for your teaching, we thought you might be able to connect us with current/recent students and postdocs that are looking for a teaching-focused faculty position. We welcome applicants from any engineering discipline who have a passion for educating undergraduate engineers. The positions will be assistant or associate professor level.

Link to ad: https://academicjobsonline.org/ajo/jobs/22401. If potential applicants have questions about the faculty positions, they can reach out to the search committee at eng-search-2022-10@g.hmc.edu.

2. **POSITION ANNOUNCEMENT:** Assistant Professor of Engineering, Rockhurst University (Kansas)

The Department of Physics and Engineering at Rockhurst University invites applications for a full time, tenure-track Assistant Professor of Engineering position beginning August 1, 2023. Preferred applicants will hold a terminal degree in Engineering in one of two fields: Biomedical Engineering or Mechanical Engineering. Rockhurst University has ABET accreditation in Civil, Mechanical and Electrical Engineering programs and a growing biomedical physics program.

https://www.indeed.com/viewjob?jk=3d6509ea0b0d2151&utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic_

3. **POSITION ANNOUNCEMENT:** Post Doctoral Fellows, BME Education, Cornell University

Applications are being sought for Postdoctoral Fellows in Engineering Education in the Meinig School of Biomedical Engineering at Cornell University. These Fellows will take a leading role in the design, implementation, and assessment of a transformational

pedagogical strategy for Biomedical Engineering curriculum to be tested through remodeling of a 5-course core sequence.

Successful candidates will co-design, implement and evaluate a unique Studio Pedagogy in collaboration with instructional faculty and teaching assistants in partnership with faculty in the Department of Architecture. They will create and implement new integrated classroom training activities, lecture materials, and assessments that will be tested and improved between courses and over semesters. Further, Fellows will design innovative individualized training resources to complement classroom learning and preparation. They will co-lead educational activities with faculty, teaching assistants and support staff. This rich educational environment will support rigorous engineering education research evaluating student and faculty shifts in learning and teaching. They further will engage with departmental faculty who have established engineering education expertise. Finally, Fellows will participate in Cornell's nationally-recognized community engagement and educational outreach programs.

Position Requirements: • PhD in an engineering or design-related degree earned no earlier than January 1, 2018 • Training in biomedical science, molecular/cellular biology, or related disciplines • Prior experience in modeling, simulation, and/or coding • Prior experience assisting in teaching of engineering courses

Link to ad:. https://academicjobsonline.org/ajo/fellowship/21746 If potential applicants have questions about the faculty positions, they can reach out to the search committee at cornell.edu

4. **POSITION ANNOUNCEMENT:** Tenure Track Faculty Position (focus Engineering Education), Biomedical Engineering, Cornell University

The Nancy E. and Peter C. Meinig School of Biomedical Engineering at Cornell University invites applications for tenured or tenure-track faculty position in biomedical engineering, with an emphasis on engineering education research. Candidates must have an earned doctorate in engineering, STEM education, or a closely related field, with a demonstrated potential for success as an independent education research investigator and a classroom educator. Responsibilities include the pursuit of a program of scholarly research in Biomedical Engineering Education; teaching courses in Biomedical Engineering; and advising undergraduate and graduate students. We are especially interested in receiving applications from candidates that embrace diversity, equity, and inclusion. Senior candidates with exceptional accomplishments in research, teaching, and graduate student mentorship are encouraged to apply. Junior candidates must show outstanding research and potential for excellence in teaching and graduate student mentorship. Salary and rank are commensurate with qualifications and experience.

Link to ad:. https://academicjobsonline.org/ajo/jobs/22905 If potential applicants have questions about the faculty positions, they can reach out to the search committee - Chris Schaffer or Jonathan Butcher at cornellbmesearch@cornell.edu

5. **POSITION ANNOUNCEMENT:** Biomedical Engineering Communications Faculty in the Department of Biomedical Engineering and Mechanics (BEAM) at Virginia Tech

We invite applications for a full-time non-tenure track faculty position at the instructor or collegiate assistant professor level, effective August 2023, in areas related to technical communication, professional development of undergraduate students, and engineering pedagogy. We seek candidates motivated to contribute to a collegial, interdisciplinary community with a strong tradition of high-quality teaching, student engagement, and mentoring. For more information or to apply, please visit:

https://careers.pageuppeople.com/968/cw/en-us/job/521992/communications-faculty