

## SEAS DEIB Year 2 Reporting

June 14, 2023

We report here on the five goals established in our 2022-23 action plan as well as the common action goal related to professional development. We also share additional DEIB accomplishments from the year.

1. *Incorporate DEIB into courses through discussions on issues encountered in research and professional settings, invited guest lecturers from diverse backgrounds, discoveries/histories of prominent URM researchers\**

**MEMS 400 & 425.** This year, our Mechanical Engineering & Materials Science department hired Ronald Adrezin and Marcus Johnson to teach MENG 400 and MENG 425. The courses focused on designing and prototyping mechanical devices to support members of the disability community. Dr. Adrezin, who is a former rehabilitation engineer, led both courses in professional design, utilizing computer-aided design software. Mr. Johnson, who is a counselor with years of experience supporting clients with disabilities and has firsthand experience with disabilities, led small groups to determine the requirements needed for successful rehabilitation-focused designs.

**ENAS 508.** Professor Evan Morris teaches ENAS 508 Professional Ethics Class for Biomedical Engineering graduate students. With DEIB committee support, he was able to bring in a panel of diverse speakers for his class, which he opened up to the entire school; this was advertised broadly by SEAS, especially to graduate students and postdocs. On April 17<sup>th</sup>, he hosted: **Panel Discussion on Career Choices, Mentoring and Teaching Philosophy with Special Attention on Women's Careers in Engineering.** Evan brought in two stars of biomedical engineering research and teaching: Vice Chancellor Ranu Jung from the University of Arkansas and Dean Cynthia Paschal from Vanderbilt University.

2. *Invite speakers of more diverse backgrounds (URMs, experiences outside of academia) for departmental seminars. Host broader DEIB-focused engagements with visitors, geared toward all members of the SEAS community\**

**Diverse Leaders Seminar Series<sup>++</sup>:** Professor Rebecca Kramer-Bottiglio received a supplement to an NSF award to focus on broadening participation in engineering at SEAS. Through this support, on April 13-14, 2023, SEAS welcomed Professor Tahira Reid Smith, Penn State Arthur L Glenn Professor of Engineering Education and Associate Department Head for Inclusive Research and Teaching. Dr. Reid's talk, **Establishing the Research in Engineering and Interdisciplinary Design (REID) Lab** was well attended by faculty, students and post-docs and included a student-only discussion afterwards.

Yale SCHOOL OF ENGINEERING  
& APPLIED SCIENCE

### Diverse Leaders Seminar Series



Tahira Reid Smith  
Penn State University

\*The SEAS DEIB Committee was able to make a modest amount of funds available to the SEAS community for these two goals, generally based around infusing diversity into our courses and seminars. We advertised an application process, whereby anyone could apply for this funding with a simple application. This was very well received and allowed the organizing to happen locally.

<sup>++</sup>This program is being evaluated by Dr. Meghan Bathgate, Poorvu Center Director of Educational Program Assessment.

**Equity in the Job Search.** The SEAS DEIB committee also sponsored the Equity in the Job Search Conference, held May 12, 2023. This event, annually organized by SEAS graduate students, is open to graduate students, post-docs, faculty and research staff.

**SEAS DEIB Speaker Series:** With support from the DEIB committee, our graduate student group (GECO) took the initiative to arrange for Dr. Bayo Ogundipe, Department Head and Professor at James Madison University, to come to campus. On May 19<sup>th</sup>, Dr. Ogundipe, who is from a diverse background, led a seminar, **Practical Approaches to Implementing Sustainability Across Engineering Disciplines: The EOP Framework**. This was followed by a student and postdoc lunch with the speaker and then a faculty discussion with the speaker.

“Practical Approaches to Implementing Sustainability Across Engineering Disciplines: The EOP Framework”



Dr. Bayo Ogundipe  
Department Head and Professor, James Madison University

- 3. A semiannual message from the dean emphasizing SEAS DEIB efforts, requesting feedback, and highlighting the community diversity statement.*

The dean sent out a message in July of 2022 reflecting on the progress of Year 1, previewing Year 2, and inviting feedback. The school wrote a [summary news story](#) covering our exciting DEIB activity in August 2022.

With the start of the academic year and with recognition of the cadence of DEIB activity we wanted to maintain, we broadened the scope of this communications goal to include messages from the SEAS DEIB committee and the SEAS Dean’s Office. In September 2022, our DEIB committee issued a message to the SEAS community about the opportunities for involvement in the semester ahead – this included information on professional development and available funding.

In December of 2022, our committee sent another message, celebrating successes and sharing ways in which to be involved. The message included information on: funding available for infusing diversity goals, the opportunity for teaching observations from the Poorvu Center, a SEAS student/postdoc workshop on “*Creating Equitable Classrooms in SEAS*” to happen January 2023, information on other evidence-based Poorvu workshops, and acknowledgement of the graduate student teams that attended engineering diversity conferences this year.

The Dean emailed all faculty about the climate survey results in March of 2023.

- 4. Establish a SEAS events calendar, including DEIB events, academic seminars, social events, conferences, workshops; display on website and in physical spaces.*

Sadly, our current website is too antiquated to support the type of calendar desired by the SEAS community.

SEAS recognizes that we have some significant upgrades needed in our communications strategy. With input from OPAC, we decided to embark on a multi-stage plan to modernize our branding and web presence. This year we engaged a branding company, Pentagram, to design a new brand identity for the

school. We expect to have final recommendations from them this summer, at which point we will begin design for a new school website. This new website will be able to support a school-wide calendar, which will include DEIB events. Depending on the timeline provided by our web vendor, we hope to have this calendar available as soon as possible in the next academic year.

5. *Reach out to prospective graduate students, encourage to apply.*

The SEAS Dean's Office sponsored 11 SEAS graduate students to attend diversity-serving engineering conferences this year. With leadership from Professor Michael Loewenberg, Graduate Student Diversity Liaison, these students attended a combination of two conferences: SACNAS (fall 2022) and NSBE (spring 2023). (And one student attended both!)

At these conferences, the graduate students met with undergraduates and talked to them about graduate school at Yale. The teams have put in place mechanisms to track which graduate school applications to SEAS may have come from undergraduate students met at these conferences.



SEAS team in exposition booth at SACNAS 2022. Left to right: Fernanda Vargas, Ming Xu, Luis Ramirez, Michael Loewenberg, Zeyu Kuang.

**Graduate Student Onboarding.** As part of her Advanced Graduate Leadership Program fellowship, PhD student Julianne Rolf created an orientation booklet for graduate students. This is meant to be a welcoming introduction to graduate school in SEAS, written for students by students. It will be maintained and distributed by GECO, our graduate student group.

6. *COMMON ACTION: Professional development*

Our professional development offerings last year were robust and relied heavily on campus partners. This year, we wanted to continue to lean on internal experts but without asking them to curate offerings explicitly for SEAS. We tried to advertise many of the existing offerings by Poorvu, the Office for Diversity and Inclusion, and others.

We've been lucky to partner deeply with Poorvu, who created a custom workshop for SEAS this year that we ran twice. Expert Poorvu facilitators led **Creating an Equitable Classroom in SEAS**, based on actual pedagogical examples from SEAS faculty. The workshop description reads:

*Are you curious about ways that you can encourage equity in STEM as a teaching fellow, especially when teaching highly technical subjects? Join us for a lively conversation about belonging and student success in the classroom, in office hours, and in giving feedback. We'll examine research on evidence-based practices, discuss case studies on supporting student learning, and garner inspiration from real examples from Yale instructors in SEAS departments who approach teaching with a focus on equity. You'll leave with new insights and tools, both from your colleagues and from the evidence on equity-focused pedagogy.*

Two students/postdocs attended January 2023, and 17 attended in March of 2023. Attendance was supported in the second session by scheduling it over spring break, during after hours, and providing dinner.

Last year, we focused on faculty involvement with Poorvu; this year, we focused on graduate students and postdocs. We worked with Poorvu to understand what level of engagement the SEAS community has had with their workshops over the past two years, and we are pleased that our partnership efforts with Poorvu seem to have resulted in increased participation for each SEAS constituency.

<i>Poorvu workshop participation</i>	<b>SEAS Faculty</b>	<b>SEAS grad students</b>
<b>2020-21</b>	18 faculty; 31 engagements	
<b>2021-22</b>	27 faculty; 38 engagements	9 grad students
<b>2022-23</b>		19 grad students

**Ivy Collective.** In addition, Yale Engineering partnered with the other Ivy Engineering schools to put on our first [Ivy Collective Symposium](#), a conference that focused on “diverse voices as the fuel propelling us to the future of Engineering.” We are thrilled that we were able to sponsor two Yale graduate students to attend. In addition, one of our SEAS Chemical Engineering PhD alumna, Wambui Mutoru, was featured as a panelist.

#### ***Additional SEAS DEIB Accomplishments***

1. **Community Event Funding.** SEAS Dean’s Office provided \$5k to each department for community events.
2. **SEAS Faculty & Staff Welcome.** The traditional fall semester welcome in SEAS has been a faculty meeting. This year, it was a faculty and staff meeting, held on 8/30/22. We had ~100 attendees.
3. **Faculty hiring.** SEAS is hiring in all departments and posted to traditional job sites. In addition, as part of our efforts to broaden our applicant pool, SEAS created a unified job ad for the school and posted it to: NSBE, SHPE, AISES, and SWE
4. **Lactation Room.** SEAS spans 6 buildings. Prior to this year, we had one lactation room for these six buildings. This year, we established a second lactation room and worked with end-users to design it according to their preferences.



SEAS 2022-23 Faculty and Staff Welcome, August 30, 2023.

5. **Graduate Mentorship Program**<sup>\*\*</sup>. The same NSF supplement awarded to Professor Rebecca Kramer-Bottiglio, previously mentioned, is supporting a new women's mentorship program, launched spring 2023. There are seven enthusiastic women-identifying faculty and 40 eager women-identifying graduate students participating. At this point, all 40 graduate students have been matched to a faculty mentor. Funds are being provided to support interactions between the mentors and mentees.



SEAS Women's Mentorship Program Launch, March 9, 2023.

6. **Menstrual products.** We received a request from a member of our community to provide complimentary menstrual products in women's restrooms, as is done in other professional schools at Yale and in undergraduate dormitories. We are happy to report that we have been able to provide these products in some SEAS restrooms. This effort has been well received and we look to expand the project this fall to more SEAS buildings in our community.

<sup>\*\*</sup>This program is being evaluated by Dr. Meghan Bathgate, Poorvu Center Director of Educational Program Assessment.