



HSTEM

BEING HUMAN IN STEM

PHYS 107 / MB&B 107 / EDST 107

POSTER SESSION

APRIL 30, 2024 • TUESDAY, 2:15-3:15 PM • LOCATION: 17 HILLHOUSE, Rm 101

Students and instructors of the course *Being Human in STEM* (PHYS 107 / MB&B 107 / EDST 107) invite you to join us as we share the project work completed in this course. *Being Human in STEM* combines academic inquiry and community engagement to investigate how personal identity impacts the experience of learning spaces and communities within STEM. Final projects for the course are student-led and developed, with a focus on making a direct impact on the STEM experience of Yale students.

This year's projects explore inclusive teaching practices and resources, scientists stories, a DEIB resource hub, and mentoring networks.

Light refreshments will be provided.

POSTER ABSTRACTS

A BEGINNER'S GUIDE TO CLASSROOM BELONGING, EQUITY, AND INCLUSIVITY

Daraeno Ekong, Krupa Hegde, Madelyn Stewart

Improving recruitment and retention of underrepresented minorities in STEM has been a major focus of universities for at least the last two decades. A large obstacle to achieving diversity in STEM has been the classroom environment; the level to which students feel like they belong in STEM classes has been shown historically to correspond with retention of underrepresented minorities in STEM. We set out to create an instructor guide highlighting simple tips for improving a STEM classroom, focusing on the first day of class, group work, representation of figures, and accessibility. A digital version of the brochure has been shared with all departments; physical copies will be distributed and abbreviated posters will be hung around hubs of STEM buildings. We hope that this work intervenes on problematic dynamics in classrooms and begins to make classrooms more inclusive spaces.

ACADEMIC CLIMATE IN INTRODUCTORY STEM COURSES

Madison Houck, Irving Morris, Coryell Smith, Anavi Uppal

The goal of our project is to better prepare incoming Yale STEM TAs for the environment of intro-level STEM courses at Yale. Through an online survey and 1-on-1 interviews, we gathered stories, both positive and negative, about various undergraduates' experiences in introductory STEM courses. We then compiled these testimonies into an instructional zine, titled *Belonging in the 100s: Stories from Intro STEM at Yale*, which will be distributed to first-year graduate students during TA training in August/September. For each story highlighted in our zine, we propose intervention strategies that TAs could employ to support students in a similar situation. Overall, the project is designed to illustrate the climate of intro-level STEM courses from the student perspective and to educate TAs on how to support students in that environment.

IDENTITY-BASED MENTORSHIP FOR UNDERREPRESENTED STUDENTS IN STEM

Amanda Budejen, Eve Cohen, Angela Zhao

Many mentorship programs exist here at Yale directed at both undergraduates and specifically STEM majors. However, these programs tend to focus on providing advice on classes and research. We wanted to establish a service to match upperclassmen, graduate students, and faculty members with scientists in earlier stages of their studies and careers in order to provide role models, personal support, and research-based interventions for underrepresented groups in STEM. These groups include gender minorities, racial and ethnic groups, FGLI students, and members of the LGBTQ+ communities. Our trainings for our mentors included specific interventions for obstacles such as bias, stereotype threat, and imposter syndrome.

ACCESSIBLE AFFINITY IN YALE STEM: A CENTRALIZATION OF DEIB RESOURCES

Gabe Botros, Sophia Moore, Ray Wipfli

The goal of our project has been to work with the STEM departments at Yale to create specific pages filled with resources that promote diversity, equity, inclusion and belonging. Through our research, we had noticed that our peer institutions in the Ivy League and beyond have direct, clickable links on their websites that immediately bring prospective and current students to pages that promote diversity, yet many of Yale sites do not have this, or the links are buried deeper within the websites or are not emphasized pages of their own. So, we built lists of faculty, undergraduate inclusion and affinity groups, and on-campus resources that will be featured as direct links that are easily accessible from the home pages of the Yale STEM websites, as well as physical resources to be distributed to undergraduates. By doing so, STEM at Yale will have a point of access for all students who are looking for DEIB resources.

STEMMING FROM YOU: STORIES OF YALE SCIENTIST

Alexis Ball, Kelly Chen, Abigail Ojo

Our project is focused on scientist identity and we aim to share stories and advice from a diverse group of up and coming scientists and current scientists at Yale, with the hope that the Yale STEM community can be inspired by and see themselves in STEM at Yale.