

## **ChBE ARDEI Quarterly Update for Spring 2022**

**Summary:** We have made extensive progress in many initiatives wrapping up the 2021-2022 school year. As a result, we are taking the summer to continue working on projects while allowing time for much needed rest. We are excited for the sponsored C3 Symposium coming up and for our undergraduate resource team to run a workshop for a much broader ASEE/AIChE audience! Stay tuned for opportunities to get involved in the Fall!

**C3 Symposium:** We have been working on organizing the first annual Context, Connections, and Community Symposium (C3S) which is a career- and networking-oriented event designed to provide Northwestern graduate students and postdocs from diverse backgrounds the opportunity to showcase their scientific accomplishments and create an opportunity for them to network with industry professionals. **We will be hosting this event on Wednesday, July 13<sup>th</sup> on the Evanston campus.** We are excited to have keynote speakers from both technical and academic backgrounds, Dr. Sarika Goel (Honeywell UOP) and Prof. Kevin Soloman (UDel) respectively. In addition to an interactive poster session and student talks, attendees will be able to network with several invited industry/national lab representatives such as Dow Chemical, Braskem, GlaxoSmithKline, Argonne National Lab, The Heritage Group, and others.

**Undergraduate ARDEI Resources:** Over the Spring 2022 quarter, we continued to collect student survey data and faculty interviews on their experiences engaging with the ARDEI-context questions written by faculty after the workshops held in Summer 2021 and Winter 2022. The focus of the workshop was to develop homework problems that could easily be deployed in the current chemical engineering curriculum that incorporated questions or context directly related to ARDEI and social justice. One additional faculty member deployed a related lecture this quarter, data from that course was collected, and 10 faculty interviews have been conducted and are being analyzed for the IRB-approved study and manuscript in progress about the workshop and benefits of using these questions. The majority of the manuscript is written and, after finishing it pending interview analysis and write-up, we will submit the manuscript to *Chemical Engineering Education*. We also developed a website with the workshop contents (<https://sites.northwestern.edu/ardeiquestionworkshop/>), which will accompany the paper, so the materials are freely accessible and available to anybody who wishes to participate. We are also going to present this workshop at the 2022 ASEE/AIChE Chemical Engineering Summer School conference in July, where this conference is geared towards preparing new faculty for teaching roles. Finally, in Summer 2022, we will be hosting both the original workshop again and a new, second workshop for those who participated in the original workshop and want to continue editing their ARDEI-context problems and creating new ones.

**Graduate ARDEI Course Development:** After codifying the ARDEI content we have been developing into the updated two-part Professional Development course, we have been working to solidify the classes and prepare for the Fall. A TA has been selected through an application process. The faculty instructor and TA for the course will undergo customized training through the Searle Center in the upcoming months to be able to interact with students and course content in the best way possible. We are now in the process of setting up the Canvas page for the course and setting up the historical Professional Development sessions as well. We are excited to implement the first iteration of the course in the Fall!

**CYR Workshop:** We are actively working to prepare four new case studies for the Fall 2022 Contextualizing Your Research Workshop. Plan to attend this year's workshop the week of retreat; exact date and registrations will be announced soon. If you have attended the workshop in previous years, you will have a completely new experience for sure with brand new case studies produced by our team!

**Accessibility/Mental Health:** Throughout the Spring 2022 quarter, we worked closely with the faculty-led Graduate Student Experiences Committee to address a variety of key results and concerns identified via a survey of graduate students in Fall 2021. This led to several suggested changes to the advisor selection process that are being discussed by faculty. A variety of other suggestions in all areas related to graduate life are also being discussed; continued dialogues on these points will be encouraged. We are also working to produce an annotated guide to accessing mental health and accessibility resources both on campus and beyond for our community. Our goal is to share this guide by Fall 2022. We have several other actions in the planning stages, including working with the Professional Development course leads to improve the first-year mental health lecture and developing resources for faculty for accessible course design.

**Department Policies:** This initiative exists to evaluate existing policies affecting students, staff, and faculty including student milestone requirements, faculty hiring practices, tenure/promotion practices, and other important policies under the department control. As a starting point, we decided to focus on student milestone guidelines. In order to determine where improvements could be made, we worked with members of the Graduate Student Experience Committee to analyze the Graduate Student Experience Survey that was conducted last fall to assess the data. Now that the data has been assessed, we can move forward and use the findings to guide this initiative's action items.

**ARDEI Annual Seminar Series:** We are looking forward to the next installment of our seminar series next year – feel free to reach out with any speaker ideas!