# GRAND CHALLENGE SCHOLARS PROGRAM

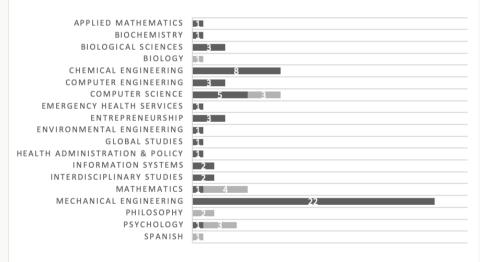
engaging students in problems that matter



In closing the academic year, we celebrated the completion of the program for four of our Grand Challenge Scholars. Connor Ganley, who was a member of the first cohort of GCSP (G1) will be pursuing his PhD in Chemical and Biomolecular Engineering at Johns Hopkins University. Emily Duan, from our second cohort (G2) will attend North Carolina State University to achieve her PhD in Mechanical Engineering. Stephanie Milani (G2) plans to seek a PhD in Machine Learning from Carnegie Mellon University. Lucas McCullum (G2) will undertake a M.S. in Computational and Mathematical Engineering at Stanford University focusing on Imaging Sciences. We wish them all well as they continue to pursue their academic careers.

Following the graduation celebration, the GCSP team had the opportunity to welcome the largest cohort of Grand Challenge Scholars to date. As a result of the recruiting efforts of GCSP staff and current scholars, we accepted 19 students into our 4th cohort (G4). The incoming cohort come from a diverse social and academic background, holding membership in other scholars' programs on campus (CWIT, Myerhoff and McNair) and academic focus in a range of disciplines. We look forward to the unique experiences that their perspectives will bring to our program and contribute to solutions in addressing the grand challenges.

## GC SCHOLARS- MAJOR & MINOR



■ Major ■ Minor



Top: GC Scholars - Major and Minor (the chart reflects some dual major scholars) Bottom: GCSP Graduates (left to right) Kiplyn Jones (Program Coordinator), Emily Duan (G2), Connor Ganely (G1), Lucus McCullum (G2), Stephanie Milani (G2), & Dr. Maria Sanchez (Program Director)

### The Royal Academy of Engineering, 2019 Global Grand Challenges Summit:

Last September, The National Academy of Engineering sponsored two of UMBC's scholars Michael LaScola (G3) and Randy Dienlein (G3) to attend the 2019 Global Grand Challenges Summit in London, England. During the summit, both students participated in the Collaboration Lab where they worked with students from several countries on a design challenge. Michael was a member of one of the finalist teams and presented their idea on managing consumer waste habits for both the producer and consumer to the summit attendees.



#### Alex Brown Center for Entrepreneurship, 2019 Idea Competition:

Elyssa Ferguson (G4) is a member of the incoming cohort of Grand Challenge Scholars and was recently recognized as second prize winner in the annual Idea Competition held at UMBC. Elyssa presented her product, The Braid Saver, which is an automatic braiding and twisting tool that styles hair and eliminates the need to intertwine sections of hair by hand.



Top: Michael LaScola (G3) with his team at the 2019 Global Grand Challenges Summit. Bottom: The winners of the Idea Competition from left to right: Niky Sicilia, Laura Holland, Elyssa Ferguson (G4), Emma Neubert. Photo courtesy of the Alex Brown Center for Entrepreneurship.

#### Annual Provost's Teaching & Learning Symposium:

The GCSP team also presented their efforts to evaluate program components. Because the UMBC program has such a complex and rich set of experiences, it necessitates a multi-faceted approach toward program evaluation. During the symposium the team presented a mixed-method approach for evaluation of the program, including pre- and post-surveys, iterative writing exercises, and well established concept inventories to understand students' experiences and assess their achievement of the learning objectives.

#### **Student Testimonials**

The Grand Challenge Scholars Program has a variety of drawing factors, but the ability to impact the world is the one that means the most to me. The world today faces a variety of problems, which need to be addressed by anyone willing to take on the challenge. This program is a way to meet people with the same vision of bettering the world, and it allows people with different experiences and backgrounds to meet and work together.

-Elizabeth Emberger (G4)

During the Collaboration Lab, I was able to meet with other motivated and passionate students from the US, UK, and China, who are working towards a brighter future for all upcoming generations. We brainstormed ideas and developed business models that could solve one or more of the NAE 14 Grand Challenges or the UN Sustainable Development Goals.

-Michael LaScola (G3) Global Grand Challenges Summit

# **Upcoming Events**

In the coming semester, the program plans to recognize thirteen graduating scholars spanning two cohorts for our GCSP Celebration. The program is looking for future scholars that would be motivated to join the program. We would appreciate your attendance at any of the events and any efforts to share the opportunity of becoming a future scholar with your networks.

- GCSP Information Session April 02, 2020
- GCSP Application Due Date April 20, 2020
- GCSP Celebration May 20, 2020

