

Project SEED 2023

By Sue White

The Detroit Local Section Project SEED program ran successfully from 1991–2021 under Project SEED Coordinator Dr. Keith Williams. In 2022, Detroit did not have a Project SEED program. One of my goals as Detroit Section Chair was to reestablish the Detroit Local Section Project SEED program as an in-person research opportunity. The 2020 and 2021 programs were virtual due to the pandemic.

Project SEED was implemented nationally by the American Chemical Society (ACS) in 1968 and has grown over the last 53 years to provide summer research experiences (8–10 weeks) and virtual summer camps to more than 12,000 students, in 40 states, and in more than 350 locations over the years. Project SEED's mission is: "to provide sustained STEM research, learning, and growth opportunities for high school students with diverse identities and socioeconomic backgrounds so they can be empowered to advance and enrich the chemical science enterprise."

<https://www.acs.org/education/students/highschool/seed.html>

This year the Detroit Local Section sponsored four Project SEED Scholars under the direction of their principal investigators Dr. Alice Walker, Dr. Long Luo, Dr. James Bour, and Dr. Charlie Fehl. The scholars included Muhammad Alim (Walker Lab), Arriea Bonds (Luo Lab), Arensa Fejzulla (Bour Lab), and Nasma Ibrahim (Fehl Lab). In addition to the principal investigators, the Project SEED scholars had post-doctoral researchers and graduate students as mentors in their labs. An additional high school summer research student, Katherina Mandia (Fehl Lab), participated the Project SEED activities but was not officially in the program and was not paid.

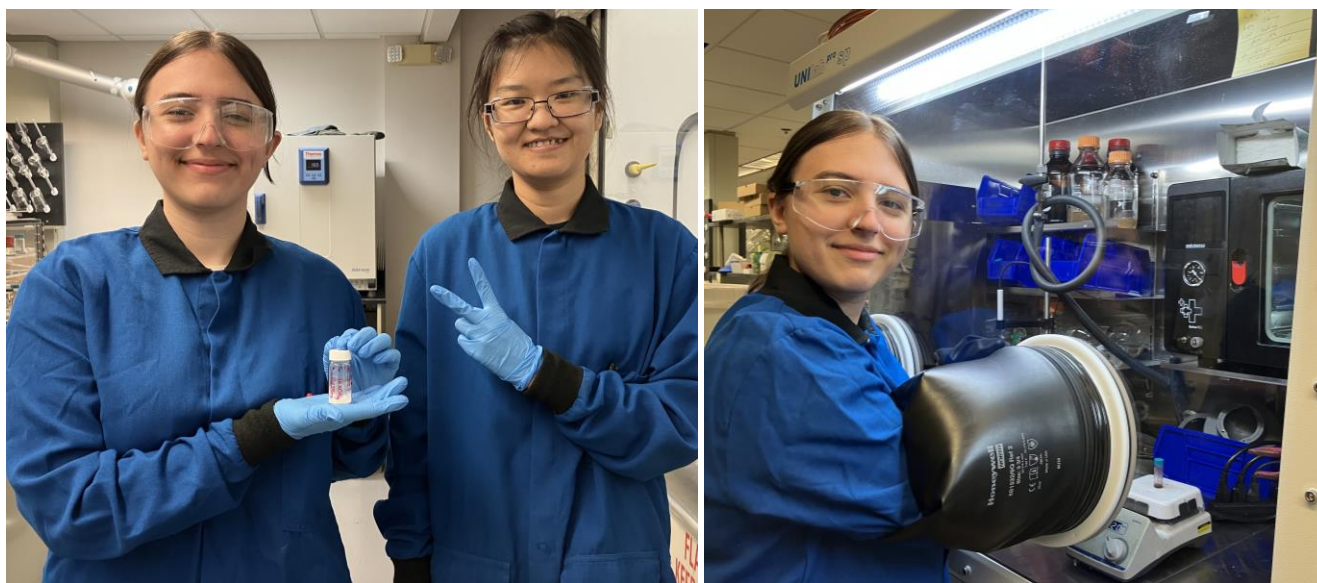
The 2023 Project SEED program ran from June 26–August 24 at Wayne State University Department of Chemistry and was co-coordinated by Sue White, Dr. Sibrina Collins, and Dr. Keith Williams. Almost all the Project SEED Team members were new to Project SEED and we worked hard to provide extra activities on top of the laboratory research experience. We had seminars and workshops on keeping a lab notebook (Fehl), laboratory safety (White), research ethics (Bour), and a journal club on *Black Panther, Vibranium, and the Periodic Table* (Collins, *J. Chem. Educ.* **2018**, *95*, 1243–1244). Additionally, the students received substantial virtual training from ACS and attended ACS seminars once a week. Furthermore, the summer research students had regular meetings with Co-Coordinator Sue White, lunches, a pizza hangout with their research mentors and the WSU ACS student chapter, liquid nitrogen ice cream training, and a farewell pizza party with everyone involved in the program. And finally, Arriea Bonds, Arensa Fejzulla, Nasma Ibrahim, and Katherina Mandia came back to WSU Chemistry and presented their summer research as posters at the WSU Chemistry Undergraduate Research Symposium on September 29.

A post-summer research poll was sent out to get feedback on our program to all participants and will be used to build on this year's success for future Project SEED programs. Overall, we received positive feedback from the scholars, principal investigators, mentors, and coordinators as well as many good suggestions for future programs. The Project SEED Team was pleased to have a successful, in-person, Project SEED program back in the Detroit Section.

Project SEED Pictures:



Luo Lab: Project SEED Scholar Arriea Bonds and mentor Dr. Rajendra Maity.

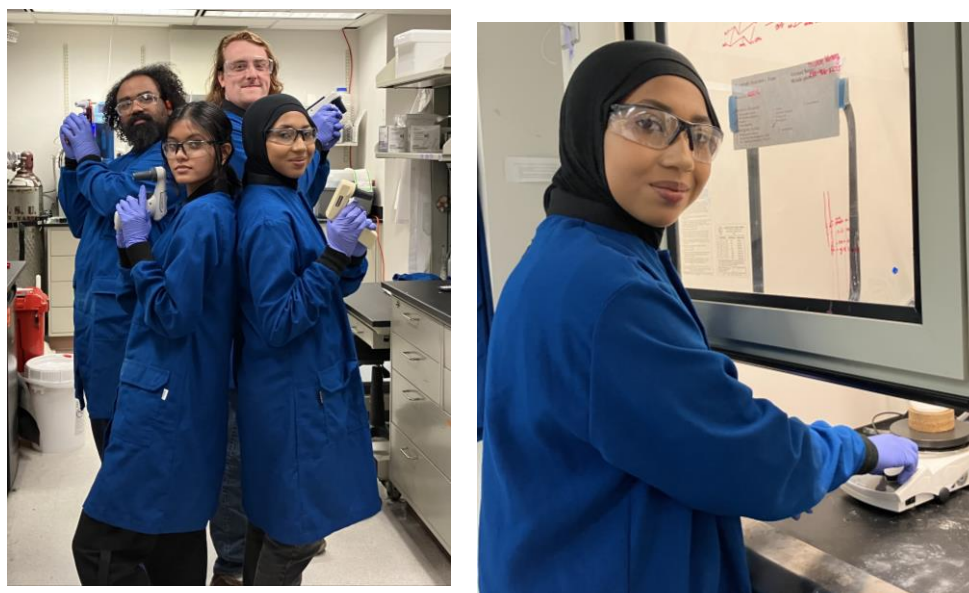


Bour Lab: Project SEED Scholar Arensa Fejzulla and mentor Shuxiao Li.

Walker Lab: Project SEED Scholar Muhammad Alim and mentor Dr. Alice Walker.



Fehl Lab: Project SEED Scholar Nasma Ibrahim (front right) with summer research student



Katherina Mandia (front left) and mentors Garry Leonard (back left) and Daniel Corey (back right).

Project SEED Summer Research Group Photo



Back Row: Daniel Corey, Dr. James Bour (PI), Dr. Alice Walker (PI), Dr. Long Luo (PI), Dr. Charlie Fehl.

Front Row: Arensa Fejzulla, Nasma Ibrahim, Katherina Mandia, Arriea Bonds, Sue White, and Dr. Rajendra Maity.

Absent: Muhammad Alim, Garry Leonard, Shuxiao Li, Dr. Sibrina Collins, and Dr. Keith Williams.

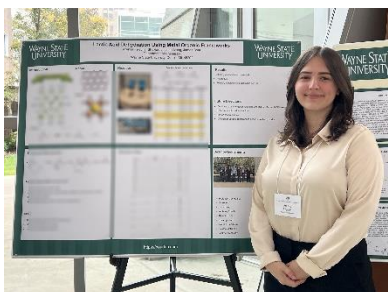
Liquid Nitrogen Ice Cream with the WSU ACS-Student Affiliates



Left to Right: Angela Belanger, Arensa Fejzulla, Nasma Ibrahim, Sue White, Arriea Bonds, Isa Ahmed, Mahmood Khattab, Matthew Maliskey, Dr. Tom Kuntzleman, Maddy Powers, and Elizabeth Ballmann.



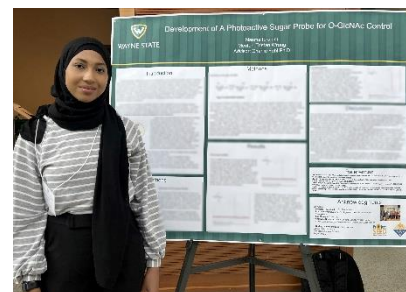
Undergraduate Research Symposium



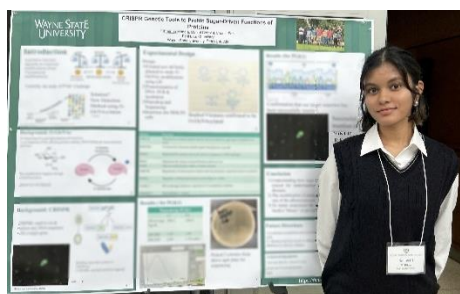
Arensa Fejzulla



Arriea Bonds



Nasma Ibrahim



Katherina Mandia