

CISTAR13-D-Underrepresented_DL

Reaching and Inspiring Minority Students to Participate in CISTAR Research and Mentoring

Outcome/accomplishment: Engineers sought to include and encourage students from populations underrepresented in engineering to conduct research through a mentoring program at the Center for Innovative and Strategic Transformation of Alkane Resources (CISTAR), an NSF-funded Engineering Research Center (ERC) based at Purdue University.

Impact/benefits: Surveys and interview data demonstrate the effectiveness of the six-week programs in getting students excited about research, networking, and improving their research skills. For example, the students expressed interest in doing more research, higher motivation in pursuing advanced degrees, and more interest in energy-related fields.

Explanation/ background: The program in Research Experience and Mentoring (REM) was funded with a supplemental grant of \$110,000. In designing and conducting the experience, CISTAR has for several years partnered with the National Society for Black Engineers.

Fourteen STEM students spent six weeks doing research with CISTAR mentors and then four weeks “giving back” by mentoring kids in virtual camps. CISTAR research projects were centered this year around a common theme: “Energy for Our Growing World,” which inspired and connected students. Two Purdue virtual programs were leveraged to provide additional professional development and networking opportunities. An Industry program with speakers, tours, and mentors was added this year, creating a wide, supportive community of industry professionals. Videos were created that show how positively the REM participants viewed the 2021 virtual program. (See <https://erc-assoc.org/content/students-describe-mentoring-experience-videos-also-help-tell-cistar%E2%80%99s-story>.)



A poster of the 2021 Summer REM Participants (Credit: CISTAR)