Eddleman Quantum Institute hosts summer program for underrepresented students

The program introduced undergrads to STEM fields, including quantum science.
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Undergraduate attendees of the RERCSS summer program, alongside some of their instructors, standing in front of the Science History Institute in Philadelphia. For many of the undergrads, this was their first time attending a scientific conference.

Picture Credit:

Jerome Robinson

First, a chance meeting between a journalist and Professor Bill Evans of the UCI Department of Chemistry led to a magazine story. Then, that story inspired the late philanthropist Roy Eddleman to found the Eddleman Quantum Institute (EQI) in the UCI School of Physical Sciences – an institute dedicated to furthering advances in quantum science as well as rare earth chemistry.

Now, EQI just helped 22 undergraduate students, many from underrepresented groups, travel to Philadelphia for the Rare Earth Research Conference Summer School (RERCSS). Over the course of two days at the Science History Institute, the students met and learned from scientists who are leaders in the fields of quantum science and rare earth elements — elements used in everything from smartphones to electric vehicles— and then attended the Rare Earth Research Conference itself.

Like the story that sparked the creation of EQI, the scientists behind the program – Professor Evans and Brown University's Professor Jerome Robinson – wanted to give students who may otherwise never hear about these fields the chance to explore them so that, perhaps, another spark might inspire them to pursue a graduate education in STEM. "How do students get hooked on science?" asked Robinson. "How do they get introduced to these topics?"

To create conditions where sparks could fly, Evans and Robinson developed a two-day program that pulled in a diverse student-body from across the country. In addition to being one of their first exposures to rare-earth chemistry, Professor Robinson said that this was the first opportunity for most of the students to attend a scientific conference.

"I really loved it," said Grace Farrell, who's an undergraduate at Morgan State University in Maryland who attended RERCSS. Farrell described how she plans to study astrophysics in graduate school, and that her time at the summer program, particularly its emphasis on quantum science, helped her see her ambitions in a new light. "It does change how I want to do astrophysics," she said.

Another attendee, University of Nevada, Reno undergraduate Jesus Diaz-Sanchez, who already works on rare earth elements in a lab at UNR, described what it was like to meet like-minded scientists. "It's really cool to talk about it with people who can understand you," he said. "It opened up my eyes."

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