

Mission-focused Mentoring of PREM Undergraduates

Penn State MRSEC and North Carolina Central University PREM

- The undergrad→graduate transition is a critical stage in the career pathway for underrepresented students.
- Working with NCCU faculty, **key “grad school readiness” courses** were identified in which high performance predicts success in the transition to grad school.
- MRSEC grad students acted as **course mentors** in these courses, meeting weekly with NCCU students and reinforcing mastery of key topics; Course mentors received a stipend boost to recognize their efforts.
- Students made immediate connections to their own research and resonated with learning from peer mentors close to their own age.
- The program expanded to include a spectroscopy minicourse focused on technique explanations and the analysis of each student's own data taken in the lab.



Above: NCCU students engaged in a tutoring session
Left: PSU student mentors Matt Krebs and Kaitlyn Pasquarella

Student Feedback:

“I enjoy being able to see the material in a different way so I can choose whichever method works better for me.”

Mentor Feedback:

“I reinforced my understanding of advanced topics in these courses, sharpened my skills in instruction for physics and mathematics, and developed my abilities to communicate and connect with my students.”