

**PROMoting Sustainable Partnerships in Education and Research (PROSPER):  
Education and Workforce Development  
Distributed Research Experience for Undergraduates (dREU)**  
Shireen Alemadi – dREU Coordinator; ND EPSCoR State Office STEM Manager

<i>Award Title:</i>	New Discoveries in the <b>Advanced Interface of Computation, Engineering, and Science: ND-ACES</b>
<i>NSF Award Number:</i>	OIA-1946202
<i>Principal Investigator:</i>	Kelly A. Rusch, Ph.D., P.E., BCEE
<i>Lead Institution Name:</i>	North Dakota State University
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**What is the outcome or accomplishment?** Five dREU undergraduate student researchers are working with ND-ACES faculty from Mayville State University (MSU) and North Dakota State University (NDSU). The photo below is from a weekly professional development meeting with the dREU Coordinator. [Top row from left to right: Madison Koppelman (NDSU), Taylor Stegman (MSU), and Hayle Boechler (MSU). Bottom row from left to right: Ansley Schug (NDSU), Megan Heeren (NDSU), and Shireen Alemadi (ND-ACES dREU Coordinator).]

**What is the impact?** dREU participants gain valuable, hands-on research experience working with NSF RII Track-1 research faculty at their home institution, while contributing to statewide scientific knowledge of the Center for Cellular Biointerfaces in Science and Engineering. Students also gain professional development skills as a remote cohort through weekly meetings with the dREU Coordinator and invited presenters who cover topics such as: Case Study discussions on Responsible Conduct of Research, Graduate School opportunities, best practices for resumes and cover letters, Science Communication, and more.



**What explanation/background does the lay reader need to understand the significance of this outcome?** NSF EPSCoR’s goal is to broaden the participation of underrepresented and underserved populations in STEM. Examples of some of these groups include women, American Indians, rural populations, economically disadvantaged, and first-generation college students. Often relocating for a traditional REU experience can be a barrier for these students. Due to the success of a past dREU RII NSF Track-1-funded program, ND EPSCoR chose to continue the dREU for ND-ACES students. This opportunity allows students to gain research experience and professional development skills that will help them when pursuing a STEM graduate degree or a STEM career.