#### ND EPSCoR

### **Education and Workforce Development:**

# Distributed Research Experience for Undergraduates (REU) James M. Nyachwaya, Ph.D.

Award Title	INSPIRE-ND
NSF Award Number:	OIA-1355466
Principal Investigator:	Kelly A. Rusch, Ph.D., P.E.
Lead Institution Name:	North Dakota State University
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#### What is the outcome or accomplishment?

12 students have participated in REU research at various institutions in North Dakota. These students have presented at state EPSCOR meetings in the last two years. The pictures below show some of the REU students with NSF EPSCoR Section Head, Denise Barnes, and their mentors at the 2017 ND EPSCOR Annual State Conference.



From left to right: Hayden Zander and his Valley City State University mentor, Andre DeLorme; Billi Jean Petermann and her Dickinson State University mentor, Erik Brevik; Levi Bassett and his DSU mentor, Joshua Steffan; NSF EPSCoR Section Head Denise Barnes; Minot State University's Mikhail Bobylev and his mentee, Breanne Hatfield and University of North Dakota's Qianli 'Rick' Chu (his mentee, Quintin Elliott, is not pictured)

#### What is the impact?

In addition to contributing to science through their work, the students have gained valuable experience in conducting research, as well as knowledge about graduate school research options and opportunities. Five of the twelve students are either currently in, or will be starting, graduate school in the fall semester of 2018 (three are starting this fall).

## What explanation/background does the lay reader need to understand the significance of this outcome?

One of the goals of the education department at the federal level as well as state departments of education is to broaden participation of minority groups in STEM. Such groups include Native American, women, and first-generation students, among others. Conducting research across all post-secondary levels can be problematic because of the lack of access to funding. The National Science Foundation (NSF) through ND EPSCOR provided funding for the distributed REU, which made it possible for students at various institutions across the state to conduct research. This experience was instrumental in these students' decision to attend or pursue graduate school. NSF has therefore been an integral part of this outcome.

ND EPSCOR aims to establish and facilitate a STEM pipeline from the tribal colleges and fouryear institutions in the state, to inform and encourage students from those institutions to consider NDSU or UND for their graduate studies. One of the five students will be joining NDSU this fall for his graduate studies.