

**PROMoting Sustainable Partnerships in Education and Research (PROSPER)  
Broadening Participation:**

**Nurturing American Tribal Undergraduate Research and Education (NATURE)**

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<i>Award Title:</i>	<b>New Discoveries in the 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?**

In response to COVID-induced quarantine, the ND EPSCoR State Office converted its 2020-21 NATURE Sunday Academy from an in-person STEM outreach program into an at-home asynchronous STEM outreach program by creating 140 STEM activity kits, which were delivered directly to the homes of middle- and high-school participants throughout the state.

**What is the impact?** This change in program delivery has enabled American Indian high school students to continue to be engaged in extracurricular culturally-based STEM activities despite being confined to their homes.



Jody DeLong Jr. (age 14) applying a sample to an agar plate during the 12/2020 microbiology activity.

**What explanation/background does the lay reader need to understand the significance of this outcome?** One of four components in the ND EPSCoR State Office NATURE program, the Sunday Academy activity traditionally consists of TCU faculty, RU faculty, cultural experts, and K-12 teachers gathering American Indian students at TCU campuses on one Sunday of each month to engage them in culturally-based STEM activities. The COVID-19-induced quarantine prevented in-person gatherings and challenged this group to rethink and recreate Sunday Academy in a form that would continue to engage American Indian youths throughout the state in STEM activities despite being confined to their homes. Asynchronous STEM activities that could be completed at home were developed.