2016-2017 4-H STEM PROGRAM WORK TEAM ANNUAL REPORT

1. **Full name of your Program Work Team (PWT):**
   
   4-H Science, Technology, Engineering and Math Program Work Team

2. **Please identify your PWT’s greatest accomplishments over the past year.**

   **Campus Retreat: 4-H STEM Cornell Campus Crawl**

   4-H STEM educators were invited to campus to meet Cornell campus resource staff in their labs and to learn about supplies and equipment available to 4-H. Thirty-five educators registered to attend a total of five lab experiences. In addition, lightning talks were offered to provide a snapshot of three additional campus and county programs available to educators. Participants were provided with a flash drive containing published resources and take home references.

   **Lab Experiences**
   - 4-H Polymers
   - Cornell Center for Materials Research Library
   - Cornell Institute for Biology Teachers
   - Program for Research on Youth Development and Engagement (PRYDE)
   - Xraise, Wilson Laboratory

   **Lightning Talks**
   - Cornell Garden-Based Learning
   - NYS 4-H STEM Resources
   - Youth, Nature, and Outdoor Education PWT

   **4-H STEM/Library Partnership**

   The 4-H STEM PWT supported 4-H Educators with integration of 4-H STEM activities and curriculum into the New York State Library Summer Reading Program. Relating to the Collaborative Summer Reading Program theme of “Build a Better World,” the 4-H curriculum “Earthquake! Beyond Duck, Cover and Hold” was reviewed by Bonnie Peck, CCE Schenectady. Activities to demonstrate the science of earthquakes and the engineering of structures were excerpted and distributed to all 4-H Districts in New York. The earthquake type activity is demonstrated with Slinky toys. The PWT provided a set of Slinkys to each district.

   Many 4-H educators work with local libraries and the collaboration is enhanced by 4-H STEM PWT support materials. Additionally, the PWT campus co-chair co-sponsored with CCE Ontario, a CALS-CCE Summer Intern to bring the program to all 42 libraries in the Pioneer Library District and document best practices.
2017 4-H National Youth Science Day Challenge

The 4-H STEM leverages the 2017 4-H National Youth Science Day (NYSD) Challenge to engage audiences new to 4-H and bring new STEM content to long time members. We “seed” New York CCE Association 4-H programs with NYSD kits. We purchase the kits and distribute them as early as possible to allow educators to familiarize themselves and take best advantage of training programs provided at the national level. Most counties then go on to purchase more kits to meet their constituent program.

This year’s kit “Incredible Wearables” was developed by University of Nebraska, with the National 4-H kick-off event was held at PS 21 in Brooklyn, NY. Several 4-H STEM PWT members traveled to support the event with technical expertise and enrichment activities.

4-H Science Sampler at Cornell

The 4-H Science Sampler Day was held in November of the 2017-2018 program year. Planning for the 4-H Science Sampler at Cornell began in the 2016-2017 program year. With a target audience of middle school aged 4-H youth, a day of programming on campus for hands-on science exploration was planned by 4-H STEM PWT members. It was based on a pilot event held several years ago. The response was very positive and as a result, another Sampler Day will be planned in this program year for November 2018. Sixty percent of participants completing the event survey said Science Sampler Day was excellent. Participants especially valued the hands-on learning experiences in the workshops and the opportunity to be at Cornell.