

Vermont EPSCoR Center for Workforce Development and Diversity

Veronica Sosa-Gonzalez, PhD – CWDD Coordinator

Declan McCabe, PhD – CWDD Faculty Member

All Hands Meeting

June 12, 2018

VT EPSCoR BREE

Center for Workforce Development and Diversity



Research component organized
in groups by discipline



Outreach and science
engagement component

Center for Workforce Development and Diversity

The VT EPSCoR Center for Workforce Development and Diversity works to cultivate and prepare students in science (including social science), technology, engineering and math (STEM) fields. Through integrating students and teachers into active research we inspire students to pursue STEM careers.



Programs

- Middle School
 - Outreach Visits
 - *VT Works for Women – Rosie's Girls*
 - *Trout Unlimited – Trout in the Classroom*
- Macroinvertebrate Workshops
- High School Research
- Undergraduate Internship
- Scholarships
- Symposium



Middle School

- Classroom visits
 - Focused on water quality
 - Adapted to curriculum
- *Rosie's Girls*
 - *Summer day camps in carpentry and welding*
 - *Subsidize the cost of the program for all girls*
 - *Offer scholarships when family can't afford the program*
 - *67 girls attended in 2017, 35 got scholarships*
- *Trout in the Classroom*
 - *Students raise trout from egg to fingerlings*
 - *Release fish into local stream*
 - *Study stream habitat*
 - *Strengthen our Middle School Teacher network*
 - *We are financing one tank, doing fieldwork outreach with other schools in the program*



High School program

- Teacher-students team
- 1-week training in the summer
- Sampling June – November
- Data analysis
- Present at Research Symposium
- Stipend for teacher and equipment
- 2018-2019
 - 23 teams applied; 17 accepted
 - 8 VT teams, 5 MA teams, 4 PR Teams



Undergraduate Internship

- 1-week orientation; 9 weeks of research
- Late May to early August
- Integrated into BREE research teams
- Attend workshops during the summer
- Present results at Spring Symposium
- 2018 – 2019
 - 211 applicants; 19 accepted
 - Home institutions: University of Vermont, St. Michael's College, Middlebury College, Norwich University, Universidad de Puerto Rico, Universidad Metropolitana, Universidad del Turabo, Northern Arizona University, Duquesne University, University of Florida, Hunter College



Mentor training

- All mentors trained
 - Aligning expectations
 - Working with diverse students
 - Develop internship plan
- National Research Mentoring Network Certified Facilitator
 - Provide materials for the training
 - Survey for implementations



Scholarships

- \$5,000 towards tuition costs
- Vermont native
- First Generation and Native American students
- Declared STEM Majors in VT Institutions
- 2018
 - 42 applicants
 - 5 recipients
 - 3 from University of Vermont, 1 from Norwich University 1 from Vermont Technical College



Student Research Symposium

- Capstone event for High School and Undergraduate programs
- Oral and poster presentations
- Spring after research is done
- 2018 Symposium
 - 34 High School students presented
 - 29 Undergraduate students presented



Recruitment - Conferences

- Society for Advancement of Chicanos and Native Americans in Science (SACNAS)
- Annual Biomedical Research Conference for Minority Students (ABRCMS)



Recruitment – Talks

- Puerto Rico
 - Universidad de Puerto Rico
 - Universidad Metropolitana
 - Universidad del Turabo
 - Universidad del Este
- Institutions near the National Meetings
 - Phoenix College
 - Arizona State University
 - Northern Arizona University

