



Welcome to the 2019 Vermont EPSCoR Undergraduate Research Symposium



Thank you for a successful year of BREE
Your passion and dedication make this event
possible!

August 1st, 2019

2:00 - 7:30 pm

Main Street Landing
Burlington, Vermont





2019 VT EPSCoR Undergraduate Student Research Symposium

Agenda

2:00 Registration

2:30 Welcome and Introduction to BREE

Dr. Arne Bomblies, State Director, VT EPSCoR

Dr. Veronica Sosa Gonzalez, Coordinator, VT EPSCoR
Center for Workforce Development and Diversity

3:00 Scholarship Ceremony

Dr. Arne Bomblies, State Director, VT EPSCoR

Ted Brady, Deputy Secretary, VT Agency of Commerce
and Community Development

4:30 Oral Presentations

5:15 Poster Session

6:30 Dinner



Scholarship Recipients

First Generation Scholarship

William Li, University of Vermont

Major: Civil Engineering

Lexus Pattershall, University of Vermont

Major: Environmental Engineering

Ryland C. Richardson, Norwich University

Major: Mechanical Engineering

Tracee Turnbaugh, Castleton University

Major: Computer Information Systems

Native American Scholarship

KC Herne, Norwich University

Major: Biology

Stiles Loper, Community College of Vermont - Rutland

Major: Health Sciences

Katie Lucier, Northern Vermont University - Johnson

Major: Biology



Oral Presentations

4:30-5:15pm

- 4:30 Ann Marie Matheny, Maike Holthuijzen, Indiana University
Assessing the effectiveness of empirical quantile mapping for bias correcting historical extreme temperature projections from a climate model
- 4:40 Julyanice Cruz, Stephanie Drago, Rebecca Diehl, Don Ross, Beverley Wemple, St. Michael's College
A spatial investigation of floodplain deposition in the Lake Champlain basin of Vermont
- 4:50 Mariana C. Delpin Sosa, Wilton Burns, Luis Esbrí Ruiz, Andrew Schroth, Universidad Ana G. Mendez
Understanding the community dynamics, timing, and intensity of the 2017 and 2018 cyanobacteria blooms in two shallow eutrophic bays in Lake Champlain
- 5:00 Jack Goldman, Brittany Lancellotti, University of Vermont
An analysis of greenhouse gas fluxes across landscape positions in forested riparian buffers



Poster Presentations

5:15-6:30pm

1. Anna Singer, Patrick Bitterman, Chris Koliba, University of Delaware
The central role of state agencies in Lake Champlain water quality governance
2. Alex Howe, Kevin Andrew, University of Vermont
Modeling deforestation and land cover transitions in the Lake Champlain Basin
3. Pamela Garcia, Brittany Lancellotti, Universidad de Puerto Rico
Impacts of land use and landscape position in denitrification rates during snowmelt period
4. Sarimar W. Cuevas Hernandez, Elizabeth Doran, Universidad de Puerto Rico
Evaluating BRAT: A tool to predict castor canadensis habitat to determine nature-based wetland restoration potential in Vermont
5. Giorgio Sarro, Caitlin Crossett, Lesley-Ann Dupigny-Giroux, University of Wisconsin
Meteorological predictors of droughts in Vermont, New Hampshire and Eastern New York
6. Raquel Lugo-Bendezu, Scott Hamshaw, Donna Rizzo, Mandar Dewoolkar, Universidad de Puerto Rico
Analysis of suspended sediment and discharge hysteresis patterns using classification tests



7. Luis A. Esbrí Ruiz, Wilton Burns, Mariana C. Delpin Sosa, Andrew Schroth, Universidad de Puerto Rico
A comparative analysis of nutrient dynamics and their drivers in Missisquoi and Saint Albans Bays of Lake Champlain.
8. Connor Zwonik, Maike Holthuijzen, University of Vermont
Assessing the effectiveness of empirical quantile mapping for bias correcting historical extreme precipitation projections from a climate model
9. Kerien Lopez-Aquino, Diego Rodriguez-Steinhardt, Clare Ginger, Richard Kujawa, Universidad de Puerto Rico
Resilience to extreme events: An analysis of local hazard mitigation based on state of Vermont priorities
10. Mathew Koretsky, Jesse Gourevitch, University of Vermont
Effects of water quality changes on property values along the Lake Champlain shoreline
11. Grady Jakobsberg, Jesse Gourevitch, University of Vermont
Effects of water quality changes in Lake Champlain on Vermont state park visitation
12. Ellie Sovcik, Dustin Kincaid, Erin Seybold, Carol Adair, Andrew Schroth, University of Vermont
Influence of the Missisquoi river wetland complex on riverine nitrogen and phosphorus cycling under different flow regimes
13. Mariah Cronin, Julia Petty, Erin Seybold, Dustin Kincaid, Carol Adair, Andrew Schroth, University of Vermont
Groundwater phosphorous dynamics along a riparian buffer

Thank you for a great summer of research!



2019 BREE Undergraduate Interns

Home institutions:

University of Vermont, St. Michael's College, Universidad de Puerto Rico, Universidad Ana G. Mendez, Indiana University, University of Wisconsin, University of Delaware

