7th Annual Undergraduate Research Conference
Saturday, September 23, 2017

2017 Schedule

Skidmore College
Saratoga Springs, NY

Presentation Abstracts are at newyork6.org/students/resources
9:00-9:30 am  Arrivals and Breakfast
Lobby of Gannett Auditorium, Palamountain Hall

9:30-9:45 am  Welcoming Remarks
Beau Breslin, Dean and Vice President for Academic Affairs, Skidmore College
Gannett Auditorium, Palamountain Hall

9:45-10:45 am  Oral Presentations  (4 locations)

**Palamountain 201**
Zongliang Ji, Union College, 2019, Computer Science & Math, Explore Fast Multiplication Algorithms
Giorgos Petkakis, Skidmore College, 2018, Computer Science, Mining Code in Search of Reason
Omar Beesley, Spencer Woolfson, Hamilton College, 2020, Math and Physics, Methods for Quantifying Gender Bias in Text
Natasha Turyasingura, St. Lawrence University, 2018, Biochemistry, The role of USP8 in lymphocyte activation

**Bolton 280**
Veronica Mierzejewski, Skidmore College, 2019, Chemistry, Design and Development of a Novel Antibiotic: a GatCAB Inhibitor
Anne Buck, St. Lawrence University, 2018, Biochemistry, Progress Towards Efficient Synthesis of Morphe Analogue Using the Wagner-Jauregg Reaction
Kaitlyn Rodriguez, Colgate University, 2017, Molecular Biology, Serine Hydroxymethyltransferase Isoforms are Adapted for Plant Stress Response
George Chakalos, Laura Noejovich, Skidmore College, 2018, Neuroscience, Charting the Uncanny Valley

**Bolton 281**
Lily Capstick, Hamilton College, 2018, Sociology major, creative writing minor, Exploring the Value Transformations of Ex-Tigistes in Rwanda: The Case of TIG
Yohary Fabian, Colgate University, 2018, Spanish; Elisa Smith, Skidmore College, 2018, Social Work; Sydney Keane, Union College, 2018, Neuroscience; Kristen St. Andrews, Union College 2018, Biology; Community, Action, Research, and Education (C.A.R.E) Program

**Bolton 282**
Ana Sosa, Skidmore College, 2018, Sociology, Identifying The Haitian Second Generation
Ruby Thompson, Skidmore College, 2018, Sociology, To Be or Not To Be: Ethnic Identity For Second Generation West Indians
Sabrina Callender-Clewett, Colgate University, 2019, Environmental Economics / Philosophy, Débrouillardisme: Martinique’s Past, Present, and Future
**Palamountain 202**

Bridget Lavin, Hamilton College, 2018, Theatre and Women’s & Gender Studies, Speaking Out: How Documentary Theatre Provides a Voice to Sexual Assault Survivors

Priyadarshinee Dhawka, Colgate University, 2019, Computer Science; Annie Wang, Colgate University, 2019, History, Multilingual Experiences of International Students at NY6 Campuses

Benjamin Ringel, Colgate University, 2018, International Relations & Spanish, Apartheid South Africa Manipulates its Nuclear Program for Political Gain

Elizabeth Dunne, Hobart and William Smith Colleges, 2019, Refugee Studies, Detention Centers and the Rights of Migrants in EU today
**10:50-11:55 am**  
**Poster Session #1**  
(3 locations)

**Bolton 280**

Shivam Tewari, Sarah Sveen, Hobart and William Smith Colleges, An Initial Investigation into the Development of Desalination Methods for the Stennett Research Lab

Sampriti Thapa, Skidmore College, 2018, Biochemistry, Effect of Cullin-5 Protein on Conformational Flexibility of HIV-1 Vif Protein

Charrmaine Bing Bing Chung and Jasmine Jackson, Hobart and William Smith Colleges, Biochemistry, Effects of Macromolecular Crowding on Enzyme Kinetics

Hannah Forman, Hongwei Yu, Skidmore College, 2019, Biochemistry, Expanding the genetic code with pyroglutamate

Aaron Beguelin, Hamilton College, 2018, Biology, The gut microbiome of two sympatric species of sea urchin from two locations in Fiji: Does geographic location or sea urchin specificity result in differences between gut microbiomes?

Jessica Gilbert, Union College, 2018, Biology, The Impact of Biological Soil Crusts on the Success of Seedling Germination in the Albany Pine Bush Preserve

Yao Xiao, Skidmore College, 2019, Chemistry, Daytime and Nighttime Atmospheric Processing of US Fly Ash

Gabrielle Mascarin, Skidmore College, 2018, Biology, The impacts of N-acetyl-L-Cysteine on the cell well of Penium margaritaceum

**Bolton 281**

Michelle Taylor, Tessa Ruff, Colgate University, 2018, Cellular Neuroscience, Effects of antidepressants on nitric oxide production by microglia and astrocytes

Giovanny Dominguez, Hamilton College, Chemistry, 2018; Mackenzie Morshead, Hamilton College, 2018, Biochemistry and Art, Synthesis and antimicrobial evaluation of 3-hydroxy-2-oxindoles

Deborah Kim, Kathleen J. Maas, Skidmore College, 2018, Chemistry, Daytime Chemistry of Sea Spray Aerosols: Alternative Pathways of HONO Formation

Claudia Bennett-Caso, Skidmore College, 2019, Chemistry; Chris Ostaszewski, Skidmore College, 2019, Chemistry and Mathematics; Non-Thermal Plasma for the Heterogeneous Chemistry of Chemisorbed Volatile Compounds with Free-Radicals

Woohee Kim, Colgate University, 2018, Educational Studies, Korean Youth Activism and Education: Taking Learning beyond the Educational System into Activism

Ronald Caruso, Skidmore College, 2018, Exercise Science, Effects of DhamaSPORTtm Cooling Band Technology on Recovery from Exercise-Induced Heat Stress Associated with Firefighting Personal Protective Equipment (PPE)

Ivy Raines, St. Lawrence University, 2018, Government, The Discourse of Divide: Explaining the Divorce Between Egyptian and Jordanian Policy and Public Sentiment Towards The Israeli Palestinian Conflict

**Bolton 282**

Alexandra Cassell, Skidmore College, 2019, Mathematics and Computer Science; Alexander Smith, Skidmore College, 2018, Mathematics; Developing an Oscillator Model for Group Behavior in Drosophila melanogaster
Allison Mogul, Hamilton College, 2018, Neuroscience; Gianna Davino, Hamilton College, 2020, Psychology; Putting Fear in Context: Elucidating the Role of the Retrosplenial Cortex in Context Discrimination in Rats
Abigail Dayton, Hamilton College, 2019, Neuroscience, Strategies to Improve the Novel Object Recognition Task
Skye Conlan, Union College, 2018, Physics, PIXE Analysis of Artificial Turf
Grant Kiefaber, Hamilton College, 2019, Religious Studies, Muslim Refugees in Utica: Perception and Reality
Alicia (Phuong) Nguyen, Colgate University, 2020, Undeclared, The Nation in the French Indochina: An Ethno-symbolist Approach
Anouk Nouet, Union College, 2018, Environmental Science, Pervious Concrete Behavior in Freeze-thaw Conditions: Does the Inclusion of Recycled Materials Affect Performance?

Noon-1:00 pm       Lunch
   Murray Aikins Dining Hall

1:10-2:15 pm       Poster Session #2     (4 locations)

Bolton 280
Kristina Foley, Skidmore College, 2018, Biochemistry, Effects of conformational changes and flexibility from ArkA binding to the ABP1-SH3 domain
Robyn Stix, Skidmore College, 2018, Biochemistry, Conformational Changes of ArkA12
Jack Sherwood, Hobart and William Smith Colleges, 2019, Biochemistry, Developing a Synthetic Pathway for Production of Fluorescein-Labeled Peptides
Emily De Jong, Hamilton College, 2019, Biochemistry and Hispanic Studies, Ovaries from diabetic mice exhibit loss of follicles leading to reproductive failure
Karl Brown, Colgate University, 2018, Biology, The utilization of soundscape ecology to measure and track changes to biodiversity in the forests surrounding Colgate University
Erin Biggar, Mary Kathryn McCann, Colgate University, 2018, Biology, Lack of refractory period in Red-eyed vireo song causes a decrease in Ovenbird song productivity
Clare Munroe, Hamilton College, 2018, Chemical Physics, High-Resolution Atomic Force Microscopy of alpha-Quartz in Air and Liquid

Bolton 281
Danielle Couture, St. Lawrence University, 2018, Chemistry, Synthesis of Multi-ringed Compounds Using an Intramolecular Wagner-Jauregg Reaction
Lieza Chan, Skidmore College, 2018, Chemistry, Effect of Elongin-B C-terminus on Correlated Motions in HIV Vif Complex
Yingsi Qin, Leo Ascenzi, Colgate University, 2020, Computer Science & Physics, Design of a Video Co-Watching Web Application
Zhengqi Yang, Union College, 2018, Electrical Engineering and Mathematics, Image Classification via Convolutional Neural Network
Angelica Greco, Colgate University, 2018, Geography, Who’s Calling the Shots on Nuclear Decommissioning: A Case Study of Scriba, NY and Vernon, VT
Alexs Matias, Monique Dudar, Josip Kauzlaric, Skidmore College, Health and Exercise Science, Rehydrating Efficacy of Maple Water after Exercise-Induced Dehydration: Potential Sex Differences
Jose Giron, Skidmore College, 2020, Chemistry/Biochemistry, Direct Pathway For Bacillus Anthracis tRNA Asparaginylation

Bolton 282
Kathryn Wall, Union College, 2018, Neuroscience, Effects of Neuropsychological Testing Media on Results
Stephen Wisser, Hamilton College, 2020, Neuroscience, Environmental Studies; Kai Scarangella, Hamilton College, 2020, Environmental Sciences; Anneka Sheppard, Hamilton College, 2019, Biochemistry and Molecular Biology; Analysis of water column and sub-chemocline biofilm samples from meromictic Green Lake (Fayetteville, NY)
Sajju Chalise, Union College, 2019, Physics, Proton Induced X-Ray Emission (PIXE) Analysis to Measure Trace Metals in Soil Along the East River in Queens
Claudia Karademas, Hamilton College, 2020, Psychology, Do Gustatory Processing Styles Prime Vision?
Sophie Staton, Skidmore College, 2018, Social Work, VOICES: Voicing Our Individual and Collective Experiences
Lukuo Lee, Jack Herrick, Colgate University, 2018, Molecular Biology, Interdisciplinary Chemical Biology Approach for the Identification of Novel Compounds Promoting Plant Disease Resistance
Taylor Coursey, Hamilton College, 2019, Environmental Studies, Perceptions of the link between Meat Consumption and Greenhouse Gas Emissions

Palamountain 202
YiZhi Lin, Union College, 2018, Neuroscience, Differences in emotional brain areas in people with chronic facial pain
Kathleen Murray, Colgate University, 2019, Neuroscience, A novel experimental setup for the analysis of social interaction in the zebra finch
Christopher Ostaszewski, Skidmore College, 2018, Chemistry, Mathematics, Quantum Mechanical Calculations of O(3P) Reactions with Cyclohexene Chemisorbed onto Al2O3
Sarah Gowan, Skidmore College, 2019, Neuroscience, Atmospheric Particle Aging: Daytime Chemistry in the Ocean/Atmosphere Interface
Natalie Stuart, Skidmore, 2018, Chemistry, Computational Calculations of the Effects of Surface Water on the Photocatalysis of HNO3 on TiO2
2:20-3:30 pm  Poster Session #3  (4 locations)

**Bolton 280**

Danielle Rodriguez, Hamilton College, 2019, Biochemistry; Olivia Simone, Hamilton College, 2019, Chemistry; Caroline Sullivan, Hamilton College, 2020, Undecided; Use of N-(1-alkoxyvinyl) pyridinium salts in organic synthesis
Rebecca Wales, Skidmore College, 2018, Biochemistry, Direct Route for Asparaginyl-tRNA Formation in B. subtilis
Elissa Williams, Yutong Li, Skidmore College, 2019, Biochemistry, B. Anthracis Indirect Pathway Of Asparaginyl-Trna Formation
Caitlin Schroeder, Skidmore College, 2018, Bio-Chemistry Major/Anthropology Minor, Characterization of the Dual Pathways for B. halodurans Asparaginyl-tRNA Formation
Jodi Weiss, Hamilton College, 2019, Biology, Frequency of Abnormal Chromosome 10 in Tropical Landraces of Zea mays
Edward Gebara, Union College, 2018, Bio-Medical Engineering, Controlling Regioselectivity using Supramolecular Assembly
Haley Anchukaitis, St. Lawrence University, 2018, Chemistry, Synthesis of Doxorubicin Analogs for DNA Binding Studies

**Bolton 281**

Alexis Haley, St. Lawrence University, 2018, Chemistry, Investigation of MhuD Iron Insertion into Protoporphyrin IX
Gabriella Gerlach, Skidmore College, 2019, Chemistry, Role of Segments 1 and 2 in the ArkA12 Structural Ensemble
Leo Ascenzi, Yingsi Qin, Colgate University, 2020, Computer Science & Physics, Design of a Video Co-Watching Web Application
Daniel Casarella, Jennifer Cristiano, Skidmore College, 2018, Environmental Science, Tree functional traits vs environmental controls on key ecosystem properties and processes in the Adirondack Park
Jenny Soonthornrangs, Hamilton College, 2019, Geosciences and Mathematics, Monitoring Groundwater and Surface Water Nutrient Fluxes on Lake Erie’s Eastern Shore
Emily Schlicht, Skidmore College, 2018, Health and Exercise Science, The Impact of a Novel Wrist Cooling Device on Exercise Performance and Recovery in the Heat
Lucy Walker, Skidmore College, 2019, Geosciences, The Study of Zooplankton Trap Bias and Plastic Content in the Upper Ocean: A Sediment Trap Intercomparison

**Bolton 282**

Tatenda Chakoma, Hamilton College, 2018, Neuroscience, DREADDs: A Chemogenetic Technique for Remotely Controlling Neural Activity in Rats
Sara Aldrich, Hamilton College, 2019, Neuroscience, Characterization of a Putative Rat Model for Autism Spectrum Disorder
Ho Jun (Paul) Sim, Colgate University, 2018, Neuroscience and Music, Development of optogenetic transgenic songbirds
Beatriz Chavez, Tenzin Gyaltsten, Skidmore College, 2018, Physics, Development of Open-Source Hardware For Use With Microfluidic Testing Technology
Roxanna Martinez, Skidmore College, 2019, Chemistry; Kyla Johnson, Skidmore College, 2020, Undecided; Development of a Paper Microfluidic Test for D-Lactate: A Diagnostic Test for Malaria
Alan Xiao, Skidmore College, 2018, Molecular Biology, The effects of flufenacet on cell expansion, morphogenesis and cell wall deposition in the charophyte, Penium margaritaceum.
Alisha Blades, Hamilton College, 2020, Undecided; Phoebe Keyes, Hamilton College, 2019, Chemistry; Danielle McConnell, Hamilton College, 2020, Undecided; Direct synthesis of N-(1-alkoxyvinyl) pyridinium salts, a novel class of N-quaternized ketene N,O-acetals

*Palamountain 202*

Meichai Chen, Union College, 2020, Psychology, Investigating change in anxiety during exposure meals over time as a predictors of eating disorder recovery
Devon McLane, Skidmore College, 2019, Chemistry, Nutrient Dynamics and Eutrophication of an Urban-Influenced Lake
Corinne Crisfield, Hamilton College, 2018, Public Policy; Ricardo Rios, Skidmore College, 2018, Government; Clifford Elike, Union College, 2020, Engineering; Refugees on the Move
Jeff Okoro, Skidmore College, 2018, Neuroscience; Haoyang Huang, Skidmore College, 2020, Neuroscience; Characterizing ATXN1 aggregation and propagation in Spinocerebellar ataxia type 1
Ben Juneau, Skidmore College, 2018, Neuroscience, Investigating the Role of sNPF in Drosophila Using Optogenetics
Andrew Przysinda, Skidmore College, 2018, Biology, Ellipsoid Body Neurons Induce Rebound Sleep in Drosophila Melanogaster

**3:30 pm**  **Departure**