

THE SENIOR SYMPOSIUM

SHARE YOUR PASSIONS

April 14, 2017

Sponsored by the
Center for Teaching and Learning



HOBART AND WILLIAM SMITH COLLEGES



HOBART AND WILLIAM SMITH
COLLEGES

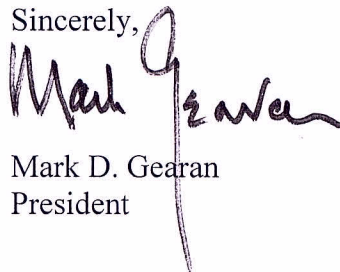
Office of the President

Dear Members of the Hobart and William Smith Community,

One of the many wonderful events of the Spring semester is the annual Senior Symposium. I am proud to welcome you to this important tradition celebrating the sustained and sophisticated work of our seniors and MAT students. For nine years, we have had the benefit of seeing students work under the mentorship of our faculty. And we have been fortunate to witness our students push boundaries of their disciplines as they enhance the intellectual vibrancy of our campus.

This year's program features an impressive 98 presentations delivered by 120 student presenters. Whether in the classroom or studio, the library or laboratories, in the Geneva community or across the globe – the consequential work of HWS students gives voice to new ideas and conversations.

On behalf of the campus, I congratulate all of the participants in this year's Symposium and thank them for their commitment to our intellectual community. I am grateful to the many members of the faculty who have engaged with our students and have encouraged them to pursue this challenging and vital work. I commend the leadership of our Provost and Dean of the Faculty Titi Ufomata and Dr. Susan Pliner and her staff at the Center for Teaching and Learning. The vision and range of the Senior Symposium is a highlight of the spring semester and a pride point for the Colleges as a nationally recognized leader in academics.

Sincerely,

Mark D. Gearan
President



HOBART AND WILLIAM SMITH
COLLEGES

Office of the Provost

Dear HWS Community,

I am very proud of our students' scholarly and creative work, as well as their research and community-infused projects. At Hobart and William Smith Colleges, we are fortunate to see and celebrate our students' intellectual passion in the Senior Symposium. The event represents multiple aspects of what makes a liberal arts education so valuable: interdisciplinarity, close student-faculty interaction, attention to multiple learning modes and opportunities, and a high standard of rigor and intellectual engagement. As Provost and Dean of Faculty, I look forward to sharing these great examples of what a Hobart and William Smith College education can produce, with the greater HWS community.

I also want to express my gratitude to the faculty and staff who have nurtured these students and their work throughout their time at HWS, and to those who have mentored and sponsored the students as they prepared their Senior Symposium presentations. I am also grateful to those who will take time from their busy schedules to moderate panels on April 14th. Welcome all and thank you,

Sincerely,

A handwritten signature in black ink, appearing to read 'Ufomata'.

Titilayo Ufomata
Provost and Dean of Faculty



HOBART AND WILLIAM SMITH
COLLEGES

Members of the HWS Community:

The *Senior Symposium* is an exciting event that reflects and honors the depth and breadth of engagement among Hobart and William Smith students in a diverse spectrum of academic and creative interests. It makes visible that which is often invisible: the long hours and hard work students dedicate to the intellectual journey during their four years at the Colleges. Most importantly, it provides an opportunity for students, under the guidance of advisors, to engage each other as teachers and learners.

As your Deans, we join with the Center for Teaching and Learning in applauding those who are participating in the ninth Senior Symposium as presenters. This is an important academic achievement that you now have as part of your legacy. We applaud the faculty and staff who will serve as panel moderators. The Deans also join in welcoming of all members the HWS community to this wonderful demonstration of student teaching and learning.

Sincerely,

A handwritten signature in black ink that reads "C. Gallouët".

Catherine Gallouët, Ph. D.
Dean
William Smith College

A handwritten signature in black ink that reads "Valerie Gunter".

Valerie Gunter
Assistant Dean
William Smith College

A handwritten signature in black ink that reads "Lisa Kaenzig".

Lisa, Kaenzig, Ph. D.
Associate Dean
William Smith College

A handwritten signature in black ink that reads "Eugen Baer".

Eugen Baer, Ph. D.
Dean
Hobart College

A handwritten signature in black ink that reads "Chip Capraro".

Chip Capraro, Ph. D.
Associate Dean
Hobart College

A handwritten signature in black ink that reads "D. Mapstone".

David Mapstone
Assistant Dean
Hobart College



HOBART AND WILLIAM SMITH COLLEGES

Dear Hobart & William Smith Colleagues, Students, and Friends:

Each year we set aside a day to honor the academic interests, research, passion, and creativity of the Senior classes, as well as MAT candidates: welcome to the ninth annual Senior Symposium!

The Senior Symposium is a visible and tangible representation of the diversity and breadth of the work our students pursue, as well as an example of a community that collectively celebrates student achievement. The Senior Symposium is a culmination of students' journeys and an opportunity for them to empower and enrich the HWS community by engaging in interdisciplinary dialogues about their intellectual accomplishments.

This year we, at the CTL, celebrate the community aspect of Senior Symposium, reflecting the values that President Gearan has helped to shape during his tenure at the Colleges. Under his leadership, HWS has flourished as a vibrant and intellectually engaged community, with a particular emphasis on community. The intellectual engagement of our community is visible in the Senior Symposium experience through faculty and staff sponsor who students, assist with abstract writing and presentation skills, and serve as panel moderators. We would like to thank President Gearan, along with the myriad of faculty and staff colleagues who champion this collective community celebration.

I would also like to extend my sincere thanks to the dedicated staff of the CTL: Ruth Shields, Susan Hess, Ingrid Keenan, Jamie Slusser, Sam Vann, David Silver, and our exceptional student assistants, for their dedication and hard work in making this event possible.

Hobart and William Smith Colleges is truly a special place for learning and living. I hope that you share in my excitement for this event, which highlights the wonderful array of academic opportunities available. Congratulations to our student presenters who truly represent the value of an HWS education. I look forward to seeing many of you on Friday, April 14th 2017!

Sincerely,

A handwritten signature in black ink, appearing to read 'Susan M. Pliner', with a long horizontal line extending to the right.

Susan M. Pliner, Ed.D.
Associate Dean of Teaching, Learning, and Assessment
Director, Center for Teaching and Learning

ACKNOWLEDGEMENTS

The ninth annual Senior Symposium was made possible by the vision, leadership, and efforts of many in the Hobart and William Smith community:

Office of the President

Office of the Provost

Offices of the Hobart and William Smith Deans

Office of Communications

IT Services

Center for Teaching and Learning

Alejandra Castillo, Vincent Creer, Susan Hess, Ingrid Keenan, Maggie Nalbone,
Susan Pliner, Eliza Santin, Ruth Shields, David Silver, Jamie Slusser, Alexis Spann,
Sam Vann

Abstract Writing and Presentation Workshop Facilitators

Geoffrey Babbitt, Beth Belanger, Hannah Dickinson, Amy Forbes, Scott MacPhail,
K. Whitney Mauer, Kaylyn O'Brien, Emily Perkins, Katie Stiffler, Jenny Tessendorf

Sincere thanks are extended to the students, faculty advisors, faculty moderators, department administrative assistants, staff, alumnae, and all who have contributed to the success of this year's event.

Research Support and Awards:

Symposium students have received generous support for their academic projects from the following organizations, programs, and funds:

2017 Rochester Academy of Science Research Grant Award
Barry Goldwater Scholarship and Excellence in Education Honorable Mention
Biology Department Professor Romana Lashewycz-Rubycz Fund for Honors Students in New York Six Upstate to Global Research Collective
Carver and Delaney Environmental Studies Endowment Grant
Center for Exceptional Children (CEC) National Conference in St. Louis, Missouri 2016
Cohen Fund
Edward J. Tapper '64 Science Research Fund
Faculty Research Grant Professor Romana Lashewycz-Rubycz Honors Fund
Hill/Franks Prize in Chemistry 2016
Hobart Dean's Office
Hobart Dean's Office Travel Grant
Hobart Student Government Travel Grant
Honors Stipend Biology Department Alumni Funding
National Science Foundation
NSF-RUI Grant Hobart and William Smith Colleges (Provost Office)
NYSSA Conference and the New York Six Research Consortium
Provost Office, Hobart and William Smith Colleges
Tapper Honors Award Rochester Academy of Science Donation from Superpower Donation from American Superconductor
Thomas J. Glover Research Fund
Undergraduate Award for Achievement in Organic Chemistry
Woodworth Fellowship (Fisher Center) 2016

Senior
Symposium
2017
Presenters

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Alon, Talia	Sociology	Jack Harris	11:15-12:10	Learning Studio 1
Alon, Talia	American Studies	Beth Belanger	12:20-1:15	Geneva Room
Alphas, Sophie	William Smith Dean's Office	Lisa Kaenzig	12:20-1:15	Learning Studio 3
Anastasi, Chatham	Education	Jim MaKinster	4:05-5:00	Sanford Room
Arias, Maria	Education	Audrey Roberson	1:55-2:50	Geneva Room
Arroyo, Kelsey	Psychology	Jamie Bodenlos	10:10-11:05	Geneva Room
Baird, Alexandra	American Studies	Beth Belanger	9:05-10:00	Sanford Room
Balk, Keegan	American Studies	Beth Belanger	11:15-12:10	Sanford Room
Banales Mejia, Fernando	Chemistry	Erin Pelkey	1:55-2:50	Sanford Room
Barry, Sean	American Studies	Beth Belanger	8:00-8:55	Geneva Room
Bell, Molly	Sociology	Jack Harris	3:00-3:55	Geneva Room
Bell, Molly	Public Policy	Craig Rimmerman	11:15-12:10	Learning Studio 1
Bell, Molly	Sociology	Kendralin Freeman	8:00-8:55	Learning Studio 3
Bentsi-Enchill, Ato	French and Francophone Studies	Kanate Dahouda	9:05-10:00	Learning Studio 1
Beyer, Mitchell	Environmental Studies	Kristen Brubaker	12:20-1:15	Sanford Room
Bowers, Samantha	Psychology	Brien Ashdown	3:00-3:55	Learning Studio 3
Brooks, Hannah	Sociology	Jack Harris	8:00-8:55	Sanford Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Brown, Franklin	American Studies	Beth Belanger	4:05-5:00	Learning Studio 1
Buck, Marilyn	Psychology	Brien Ashdown	3:00-3:55	Geneva Room
Buffington, Kayleigh	Biology	Meghan Brown	1:55-2:50	Learning Studio 1
Calderon, Benny	Sociology	Jack Harris	10:10-11:05	Sanford Room
Calnan, Scott	Physics	Ileana Dumitriu	10:10-11:05	Learning Studio 3
Campion, Thomas	History	Matt Crow	10:10-11:05	Learning Studio 3
Carr, Caroline	Environmental Studies	Beth Kinne	9:05-10:00	Geneva Room
Carr, Caroline	Geoscience	Nan Arens	8:00-8:55	Geneva Room
Carr, Kelsi	Writing and Rhetoric	Ben Ristow	9:05-10:00	Learning Studio 3
Carrock, Joseph	Economics & Computer Science	Warren Hamilton & John Lasseter	1:55-2:50	Learning Studio 1
Cirra, Alexandra	Environmental Studies	Beth Kinne	12:20-1:15	Sanford Room
Cohen, Samantha	Education	Jim MaKinster	4:05-5:00	Sanford Room
Conard-Malley, Will	History	Matt Crow	10:10-11:05	Learning Studio 3
Cooper, James	Biology	Sigrid Carle	12:20-1:15	Learning Studio 1
Cragg, Matt	Sociology	Jack Harris	8:00-8:55	Learning Studio 1
Czajkowski, Rebecca	Centennial Center for Leadership	Solomé Rose	9:05-10:00	Learning Studio 3
Davis, Iquawn	Music	Charity Lofthouse	10:10-11:05	Geneva Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Davison, Ryan	Chemistry	Justin Miller	1:55-2:50	Sanford Room
Demas, Christopher	Sociology	James Sutton	3:00-3:55	Learning Studio 1
Demas, Christopher	Physics	Ileana Dumitriu	10:10-11:05	Learning Studio 3
DeVault-Feldman, Sara	Anthropology	Brenda Maiale	12:20-1:15	Sanford Room
Dietrich, Molly	Sociology	Jack Harris	8:00-8:55	Sanford Room
Dietrich, Molly	Centennial Center for Leadership	Amy Forbes	10:10-11:05	Learning Studio 1
Doebelin, Michael	American Studies	Beth Belanger	8:00-8:55	Sanford Room
Donnabella, Jane	Writing and Rhetoric	Ben Ristow	4:05-5:00	Learning Studio 1
Dunn, Clint	Economics	Christina Houseworth	11:15-12:10	Learning Studio 1
Dush, Eric	Environmental Studies	Beth Kinne	9:05-10:00	Geneva Room
Feinberg, Drew	Sociology	Jack Harris	11:15-12:10	Learning Studio 1
Feldesman, Emily	Education	Jim MaKinster	10:10-11:05	Geneva Room
Fischer, Mikhail	Geoscience	Nan Arens	8:00-8:55	Geneva Room
Flaherty, Allison	Education	Audrey Roberson	1:55-2:50	Geneva Room
Flaherty, Allison	Sociology	Jack Harris	8:00-8:55	Learning Studio 1
Foote, Abbey	Biology	Shannon Straub	8:00-8:55	Geneva Room
Friedman, Sarah	Education	Jim MaKinster	4:05-5:00	Sanford Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Gesualdi, Peter	American Studies	Beth Belanger	11:15-12:10	Sanford Room
Glatman, Rachel	Education	Jim MaKinster	4:05-5:00	Sanford Room
Glenshaw, Hannah	Africana Studies	James McCorkle	3:00-3:55	Learning Studio 3
Goodman, Adam	American Studies	Beth Belanger	10:10-11:05	Learning Studio 1
Guardino, Nicole	Psychology	Brien Ashdown	10:10-11:05	Learning Studio 1
Guglielmino, Carmelo	Education	Jim MaKinster	4:05-5:00	Sanford Room
Gutierrez, Kim	Sociology	Jack Harris	10:10-11:05	Sanford Room
Hanzlik, Tyler	Physics	Ileana Dumitriu	1:55-2:50	Learning Studio 1
Hartnett, Julianna	Education	Audrey Roberson	1:55-2:50	Geneva Room
Hayes, Eleanor Brooke	Music	Charity Lofthouse	10:10-11:05	Sanford Room
Helbling, Drew	Sociology	Jack Harris	10:10-11:05	Learning Studio 1
Hillenbrand, John	Sociology	Jack Harris	8:00-8:55	Sanford Room
Hughes, Graham	Africana Studies	James McCorkle	9:05-10:00	Geneva Room
Hyska, Kei	Political Science	Kevin Dunn	8:00-8:55	Learning Studio 3
Jones, Kayla	Sociology	Jack Harris	8:00-8:55	Sanford Room
Kenific, Stephanie	Writing and Rhetoric	Hannah Dickinson	10:10-11:05	Sanford Room
Kombouras, Nicolette	Sociology	Jack Harris	11:15-12:10	Sanford Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Kostovic, Katarina	Biology	Shannon Straub	8:00-8:55	Geneva Room
Kubinski, Mary	Political Science	Kevin Dunn	9:05-10:00	Learning Studio 3
Kubinski, Mary	Philosophy	Steven Lee	8:00-8:55	Learning Studio 3
Kubinski, Mary	William Smith Dean's Office	Lisa Kaenzig	12:20-1:15	Learning Studio 3
Lawrence, Elizabeth	English	Anna Creadick	9:05-10:00	Sanford Room
Lippincott, Hannah	Dance	Donna Davenport	12:20-1:15	Geneva Room
Loretz, Jordan	Music	Charity Lofthouse	4:05-5:00	Learning Studio 1
Loretz, Jordan	Music	Charity Lofthouse	12:20-1:15	Learning Studio 1
Lukas, Andrew	American Studies	Beth Belanger	9:05-10:00	Sanford Room
Mandart, James	Music	Mark Olivieri	8:00-8:55	Learning Studio 1
Manning, Kendra	Sociology	Jack Harris	11:15-12:10	Learning Studio 1
Marola, Grace	Psychology	Jamie Bodenlos	4:05-5:00	Learning Studio 3
Mauch, Kelly	Environmental Studies	Beth Kinne	3:00-3:55	Sanford Room
McCready, Gabriella	Philosophy	Steven Lee	12:20-1:15	Geneva Room
McKenna, Paige	Sociology	Jack Harris	8:00-8:55	Learning Studio 1
Mendelson, Lucie	Education	Diana Baker	8:00-8:55	Learning Studio 1
Mendelson, Lucie	Sociology	Jack Harris	10:10-11:05	Sanford Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Meyer, Katlain	Sociology	Jack Harris	11:15-12:10	Sanford Room
Michels, Noland	Biology	Susan Cushman	3:00-3:55	Sanford Room
Michels, Noland	Environmental Studies	Beth Kinne	8:00-8:55	Sanford Room
Mueller, Danielle	Education	Jim MaKinster	4:05-5:00	Sanford Room
Neerukonda, Namita	Biology	Patricia Mowery	1:55-2:50	Sanford Room
Nelson, Jessica	Education	Audrey Roberson	1:55-2:50	Geneva Room
Nichols, Hannah	Psychology	Brien Ashdown	3:00-3:55	Sanford Room
Nuñez, Katerina	Dance	Donna Davenport	4:05-5:00	Learning Studio 1
Ott, Emily	Environmental Studies	John Halfman	3:00-3:55	Sanford Room
Parkins, Elena	Music	Charity Lofthouse	3:00-3:55	Learning Studio 3
Patterson, Melanie	Psychology	Jamie Bodenlos	10:10-11:05	Geneva Room
Pena, Keirys	Media and Society	Leah Shafer	12:20-1:15	Learning Studio 1
Peters, Alexandra	English	Grant Holly	12:20-1:15	Learning Studio 1
Prescott, Nina	Psychology	Daniel Graham	3:00-3:55	Learning Studio 1
Pye, George	Environmental Studies	Beth Kinne	8:00-8:55	Sanford Room
Rafferty, Phoebe	Environmental Studies	Beth Kinne	9:05-10:00	Geneva Room
Reuscher, Karley	Sociology	Jack Harris	8:00-8:55	Learning Studio 1

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Richards, Sophia	Anthropology	Jason Rodriguez	3:00-3:55	Learning Studio 3
Rivero, Lesly	Sociology	Jack Harris	10:10-11:05	Sanford Room
Rizza , Jeff	Education	Jim MaKinster	10:10-11:05	Geneva Room
Rizzotti, Julianne	Centennial Center for Leadership	Kaylyn O'Brien	12:20-1:15	Geneva Room
Roistacher, Alicia	Biology	Susan Cushman	4:05-5:00	Learning Studio 3
Rugg, Taylor	Writing and Rhetoric	Hannah Dickinson	3:00-3:55	Learning Studio 1
Rugg, Taylor	Writing and Rhetoric	Ben Ristow	9:05-10:00	Learning Studio 1
Rugg, Taylor	William Smith Dean's Office	Lisa Kaenzig	12:20-1:15	Learning Studio 3
Salemy, Christian	Environmental Studies	Beth Kinne	12:20-1:15	Sanford Room
Seminer, Carly	Environmental Studies	Beth Kinne	9:05-10:00	Geneva Room
Shapiro, Jake	Sociology	Jack Harris	11:15-12:10	Learning Studio 1
Skinner, Matthew	Philosophy	Eugen Baer	3:00-3:55	Learning Studio 1
Solomon, Sam	Sociology	Jack Harris	11:15-12:10	Sanford Room
Spraggs, Emily	Women's Studies	Jessica Hayes-Conroy	12:20-1:15	Learning Studio 3
Sudduth, Chloe	Sociology	Ervin Kosta	11:15-12:10	Sanford Room
Sullivan, Jennifer	American Studies	Beth Belanger	12:20-1:15	Learning Studio 3
Surette, Meredith	Sociology	Jack Harris	11:15-12:10	Sanford Room

SENIOR SYMPOSIUM 2017 PRESENTERS

Presenter	Department/Program	Sponsor	Panel Time	Room
Sweeney, Shane	American Studies	Beth Belanger	9:05-10:00	Learning Studio 1
Sweet, Taylor	Education	Jim MaKinster	4:05-5:00	Sanford Room
Teel, Kevin	History	Matt Crow	9:05-10:00	Sanford Room
Teel, Kevin	Education	Audrey Roberson	1:55-2:50	Geneva Room
Thai, Steven	Sociology	Jack Harris	3:00-3:55	Geneva Room
Tiller, Slade	Environmental Studies	Beth Kinne	12:20-1:15	Sanford Room
Tongue, Garrett	Economics & Computer Science	Warren Hamilton & John Lasseter	1:55-2:50	Learning Studio 1
Truax, Nathanyal	Chemistry	Erin Pelkey	1:55-2:50	Sanford Room
Urbanski, Tanina	Dance	Donna Davenport	4:05-5:00	Learning Studio 3
VanBenschoten, Laurie	Sociology	Jack Harris	3:00-3:55	Geneva Room
Wang, Linqi	Philosophy	Steven Lee	9:05-10:00	Geneva Room
Wilkoff, Marni	Centennial Center for Leadership	Kaylyn O'Brien	3:00-3:55	Geneva Room
Williams, Amber	Media and Society	Leah Shafer	9:05-10:00	Learning Studio 1
Workman, Ren	Anthropology	Chris Annear	9:05-10:00	Learning Studio 3
Zhao, Amelia	Biology	Patricia Mowery	8:00-8:55	Learning Studio 3

Senior
Symposium
2017
Schedule

Geneva Room

Time	Presenters	Abstract Title	Department/ Program
Proper Identities			
<i>Moderator: Nan Crystal Arens, Professor of Geoscience</i>			
8:00-8:55	Barry, Sean	HWS Image in 2014	American Studies
	Carr, Caroline	The Identity of Fossil Leaves: Numerical Taxonomy and Classification of Late-Cretaceous Angiosperm Macrofossils	Geoscience
	Fischer, Mikhail	Testing a Method for Identifying OTU's in Dispersed Fossil Leaf Floras	Geoscience
	Foote, Abbey Kostovic, Katarina	Phylogenetics of the Apocynaceae Plant Family	Biology
	Questions & Answers		
Education and Outreach			
<i>Moderator: Kevin Dunn, Professor of Political Science</i>			
9:05-10:00	Carr, Caroline Dush, Eric Rafferty, Phoebe Seminer, Carly	Listen to the Lake: Educating the Public in Watershed Management	Environmental Studies
	Hughes, Graham	Educational Opportunity Gaps in the United States and South Africa: Comparing the Problems and Finding Solutions	Africana Studies
	Wang, Linqi	HIV/AIDS: From Past to the Future	Philosophy
	Questions & Answers		

Geneva Room

Time	Presenters	Abstract Title	Department/ Program
Ask a New Question			
<i>Moderator: Alla Ivanchikova, Assistant Professor of English and Comparative Literature</i>			
10:10-11:05	Arroyo, Kelsey Patterson, Melanie	Adult Coloring Books: Effects on Mood and Mindfulness	Psychology
	Davis, Iquawn	Manipulation of Semitones: Triadic Transformation and Emotion	Music
	Feldesman, Emily Rizza, Jeff	Boys and Girls Club of Geneva: The Teen Center Tutoring Program	Education
	Questions & Answers		
E Pluribus Unum			
<i>Moderator: Justin Rose, Assistant Professor of Political Science</i>			
12:20-1:15	Alon, Talia	Economics Male, Education Female: The Gender Divide in Major Choice	American Studies
	Lippincott, Hannah	Differently-abled Bodies in College Performing Arts Classes	Dance
	McCready, Gabriella	Voting Rights: Democracy at Risk and Policy Solutions to Bolster Participation in the American Political System	Philosophy
	Rizzotti, Julianne	Leadership Institute 2017: Emphasizing Unity and Common Purpose	Centennial Center for Leadership
	Questions & Answers		

Geneva Room

Time	Presenters	Abstract Title	Department/ Program
Bilingual Education			
<i>Moderator: Audrey Roberson, Assistant Professor of Education</i>			
1:45 - 2:50	Arias, Maria	The Shift towards Bilingualism in Geneva: Elementary Dual-immersion Programs	Education
	Flaherty, Allison	Parental Involvement in Bilingual Education: Geneva Elementary Dual-immersion Program	Education
	Hartnett, Julianna	Dual-immersion and Behavior	Education
	Nelson, Jessica	Am I Smart? Dual-immersion, Self-esteem, and Class Participation	Education
	Teel, Kevin	The Role of Time in a Dual-immersion Classroom	Education
	Questions & Answers		
Serving the Community			
<i>Moderator: Chip Capraro, Associate Dean of Hobart College</i>			
3:00-3:55	Bell, Molly Thai, Steven VanBenschoten, Laurie	Taking Care of Business: Alternative Funding Models for the Boys and Girls Club of Geneva	Sociology
	Buck, Marilyn	Can Helping Hurt? Voluntourism in Guatemala	Psychology
	Wilkoff, Marni	Piano for Patients: A Service Project	Centennial Center for Leadership
	Questions & Answers		

Learning Studio 1

Time	Presenters	Abstract Title	Department/ Program
Counting on Education			
<i>Moderator: Christine de Denus, Associate Professor of Chemistry</i>			
8:00-8:55	Cragg, Matt Flaherty, Allison McKenna, Paige Reuscher, Karley	Putting Your Numbers Where Your Math Is: An Assessment of America Counts	Sociology
	Mandart, James	Negotiating Intuition with Theoretical Knowledge in the Context of Music Composition	Music
	Mendelson, Lucie	Private, Public, and In-Between: The Education of Mennonite Students with Disabilities	Education
	Questions & Answers		
Who We Are			
<i>Moderator: Leah Shafer, Assistant Professor of Media and Society</i>			
9:05-10:00	Bentsi-Enchill, Ato	Françafrique: A Janus-faced Entity in the Postcolonial World	French and Francophone Studies
	Rugg, Taylor	Conceptualizing “The Hero”: A Discursive Analysis	Writing and Rhetoric
	Sweeney, Shane	The Cost of Words: Media Impact on Professional Athletes	American Studies
	Williams, Amber	Black and Female at Work: A Video Essay	Media and Society
	Questions & Answers		

Learning Studio 1

Time	Presenters	Abstract Title	Department/ Program
Representation			
<i>Moderator: Brien Ashdown, Assistant Professor of Psychology</i>			
10:10-11:05	Dietrich, Molly	Millennial Minds: A Business Leadership Critique by Millennials	Centennial Center for Leadership
	Goodman, Adam	Hollywood's Portrayal of Commercial Developers	American Studies
	Guardino, Nicole	The Effect of Culture on the Presentation of Psychological Disease	Psychology
	Helbling, Drew	The Internet Said So! Prejudice and Professionalization in the Digital Age	Sociology
	Questions & Answers		
Money (or Lack Thereof)			
<i>Moderator: Keoka Grayson, Assistant Professor of Economics</i>			
11:15-12:10	Alon, Talia Feinberg, Drew Manning, Kendra Shapiro, Jake	Reach into Your Wallets: Reconnecting the United Way of Ontario County and HWS	Sociology
	Bell, Molly	Where Do We Go from Here? How the History of American Federal Social Policy Can Lead to a Better Future	Public Policy
	Dunn, Clint	Major League Discrimination: Wage Premiums for Foreign-born Players in Major League Soccer	Economics
	Questions & Answers		

Learning Studio 1

Time	Presenters	Abstract Title	Department/ Program
Window on the World			
<i>Moderator: Alex Black, Assistant Professor of English</i>			
12:20-1:15	Cooper, James	A Window into the Cellular World of the Bone Marrow: A Mechanistic Understanding of CD28 in Plasma Cells	Biochemistry
	Loretz, Jordan	Notation and Imitation in the East and West	Music
	Pena, Keirys	<i>Wonders Beyond</i> : A Travel Magazine	Media and Society
	Peters, Alexandra	Comedy and Errors: Exploring the Function of Comedy and Media amidst Political Turmoil	English
	Questions & Answers		
Systems			
<i>Moderator: David Galloway, Associate Professor of Russian Area Studies</i>			
1:55 - 2:50	Buffington, Kayleigh	Non-native Species and Seneca Lake: Contaminants and Hemimysis Anomala	Biology
	Carrock, Joseph Tongue, Garrett	Market Data Collection, Analysis, Indicators, and Trading Utilizing Computational Methods	Computer Science and Economics
	Hanzlik, Tyler	Levitation with Superconducting Electromagnets	Physics
	Questions & Answers		

Learning Studio 1

Time	Presenters	Abstract Title	Department/ Program
The Skin You're In			
<i>Moderator: Kristy Kenyon, Associate Professor of Biology</i>			
3:00-3:55	Demas, Christopher	Experiences with Adult-onset Acne	Sociology
	Prescott, Nina	The Visual Neuroscience of Masks	Psychology
	Rugg, Taylor	The Performativity of Heroic Acts: A Qualitative Study of the Discursive Production of the Hero	Writing and Rhetoric
	Skinner, Matthew	To Geneva and Out Again: A Student's Tale	Philosophy
	Questions & Answers		
Conformity, Deviance, In-Between			
<i>Moderator: Christopher Annear, Assistant Professor of Anthropology</i>			
4:05-5:00	Brown, Franklin	Be a Man: Masculinity in Disney Films	American Studies
	Donnabella, Jane	Destigmatization through Examination: A Close Look at Furrries as an Anthropomorphic Subculture	Writing and Rhetoric
	Loretz, Jordan	Funk Rock or Rock Funk? A Rhythmic and Textural Analysis of the Red Hot Chili Peppers	Music
	Nuñez, Katerina	Bodies and Boundaries: Social Deviance in Site-specific Dance	Dance
	Questions & Answers		

Learning Studio 3

Time	Presenters	Abstract Title	Department/ Program
Taking Action			
<i>Moderator: Charity Lofthouse, Assistant Professor of Music</i>			
8:00-8:55	Bell, Molly	Tell Me How You Really Feel: Exploring Students' Sense of Inclusion in College Classrooms	Sociology
	Hyska, Kei	The New World Order and US Involvement in the Kosovo War	Political Science
	Kubinski, Mary	Survivor Centered: HWS and the Peer Advocate Model	Philosophy
	Zhao, Amelia	Evaluation of Apogee and other Treatments for Fireblight	Biology
	Questions & Answers		
Beyond Borders			
<i>Moderator: Solomé Rose, Interim Chief Diversity Officer</i>			
9:05-10:00	Carr, Kelsi	Resisting Rhetoric	Writing and Rhetoric
	Czajkowski, Rebecca	Bilingual Education beyond Borders	Centennial Center for Leadership
	Kubinski, Mary	Beyond Borders: Police Violence in the United States and South Africa	Political Science
	Workman, Ren	Food (In)Security: Comparing South Africa and the United States	Anthropology
	Questions & Answers		

Learning Studio 3

Time	Presenters	Abstract Title	Department/ Program
Making Waves			
<i>Moderator: Matt Crow, Assistant Professor of History</i>			
10:10-11:05	Calnan, Scott	Harvesting Wave Energy by Modifying the Anchor to Nautical Navigation Aids	Physics
	Campion, Thomas	The Living, Breathing, US Constitution	History
	Conard-Malley, Will	Seamanship as Citizenship: National Identity in the Early Republic	History
	Demas, Christopher	Remote Sensing of Algal Blooms via Drone Spectral Imaging	Physics
	Questions & Answers		
Women's Agency			
<i>Moderator: Lisa Kaenzig, Associate Dean of William Smith College</i>			
12:20-1:15	Alphas, Sophie Kubinski, Mary Rugg, Taylor	Women's Leadership: The Public Leadership Education Network's Presence	William Smith Dean's Office
	Spraggs, Emily	Speed in the Kitchen: Exploring Empowerment through Slow and Fast Cooking Practices	Women's Studies
	Sullivan, Jennifer	<i>Sports Illustrated, Swimsuit Edition</i> : Women of Color and Body Image	American Studies
	Questions & Answers		

Learning Studio 3

Time	Presenters	Abstract Title	Department/ Program
New Perspectives			
<i>Moderator: Rebecca Burditt, Assistant Professor of Media and Society</i>			
3:00-3:55	Bowers, Samantha	An Experimental Education Program in Guatemala	Psychology
	Glenshaw, Hannah	The Joys of Women: A Literary Analysis	Africana Studies
	Parkins, Elena	Madness in Music: Bipolar Disorder and Its Relationship with Music	Music
	Richards, Sophia	Rape and Reform: The Politics of Protection and Complacency	Anthropology
	Questions & Answers		
Interactive Systems			
<i>Moderator: Rob Carson, Associate Professor of English and Comparative Literature</i>			
4:05-5:00	Marola, Grace	How Does Your Gut Bacteria Influence Your Weight?	Psychology
	Roistacher, Alicia	Germination Success of Bird and Bat-dispersed Seeds after Bat Ingestion	Biology
	Urbanski, Tanina	Dance on Film: Exploring Technology's Effect on Interpersonal Relationships and the Body	Dance
	Questions & Answers		

Sanford Room

Time	Presenters	Abstract Title	Department/ Program
Geneva			
<i>Moderator: May Farnsworth, Associate Professor of Spanish and Hispanic Studies</i>			
8:00-8:55	Brooks, Hannah Dietrich, Molly Hillenbrand, John Jones, Kayla	Can We Promise Housing in Geneva? Evaluating Obstacles Homeless Families Face when Finding Permanent Housing	Sociology
	Doebelin, Michael	The True Story of the Opiate Epidemic: Does Popular Culture Influence Drug Use and Perceptions?	American Studies
	Michels, Noland Pye, George	Are We Overlooked? The Study of our Watershed	Environmental Studies
	Questions & Answers		
American Idols			
<i>Moderator: Michelle Martin-Baron, Assistant Professor of Women's Studies</i>			
9:05-10:00	Baird, Alexandra	The Kardashians and the Evolution of American Childhood	American Studies
	Lawrence, Elizabeth	Faulkner's Hierarchy of Social Disgrace	English
	Lukas, Andrew	Deflategate in Social Context	American Studies
	Teel, Kevin	Hamilton and American Identity: A Rethinking of America's Founding	History
	Questions & Answers		

Sanford Room

Time	Presenters	Abstract Title	Department/ Program
Strategic Education			
<i>Moderator: Judith McKinney, Associate Professor of Economics</i>			
10:10-11:05	Calderon, Benny Gutierrez, Kim Mendelson, Lucie Rivero, Lesly	Detour or Destination: Alternative Education Programs for Geneva Schools	Sociology
	Hayes, Eleanor Brooke	Music as an Untapped Resource in the Educational Curriculum	Music
	Kenific, Stephanie	Our Schools: Building an Anti-bias Classroom	Writing and Rhetoric
	Questions & Answers		
`urban-ish			
<i>Moderator: Jason Rodriguez, Assistant Professor of Anthropology</i>			
11:15-12:10	Balk, Keegan	Half a Century with the Gear in Neutral: Downfall and Resurrection in Detroit	American Studies
	Gesualdi, Peter	Rap and Police Brutality	American Studies
	Kombouras, Nicolette Meyer, Katlain Solomon, Sam Surette, Meredith	Geneva's Multi-million Dollar Man	Sociology
	Sudduth, Chloe	Upscaling Downtown Geneva: Urban Nightlife and the Consequences for Diversity	Sociology
	Questions & Answers		

Sanford Room

Time	Presenters	Abstract Title	Department/ Program
Location Matters			
<i>Moderator: Emily Perkins, Writing Colleagues Coordinator</i>			
12:20-1:15	Beyer, Mitchell	Habitat Restoration and a Riparian Buffer	Environmental Studies
	Cirra, Alexandra Salemy, Christian Tiller, Slade	Collaboration with Local Watershed Management	Environmental Studies
	DeVault-Feldman, Sara	Feeding, Crafting and Creating Community in Geneva, New York: The Local Foods Movement and Farm to Table Restaurants	Anthropology
	Questions & Answers		
Anti-cancer Synthesis			
<i>Moderator: Erin Pelkey, Professor of Chemistry</i>			
1:55 - 2:50	Banales Mejia, Fernando	C-H Activation: If at First You Don't Succeed	Chemistry
	Davison, Ryan	Integrating LCMS Analysis and Purification into the Synthesis of Potential Anticancer Chemotherapeutics	Chemistry
	Neerukonda, Namita	Biological Evaluation of Anti-cancer Activity of Simplified Staurosporine Analogs	Biology
	Truax, Nathanyal	BF ₃ ·Et ₂ O Mediated Electrophilic Aromatic Indolylolation of Alkyl Protected 3-Aryltetramic Acids	Chemistry
	Questions & Answers		

Sanford Room

Time	Presenters	Abstract Title	Department/ Program
What's in My Water?			
<i>Moderator: Josh Newby, Assistant Professor of Chemistry</i>			
3:00-3:55	Mauch, Kelly	Watered Down Lives: A Comparative Analysis of Water Inequity in Flint, Michigan and Chatsworth, South Africa	Environmental Studies
	Michels, Noland	Seneca Lake's Imminent Invader: The Round Goby	Biology
	Nichols, Hannah	A Joint Responsibility to Decrease Pollution at Lake Atitlan, Guatemala	Psychology
	Ott, Emily	Rainfall Variability in the Finger Lakes Region 2015	Environmental Studies
	Questions & Answers		
Boys and Girls			
<i>Moderator: James MaKinster, Professor of Education</i>			
4:05-5:00	Anastasi, Chatham Mueller, Danielle	"So Much Room For Activities!" Programs and Activities at the Geneva Boys and Girls Club	Education
	Cohen, Samantha Friedman, Sarah Sweet, Taylor	Teamwork Makes the Dream: Geneva City Schools and the Boys and Girls Club	Education
	Glatman, Rachel Guglielmino, Carmelo	Lend Me your Ears: Multiple Perspectives for Evaluation at the Boys and Girls Club	Education
	Questions & Answers		

Senior
Symposium
2017
Abstracts

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REACH INTO YOUR WALLETS:
RECONNECTING THE UNITED WAY OF ONTARIO COUNTY AND HWS

Talia Alon, Andrew Feinberg, Kendra Manning and Jake Shapiro

The United Way's mission is to raise awareness and outreach to increase community resources to help confront demanding issues in categories relating to financial stability, education, and health. United Way aims for a 30% participation rate, but only 2% of HWS faculty, administration, and staff donate to the United Way (K. Buch, personal communication, March 6, 2017). Why is this happening? Our study focuses on reconnecting Hobart and William Smith Colleges with the United Way of Ontario County.

Through interviews with Human Resource departments of private colleges/universities in New York State and the affiliated United Way county coordinators, we aimed to discover how to achieve higher participation rates. We also surveyed faculty, staff, and administrators at Hobart and William Smith Colleges to help understand why our participation rates are so low.

The United Way benefits over 40,000 people in Ontario County every year. If more Hobart and William Smith Colleges faculty, staff, and administrators donate to United Way, the agency will be better able to carry out its mission and help the community solve its most pressing issues.

ECONOMICS MALE, EDUCATION FEMALE THE GENDER DIVIDE IN MAJOR CHOICE

Talia Alon

At Hobart and William Smith Colleges, in 2016, there were 49 Hobart Economics Majors, and 16 William Smith Economics Majors. In contrast, William Smith students made up the majority majors in Education. Why does this clear gender division exist? My project investigates the gender dynamics of college majors. Why are Hobart students drawn to Economics? Why do William Smith students want an education degree? Are students consciously aware of the gender dominance of each major? Does that awareness create a self-perpetuating cycle in the majors they choose?

While women now hold visible positions in almost every field, college students still confirm to traditional gender roles when it comes to choosing their major. For my capstone project in American Studies, I surveyed Hobart and William Smith students, investigating students' awareness of the gendered perceptions of college majors. I also interviewed professors on the Hobart and William Smith campus to see their perceptions of gender in majors. Initial research suggests that despite women's changing role in the workforce over the past 25 years, gender divides on college campuses persist.

My research on the perception of gender at Hobart and William Smith Colleges can provide insight into understanding perceptions the student body and the faculty have about gender in specific majors, and how these perceptions contribute to the gender dynamics of the modern workforce.

WOMEN'S LEADERSHIP: THE PUBLIC LEADERSHIP IN EDUCATION NETWORK'S PRESENCE

Sophie Alphas, Mary Kubinski and Taylor Rugg

The Public Leadership Education Network is a national organization which aims to introduce women to role models, career paths, and skills trainings before they enter the workforce in order to increase the number of women in top leadership positions. Over the past four years, several classes of William Smith students have worked together to create an active on-campus PLEN Chapter to offer leadership guidance, opportunities and support for female-identified leaders at William Smith.

The goals for the Chapter are two-fold. At the college level, the PLEN Chapter promotes an inclusive environment for all William Smith students and creates a space where these students can discuss a wide-range of issues related to female-identified leadership. The Chapter aims to help and encourage female students to build a network with one another as well as female faculty and staff members. The Chapter hosts events, such as biweekly breakfasts or lunches, which has created a "PLEN community" of women interested in leadership generally on our campus that enhances the PLEN seminar experiences for our students and also encourages them to help each other. To maintain and enrich our network, we invite alumnae, student, and guest speakers to our Leadership lunches.

On a larger scale, the Chapter hopes to introduce students to PLEN programs and keep students informed on the ways in which they can be involved with PLEN throughout their college experience and afterward. The student leaders of the Chapter lead our regular leadership lunches and other events, and help spread the word about PLEN on our campus to students, faculty and staff. The Chapter also communicates with the national organization to provide feedback from students and to assist in outreach to alumnae and other schools.

**“SO MUCH ROOM FOR ACTIVITIES!”
PROGRAMS AND ACTIVITIES AT THE GENEVA BOYS AND GIRLS CLUB**

Chatham Anastasi and Danielle Mueller

The goal of our project is to assess and reevaluate the current academic enrichment programs at the Geneva Boys and Girls Club Teen Center. Over the past two years, there has been a collective effort by the Teen Center to improve the academic success of participating students through collaboration with the Geneva City School District and Hobart and William Smith Colleges.

The Boys and Girls Club of America, the national organization, has six core goals, which include: a) cultural enrichment, b) social recreation, c) personal and educational development, d) health and physical education, e) citizenship and leadership development, and f) environmental education. Our primary focus is to ensure that these six core areas are being reflected throughout the Teen Center’s programs and activities that provide students with enrichment opportunities (e.g., pottery, music recording, cooking, gardening). In particular, we are focused on proposing additional programs that will address the national goals and local priorities while also being of personal interest to the club members. This project will contribute not only to the Teen Center’s success but also to the future success of its members.

THE SHIFT TOWARDS BILINGUALISM IN GENEVA: ELEMENTARY DUAL-IMMERSION PROGRAMS

Maria Arias

In Spring of 2017, the Master of Arts in Teaching Cohort of 2018 conducted research on the dual-immersion program at West Street School. In the past decade, dual-immersion programs have emerged as a new approach to foster bilingualism and biculturalism in schools. In the 2014 academic school year, Geneva implemented its dual-immersion program, which follows a 50:50 model: half of a day in Spanish and the other half in English. The classroom students consist of both Spanish native speakers and English native speakers.

Using a qualitative approach, consisting of content analysis and an interview, I sought to better understand assessment in the Spanish block of the dual-immersion program, particularly whether these instill an awareness of cultural differences or show greater student creativity. Through the analysis of assessments the format of the format and type of assessment, as well as the content, I will evaluate the values that the Spanish block instills. To triangulate my data, I will be interviewing a teacher from the Spanish block; obtaining teacher input is crucial in understand how assessments were chosen, administered, created and why it was done so this way. My research is aimed at assessing the program in terms/ of its functionality and attempting to provide suggestions or improvements for the future of the program.

ADULT COLORING BOOKS: EFFECTS ON MOOD AND MINDFULNESS

Kelsey Arroyo and Melanie Patterson

The use of coloring books, which have been marketed as stress relieving tools via increasing mindfulness and psychological wellbeing, has become quite popular among adults. There is little research on the value of coloring books as a stress reliever, but previous research has indicated that college students who performed a variety of art tasks had significant decreases in anxiety. Building on this research, in a project for our independent study in Psychology, we aim to further investigate the potential benefits of Mandala coloring books, specifically in the realms of mood and mindfulness.

Our study has both short- and long-term phases and uses. In the first phase, students are asked to either color or read a cognition book for 20 minutes and complete both a pre- and post- questionnaire that assess mood and mindfulness; in the second phase, these same students are asked to color for 7 consecutive days for 20 minutes and to keep a log, and the same questionnaire will be used to assess long-term effects of the study.

THE KARDASHIANS AND THE EVOLUTION OF AMERICAN CHILDHOOD

Alexandra Baird

As part of my independent project for my capstone course in American Studies, I will be examining modern American childhood by comparing two sets of artifacts from different time periods. I will first analyze America's most watched family on their reality television show, *Keeping Up With The Kardashians*, through episodes and transcripts. By viewing the commodified preteen and teenage girl experience that the producers of the show project to the mass public, I will cultivate a definition for the 2000 and 2010 childhood experience. I will also use earlier preteen and teenage girl narratives in America to draw comparisons as well as contrasts to understand the evolution of the commodified coming of age experience that our culture reinforces through the media and other forms of pop culture.

Using "The End of American Childhood: A History of Parenting From Life on the Frontier to the Managed Child" by Paula S. Fass as a lens, I hope to answer several questions: are there fundamental similarities or fundamental contradictions within the American childhood experience during different eras? Are there obvious negatives to modern portrayals? Does our nostalgia for earlier eras mask the negatives of childhood back then? By understanding the general American childhood experience, we can better understand ourselves.

HALF A CENTURY WITH THE GEAR IN NEUTRAL: DOWNFALL AND RESURRECTION IN DETROIT

Keegan Balk

Detroit as city boomed after the automobile industry took off at the turn of the twentieth century, but all this progress was destroyed by racial tensions about a half decade later. In 1967, for 4 nights the city was set ablaze, not even the National Guard could bring the fighting to a halt. The civil rights issues caused the city of Detroit to descend into a downward spiral. The riots took a toll on more than just the physical infrastructure of the city but also forced the professional football team and basketball team to relocate to the quieter safe suburbs. This move seemed logical at the time, but analyzing the situation from a present day stance as the basketball team prepares to move back into the city for the 2017 season reuniting all of Detroit's sports team in the downtown district, could staying in the city and battling through the hardships helped Detroit repair their issues or was the hiatus needed for the return? Being from Michigan, Detroit has a special place in my heart and I am striving to prove that America's Greatest Manufacturing City comeback story is not a myth.

C-H ACTIVATION: IF AT FIRST YOU DON'T SUCCEED

Fernando Banales Mejia

Staurosporinone, a protein kinase C inhibitor, offers promise for anti-cancer therapies. As part of my Honors project in Chemistry under the direction of Erin Pelkey, I am working with the lab group to synthesize compounds with a similar 3-pyrroline-2-one framework in hopes of discovering new compounds with improved biological activity.

Previous methods towards the synthesis of such compounds have been investigated, but they are either costly and not efficient, or limit the flexibility of the installation of the final aryl groups onto the 3-pyrroline-2-one skeleton. This route attempts to use C-H functionalization with a palladium catalyst to install an aryl group at position C3 of the 3-pyrroline-2-one. If successful, this methodology opens endless possibilities of varying the aryl group and can even pave the path towards an improved synthesis of staurosporinone.

HWS IMAGE IN 2014

Sean Barry

As part of the requirements of my independent capstone project in American Studies, I am engaging in an interpretive analysis of “This Week In Photos” that appears on the Hobart and William Smith Colleges website. My examination will concentrate on the first four weeks of the academic school year following the 2014 *NY Times* article on a sexual assault case that made national news and painted a negative picture of HWS.

The purpose of this study is to understand how liberal arts colleges represent themselves on their institutional websites using visual images. Many private liberal arts colleges around the country have experienced similar incidents on campus, which leads the institutions to become hyper-aware of their image. “This Week In Photos” is a very important tool for HWS to tailor its image to certain audiences. By deploying certain images that illustrate certain themes to website viewers, the institutions choose what they present, accentuate, and exclude. Consequently, institutions have a great amount of control over certain impressions their viewers might make through the visual information they strategically choose to introduce on their website.

TELL ME HOW YOU REALLY FEEL: EXPLORING STUDENTS' SENSE OF INCLUSION IN COLLEGE CLASSROOMS

Molly Bell

The pedagogical choices of an instructor have the ability to impact the students' sense of inclusion in the classroom. The college classroom is a site where there is opportunity for constructive learning, but also for the production and perpetuation of inequalities related to race, gender, class, and more. Course structure in the college classroom dictates the roles of both the professor and the students, and determines if students are given the opportunity to participate and interact in the classroom.

Most of the previous research on this topic focuses on the impact of participation on teaching and learning, and on achievement, but not on how a student's role, as informed by course structure, impacts their sense of inclusion. In order to investigate this I asked the research question: How does course structure impact the sense of inclusion that students of various racial backgrounds feel in the classroom? I conducted my research through in-depth interviews with four HWS students in introductory level classrooms.

WHERE DO WE GO FROM HERE? HOW THE HISTORY OF AMERICAN FEDERAL SOCIAL POLICY CAN LEAD TO A BETTER FUTURE

Molly Bell

“The percent of the population in poverty when measured to include tax credits and other benefits has declined from 25.8% in 1967 to 16% in 2012”¹. Despite this and similar improvements to the economic situations of the US population, we continue to face an epidemic of poverty that is continually reproduced. The United States has not seen any major, comprehensive social policy reform, updates, or implementation since the 1990s.

As part of my independent study in Public Policy, I explored the history of social policy in the U.S. In order to bring US federal social policy into the 21st century, it is necessary to look at the history of social policy in the US to create to see what is needed for efficient, effective, and enduring policies and programs.

¹ United States. Executive Office of the President. The Council of Economic Advisors. *The War on Poverty 50 Years Later: A Progress Report*. Washington: US Federal Government, 2014. 1-79. Print.

TAKING CARE OF BUSINESS: ALTERNATIVE FUNDING MODELS
FOR THE BOYS AND GIRLS CLUB OF GENEVA

Molly Bell, Steven Thai and Laurie VanBenschoten

Our research centers around alternative funding models for the Boys & Girls Club of Geneva. The program currently serves approximately 400 families in need of afterschool childcare, many of which are under significant financial stress. The Boys and Girls Club is seeking to raise funding without increasing the financial burden on families.

Through administration of surveys to current families and interviews with directors of similar organizations, we hope to discover a way to maximize funding options and minimize harm to participation. Our research aims to help the Geneva Boys and Girls Club's community program create a sustainable funding model and allow the program to continue to provide important afterschool care for Geneva residents.

FRANCAFRIQUE: A JANUS-FACED ENTITY IN THE POSTCOLONIAL WORLD

Ato Bentsi-Enchill

The colonial and post-colonial relationship between France and its colonies in Africa is very different from that of other European powers present on the continent since the 1400s. Even after France granted independence to many of its colonies in the late 1950s and early 1960s, it has played an active role in political, social, cultural and economic policies of most of these countries. Author Shaun Gregory referred to the independence gained by French-African countries as “nominal”.¹ One of the many ways the Élysée maintained these links was through a system of political and business networks known as Françafrique.

Today, the remnants of this relationship still exist, though not to the degree of previous years; because of new French presidents who do not have as much history with the African elites as their predecessors, personal links to Africa have faded. However, France is still dependent on its colonies to some extent, mostly for energy and natural resources.

My research brings together both majors (International Relations and French and Francophone Studies) as well as my minor, African Studies, to examine this Françafrique network and understand the role of both foreign powers and African leaders in under-developing the continent.

¹ Shaun Gregory, “The French Military in Africa: Past and Present,” *African Affairs* 99, no. 396 (2000): 435–88.

HABITAT RESTORATION AND A RIPARIAN BUFFER

Mitchell Beyer

My Independent Study in Environmental Studies project will explore an area behind the environmental house overpopulated with invasive species that disrupts the soil formation and biodiversity. I plan on implementing a riparian buffer to improve the soil stability, biodiversity, and the water quality of a small tributary to Seneca Lake.

A riparian buffer will not only protect the stream from nearby land uses, but it will provide essential nutrients to the atmosphere and help provide life for all living organisms. The riparian buffer will be constructed with native species, which provides better shelter and a better food source for wildlife species. Natives are the backbone in preserving biodiversity and are part of the major effort in sustaining an ecosystem.

During Earth Week, volunteers and I will remove invasive species and then placing/introducing native species to the area. These species will reach from the edge of the property line to the stream. The native species will not only be important for the biodiversity, but will also help the soil; most native plants have an extensive root system that keep soil in place and help slow down soil runoff. All trees and plants will be purchased from the White Oak Nursery, located in Geneva.

I anticipate that the increased plant population of native species will eliminate soil erosion into the stream. This will create a better flowing stream, and most importantly, a stream with less sediment. The clean water from the stream will then flow into a small tributary of Seneca Lake and improve the water quality.

AN EXPERIMENTAL EDUCATION PROGRAM IN GUATEMALA

Samantha Bowers

A Guatemalan NGO called Amigos de Santa Cruz runs an ongoing experimental education program in the rural highlands of Guatemala. In this particular area, many poor, Maya indigenous children have not been granted access to adequate education. As a result, many children drop out of school by the first grade. Therefore, this program compares a "model classroom" to a non-model classroom for children in kindergarten to see whether certain aspects of the new classroom better prepare these students (socially, emotionally, and academically) for the first grade.

Beginning in 2015, Amigos de Santa Cruz has been interviewing the children and parents of the model and non-model classrooms. These interviews are essential for finding out the most important aspects of the class that influence learning (such as the classroom environment, the teacher, parental involvement, etc.). I coded interviews of the children and parents of the model and non-model classrooms from 2015 for major themes that arose. I added to previously coded themes from last year's research and deleted less frequently occurring themes. Currently, I am translating the 2016 interviews from Spanish to English. After, I will analyze these interviews for similar themes and newly occurring trends in the data. My project seeks to find the most effective way to prepare these kindergarten students both socially and academically for the first grade. The project asks, "What aspects of an education are most influential for learning?" Goals include looking at the relationship between parental and teacher involvement, teaching strategies, and the acquisition of important concepts by the students.

CAN WE PROMISE HOUSING IN GENEVA?
EVALUATING OBSTACLES HOMELESS FAMILIES FACE WHEN FINDING
PERMANENT HOUSING

Hannah Brooks, Molly Dietrich, John Hillenbrand and Kayla Jones

There are high levels of homelessness in Ontario County, particularly in the city of Geneva, yet Ontario County lacks an emergency shelter. Family Promise provides yearlong support and resources such as a day center with centralized professional resources and temporary housing to homeless families.

Working in tandem with Family Promise of Ontario County, this research aims to support Family Promise's mission to help find permanent housing for homeless families in Geneva. Through in-depth interviews with Geneva based landlords, professionals in various social services organizations, and city government officials, we will identify resources available to homeless families and compile an inventory of permanent, affordable housing options. This will assist homeless families in their transition from temporary to permanent housing after they leave the Family Promise program.

BE A MAN: MASCULINITY IN DISNEY FILMS

Frank Brown

What was your favorite Disney film when you were a child? Have you ever wondered what these taught you about being a boy or a girl? Walt Disney Animated Studios released its first feature film, *Snow White*, in 1937. As of 2016, Walt Disney Animations has released 56 features. Ideas about gender identity can be found throughout Disney animations into 2017.

Because Disney movies are cultural icons in the western world, it is important to question the values Disney teaches to hold it accountable for the ways it attempts to shape children's identities. The primary focus of my work is to explore how images found in Disney animated features contribute to the continuation of classical, stereotypical, and, in many ways harmful ideas of masculinity across multiple generations. By examining films from four different periods of Disney animation, this research attempts to track the evolution of masculinity, the ways it corresponds with historical contexts, the ways it rejects historical contexts, and what versions of masculinity these films offer viewers.

CAN HELPING HURT? VOLUNTOURISM IN GUATEMALA

Marilyn Buck

Voluntourism with the goal of helping those in need is a recent trend in international travel that has become increasingly popular where people volunteer internationally, and has gained attention among social scientists. Past research has mentioned a concern with voluntourism and the fact that when done poorly it can do more harm than good to the communities the help is intended for. My research looks at voluntourism through a social psychology lens to see how it impacts the individuals and communities residing in Guatemala.

Last year, I went to Guatemala with my advisor Brien Ashdown. This semester I interviewed American short-term volunteers and long-term NGO workers. Having these perspectives can help provide answers about what might be driving volunteers and why their help is not as effective as they think it is. I found that volunteering could be effective if done correctly and with an open mind about doing the work that the Guatemalans need to be done, not what the volunteer thinks need to be done. This research can offer some insight for individuals who might want to volunteer in a foreign country and do so in a manner that has a long-lasting positive impact on the community.

NON-NATIVE SPECIES IN SENECA LAKE: CONTAMINANTS AND *HEMIMYSIS ANOMALA*

Kayleigh Buffington

Non-native species can be an important tool for learning about the fate of contaminants because they create new connections in the trophic web. *Hemimysis anomala*, a mysid native to the Ponto-Caspian region, has been introduced to the Laurentian Great Lakes through ballast water and subsequently spread to inland lakes. As omnivores with ontogenetic diet shifts, *Hemimysis* have the potential to change a system's capacity for bioaccumulating and biomagnifying contaminants, as they are suspected to be a high quality food item for naturalized fish.

For my Honors project in Biology under the direction of Professor Meghan Brown, I compared methylmercury (MeHg) concentrations and foodweb position of *Hemimysis* between (1) populations in a lake (Seneca Lake) and a canal (Seneca-Cayuga Canal) (2) juvenile and adult life stage, (3) adult males and females, and (4) *Hemimysis* and the native mysid *Mysis diluviana* in Seneca Lake. We applied stable isotope analysis to understand the trophic position of all treatments. We discuss our findings about differences between lake and canal populations, as well as between mysid species due to different diets. We found a mean MeHg concentration of 115.11 ng/g dw and SD= 55.96 for *Hemimysis* collected in Fall 2016 and a mean MeHg concentration of 300.43 ng/g dw and SD=79.07 for preserved *Hemimysis* from December 2011. Additionally, we found mean MeHg concentrations in *Mysis diluviana* to be 60.05 ng/g dw and SD= 14.59. Potential contaminant-load issues due to ontogenetic diet shift and contaminant expulsion upon brood release might impact trophic web alterations and changes in bioaccumulation rates of MeHg.

DETOUR OR DESTINATION: ALTERNATIVE EDUCATION PROGRAMS FOR GENEVA SCHOOLS

Benny Calderon, Kim Gutierrez, Lucie Mendelson and Lesly Rivero

Geneva's graduation rate has slowly been increasing, but 13% of its senior students still fail to graduate on time. Those who do not graduate on time tend to live in poverty, have shorter life-spans, and have children who do not graduate high school as well. Alternative education programs are models of educating students with diverse learning needs. Our research is aimed at exploring different alternative education programs (AEP) that could address the needs of at-risk students and are appropriate for the Geneva School District. As such, our goal is to propose programs that will help students meet the standards of success: decreasing the dropout rate, increasing academic achievement scores, improving attendance, and increasing engagement.

By evaluating models of alternative education programs in different school districts, we will develop a recommendation of possible AEPs that are viable and feasible for the Geneva School District to implement. Our research methods include surveying teachers and students, observing classrooms, and interviewing school staff in order to further understand the needs of the school community.

HARVESTING WAVE ENERGY BY MODIFYING THE ANCHOR TO NAUTICAL NAVIGATION AIDS

Scott Calnan

Nautical navigation aids have been placed all over the globe to help ship captains maneuver their way across oceans and into ports. These stationary aids are constantly subject to passing waves. Approximately 2,640 TWh/yr (terawatt-hour per year) are produced by waves off the immediate coast of the United States.¹ By implementing a permanent magnetic linear generator into the buoy's anchor, the constant vertical displacement from each passing wave can be efficiently converted into electricity for the grid.

My design approaches wave energy conversion (WEC) in a more practical way than current WEC devices. The system works by modifying the design of the deadweight anchor to incorporate a generator and circuitry. The magnet inside of the generator is directly attached to the floating buoy, which, when displaced in the vertical direction, induces an electromotive force (EMF) inside a helical wound copper coil. A full wave bridge rectifier, RC time constant, and voltage regulator are then used to convert the variable induced EMF signal into a constant DC output for the energy grid.

As a passionate surfer and competitive sailor both in high school and college, I have been surrounded by ocean and lake waves for several years. As a physics major, I have come to understand the amount of energy present in each passing wave, which sparked my interest in wave energy conversion.

¹ *Ocean Wave Energy*. (n.d.). Retrieved December 4, 2016 from, <https://www.boem.gov/Ocean-Wave-Energy/>

THE LIVING, BREATHING, US CONSTITUTION

Thomas Campion

Are the meanings of the words written into the US Constitution static and independent of the sociopolitical climate of the times, thus making our founding document and its principles unchangeable? Or, conversely, has the meaning of the Constitution been subject to change throughout the course of our nation's history, thus making our Constitution an ever-evolving, "living" document?

My central finding of my Honors project in History is that the Constitution underwent a revolution during the Civil War, where the fundamental meaning of the terms "liberty" and "equality" were changed forever. More specifically, the culmination of the Civil War wrought a new constitutional order in which our nation's guarantee of civil rights and liberties were, to some extent, expanded to colored citizens. I seek to expand upon the ongoing going dialogue about the fundamental nature of our Constitution by examining the document as an evolving, ever-changing document that is simultaneously capable of liberating and enslaving its citizens. The true meaning of the Constitution is not static; rather, its immemorial human principles have proven to be subject to the whims of those with political power throughout American history.

LISTEN TO THE LAKE: EDUCATING THE PUBLIC IN WATERSHED MANAGEMENT

Caroline Carr, Eric Dush, Phoebe Rafferty and Carly Seminer

Our project for our capstone course in Sociology explores the elements of Integrated Watershed Management (IWM) and how this practice can be applied to the Finger Lakes region as a means to rectify current environmental concerns. We are focused on the “Education and Outreach” aspects of local watershed management in the Seneca Lake watershed.

Methods include contacting educational organizations working within the Seneca and Cayuga Lake watersheds. Representative organizations include the Finger Lakes Institute, Cayuga Nature Center, Cornell Cooperative Extension, and 4-H programs. We then review the watershed related programs provided to gain an understanding about which aspects of watershed management are being taught to children. In addition to youth education we will explore how municipal organizations such as the Soil and Water Conservation Districts of New York State provide support to farmers and landowners regarding management of their property. We use a mixed-methods research approach including key informant interviews, snowball sampling, and literature review.

We consult the Seneca Lake Watershed Management Plan¹ to gain information about current issues such as dangerous phosphorus, nitrogen, and salinity concentrations, harmful algal blooms, invasive species, and sediment loading. In addition we examine the Community Outreach and Education Plan² to help clarify the methods by which the public will be informed of and engaged in the Seneca Lake Watershed Management Planning Project.

We seek to clarify the outreach mechanisms that are being used by organizations to inform the public about current watershed issues, and explore the options which allow interested parties to get involved with watershed management.

¹ Seneca Lake Watershed Management Plan Draft (2012).

² Community Outreach and Education Plan (2011).

THE IDENTITY OF FOSSIL LEAVES: NUMERICAL TAXONOMY AND CLASSIFICATION OF LATE-CRETACEOUS ANGIOSPERM MACROFOSSILS

Caroline Carr

The manner in which taxonomists classify dispersed fossil leaves varies among academic circles. While cladistics is a method commonly used to work out relationships between organisms according to the proportion of measurable characteristics that they have in common, this project applies numerical taxonomy to the classification of fossil leaves.

My project for Honors in Geoscience applies numerical taxonomy to two collections of fossil leaves from the Late Cretaceous period (65 million years ago). The goal of this project is to see whether numerical taxonomy can be used as an accurate approach to classify angiosperm fossil leaves, as compared to the conventional subjective approach of cladistics.

In order to analyze these fossil leaves using numerical taxonomy, we created a binary classification system to score fossil leaves based on their derived physical characteristics. The characteristics are based on those described in the *Manual of Leaf Architecture*¹ (Ellis et al., 2009). This data is run through the statistical computing program R using the package “Hierarchical Clustering,” where specimen appear in a cluster dendrogram according to their similarity.

Once the analysis of my data is complete I will evaluate how the more objective numerical approach compares to a subjective assessment of the identity of the leaves.

¹ Ellis, B., Daly, D.C., Hickey, L.J., Johnson, K.R., Mitchell, J.D., Wilf, P. and Wing, S.L., 2009. *Manual of leaf architecture* (Vol. 190). Ithaca: Cornell University Press.

RESISTING RHETORIC

Kelsi Carr

My paper will explore the connections between policy made by political figures in South African and the United States and xenophobia in their societies. I also will be identifying the protests and social media forms of resistance used against these policies.

My interest stems from the Executive Orders on immigration being presented by the United States President, and how that sense of fear and closed doors is causing a protest for rights but at the same time demonstrating a sense of fear towards those groups involved in the ban. I will be evaluating cross continental U.S. and neighbouring country immigration, discussing the media's role, the policy made, and the dynamic of the societal structure around it. I will include a comparative analysis of the problem in both United States and South Africa, and strategies and recommendations to lessen xenophobic attitudes around immigration.

MARKET DATA COLLECTION, ANALYSIS, INDICATORS, AND TRADING UTILIZING COMPUTATIONAL METHODS

Joseph Carrock and Garret Tongue

By now most traders have outgrown the age of paper books and binders, while, the rise of computers and the ability to program has allowed common investors to participate in the collection and analysis of large amounts of data, without hundreds of hours of analyst labor. Having collected and stored large data mines, we have forged and constructed models and indicators, which we believe describe very-short-term market movement.

As an outcome of our work in two cross-listed independent studies courses, we set up an investment portfolio to trade stocks and options in both real and simulated fashion, using our models and indicators, with the goal of producing a positive return when compared to an appropriate benchmark. We have back-tested our findings with the continued help of computational resources. In the future, we will have the ability to optimize our existing strategies and construct increasingly successful indicators which we believe will lead to the increased long-term performance of our portfolio.

COLLABORATION WITHIN LOCAL SENECA LAKE WATERSHED MANAGEMENT

Alex Cirra, Christian Salemy and Slade Tiller

In our Senior Integrated Experience class for Environmental Studies we seek to develop an understanding of water quality and quantity, land use, and socio-economic challenges that relate to Seneca Lake Watershed and the roles of the stakeholders and organizations involved. Our group is creating an overview and analysis of the Seneca Lake watershed and the active organizations that are involved in the planning, operation, and maintenance of the watershed's structure.

Over a dozen organizations have been working both individually and collaboratively to address the negative impacts on Seneca Lake's water quality through research. We plan on interviewing local leaders and creating a master spreadsheet of all the organizations' sustainable management plans, and explore other ways in which they collaborate towards the goals of maintaining a healthy watershed.

TEAMWORK MAKES THE DREAM: GENEVA CITY SCHOOLS
AND THE BOYS AND GIRLS CLUB

Samantha Cohen, Sarah Friedman and Taylor Sweet

As future elementary school teachers, we recognize the importance of community and school collaboration for promoting elementary school students' success. The focus of our project is to identify resources that allow for increased communication and collaboration between tutors at the Boys and Girls Club of Geneva and local elementary school teachers.

Our primary goal is to inform and improve academic supports for students who attend the Boys and Girls Club, especially in the context of tutoring both in-school and in after-school environments. Our findings and proposals will include a shared virtual space through which Boys and Girls Club staff, participating tutors, and local teachers have access to student information, academic resources, and additional school tools.

SEAMANSHIP AS CITIZENSHIP:
NATIONAL IDENTITY IN THE EARLY REPUBLIC

Will Conard-Malley

For Honors project in History, I have looked at mostly secondary sources dealing with sailors in the first half of the nineteenth century through the lens of identity, focusing on the role of sailors in the early years of the American Republic, from 1776 until about 1812.

From independence through the War of 1812, sailors were the symbol of the nation, as Uncle Sam or Lady Liberty is today. However, after the War of 1812, they became the target of reform movements attempting to change their behaviors to better fit emerging middle class ideals of respectability. This is because sailors, as the point of first contact for many nations that had never heard of the United States before - and therefore de facto ambassadors of the US - were feared to be damaging the national reputation of the US through their behavior ashore. To Jack Tar however, the freedom to engage in drinking, fighting, and in negotiated affection with prostitutes while on liberty was a way to reassert his heterosexual masculinity in the short timeframe of liberty ashore after months at sea.

Reform attempts by organizations such as the *American Seamen's Friend Society* would see competition between two different concepts of the nation that revolved around ideas of masculinity and gender, race, and liberty. In order for the sailor to be thought of as needing salvation, reformers first had to strip away the patriotic rhetoric that had surrounded sailors, and defined their identity in the public imagination. This campaign to tar sailors with the same brush ignored, or at least underplayed, the fact that many sailors did not fit into either of the images promoted by each side.

A WINDOW INTO THE CELLULAR WORLD OF THE BONE MARROW: A MECHANISTIC UNDERSTANDING OF CD28 IN PLASMA CELLS

James Cooper

CD28 is a protein that has been found on the surface of a type of immune cell called plasma cells, as well as on the cancerous form of plasma cells, which are the cause of the blood cancer multiple myeloma. Plasma cells are the antibody production factories of the body, which exists in two main subsets: Long Lived Plasma Cells (LLPC), and Short Lived Plasma Cells (SLPC). Previously, the activation of CD28 through another protein, CD86, has been found to be essential for maintaining the population of specifically the LLPC subset in the bone marrow of mice. However, the mechanism by which this survival happens is unknown.

Through my Honors project in Biology, conducted at Roswell Park Cancer Institute in Buffalo, NY I have begun to uncover this mechanism. I found that the activation of CD28 leads to changes in the way cells create energy from the cellular fuel molecule, glucose. Additionally, I helped uncover the signaling axis within the cell that were responsible for these changes: CD28 activation leads to activation of the transcription factor, NfκB, which causes the transcription of another transcription factor, IRF4.

This research provides a better understanding of how both the normal and the aberrated cells survive in the harsh environment of the bone marrow, where they rely on the expression CD28 on their surfaces to initiate changes in the cell that allows them to utilize the energy of the environment more efficiently, allowing them to outcompete other cells on a metabolic level. Expanding our knowledge of this process will allow us to create more effective vaccines, develop new ways to treat autoimmune diseases, and help develop novel ways to combat multiple myeloma.

PUTTING YOUR NUMBERS WHERE YOUR MATH IS:
AN ASSESSMENT OF AMERICA COUNTS

Matt Cragg, Allie Flaherty, Paige McKenna and Karley Reuscher

Because many students struggle with math, it is important to determine which programs and policies best address academic success. Our group is evaluating the effectiveness of the America Counts program at Geneva Middle School. The America Counts program is a federally funded intervention service founded in 2006 that provides homework help and aide to GMS students in mathematics and English Language Arts proficiency from HWS tutors.

Using secondary data analysis of NYS testing scores and interviews with HWS and GMS administration, we are attempting to gain an understanding of whether or not the program is worthwhile in its current condition and ways in which this program could be improved. We want this to be as effective as possible in boosting math proficiency and confidence in Geneva's students.

BILINGUAL EDUCATION BEYOND BORDERS

Rebecca Czajkowski

In partnership with Stellenbosch University in South Africa, the Beyond Borders program is a collaborative approach to a transnational social justice education. As my final product for this independent study, I address how South Africa and the United States address the needs of their English Language Learners in their respective public education systems, and the success of their multilingual programming.

To effectively evaluate and compare how the two countries address this need and then offer possible solutions, I will be studying recent research on multilingual classrooms, as well as implications and implementation of the legislation written, and interviewing both South African and American participants from multilingual classrooms. Measures I will be using to evaluate the two systems are graduation rates, literacy test scores, personal accounts, and matriculation statistics.

I hope to determine how successful the South African and United States public education systems are in addressing the needs of their large populations of multilingual learners and offer possible further reforms for the evolving systems in place: what could the future of multilingual education look like in these countries?

MANIPULATION OF SEMITONES: TRIADIC TRANSFORMATION AND EMOTION

Iquawn Davis

Neo-Riemannian Theory refers to music analysis which focuses on describing types of movement between chords as a function of close or far movements by increments of one or two semitones. Neo-Riemannian Theory incorporates two defining characteristics: Voice leading parsimony, the movement from one triad to another with the least amount of effort used, and contextual inversion, and the inversion around an axis consisting of selected notes of one chord to reach a different chord. Though triadic transformation is often used to analyze music when harmonic analysis is less well suited, the importance and impact of common-tone retention (keeping notes from one chord to the next) on emotional response, as well the importance of the direction of semitone movement within the transformation, are largely underexplored.

I explore the intersectionality between triadic transformation and emotional experience through the use of semitone manipulation (changing chords by means of semitones). Aspects of anticipation manipulation, affect cues and interval size analysis, and several other relating theories will illustrate connections between Neo-Riemannian theory and emotional response. Understanding possible emotional implications of semitone manipulation during triadic transformation can allow for the inclusion of emotional intention analysis into Neo-Riemannian frameworks.

INTEGRATING LCMS ANALYSIS AND PURIFICATION INTO THE SYNTHESIS OF POTENTIAL ANTICANCER CHEMOTHERAPEUTICS

Ryan Davison

Professor Justin Miller's research group focuses on the syntheses of potential anticancer compounds known as histone deacetylase inhibitors (HDACi). We use a synthetic approach that allows for a modular construction of our chemical targets. However, the polarity of the compounds, as well as their respective synthetic derivatives, has posed a challenge when attempting to purify the materials.

My research has focused on the setup of a liquid chromatography mass spectrometry (LCMS) instrument and its integration into the synthesis of potential anticancer chemotherapeutics. My contributions include a complete LCMS instructions manual, which includes several possibilities of how to use/setup the instrument(s). Moreover, I used the solution phase synthesis of a known HDACi analog as a model for the LCMS and high pressure liquid chromatography (HPLC) methods I developed.

Future syntheses of potential anticancer compounds will benefit from the facile analysis and purification due to the LCMS/HPLC methods that have been established in this work. Specifically, several key reactions in the solution phase have been analyzed and their respective products purified using LCMS and HPLC methods. Therefore, future syntheses of compounds that are similar in chemical composition and structure will be easily analyzed and their products purified. Ultimately, the LCMS and HPLC methods produced from my research will increase the efficiency of both the synthesis and biological screening of potential anticancer chemicals.

EXPERIENCES WITH ADULT-ONSET ACNE

Christopher Demas

Although acne is a non-life threatening disorder, acne can have a significant impact on the lives of those it affects. The skin is in fact the largest organ of the human body and is the third most complained about body part, falling only shortly behind the nose and hair. The visibility of acne might explain why people struggle so deeply with this condition. Acne is prone to areas of the skin developed by sebaceous glands such as the face, back, chest, and upper arms, which are often exposed in daily interactions. Facial acne may be even more significant, since facial attributes are commonly known to be associated with personality; therefore acne may spoil first impressions and provide a barrier to social interactions.

This project for my independent study in sociology documents the lived experiences of those with adult-onset acne. My research uses an in-depth interview technique and focuses on the identity change process and understanding how people transition from being "normal" (clear skinned) to viewing themselves as acne sufferers. I explore this research question through the use of in-depth interviews in order to expand our limited understanding of adult onset acne.

REMOTE SENSING OF ALGAL BLOOMS VIA DRONE SPECTRAL IMAGING

Christopher Demas

Algae blooms occur when algae overpopulates a water source; in some cases, algal blooms can negatively impact the environment. This research uses drone-collected reflectance spectroscopy images to remotely measure algae concentration. The algal pigments are characterized by unique light absorbance and reflectance features. Spectral images obtained from two up-down visible spectrometers revealed a prominent feature around the visible blue/green wavelength range, which correlates to the concentration of algae in the water.

Initial results show the viability of using drones to measure algae concentration. This inexpensive technique, coupled with routine monitoring, improves upon current *in situ* colorimetric methods of measuring algae concentration.

FEEDING, CRAFTING AND CREATING COMMUNITY IN GENEVA NEW YORK: THE LOCAL FOODS MOVEMENT AND FARM TO TABLE RESTAURANTS

Sara DeVault-Feldman

Food is a nostalgic subject for many people and eating the food of “years gone by” certainly evokes the times of the past. My interest in the local foods movement and farm to table restaurants originates from the idea that local foods are not only sought out for better taste and quality, but that they also represent a desire for closer community relations and connections. Through observation at local restaurants like Kindred Fare and Cebo, interviews, literature review and archival research, I investigate whether there is increased interest in local foods/eating locally comes from and how those interests affect people’s practices.

While Geneva appears to be becoming more interested and supportive of local foods and farm to table restaurants, there is often a divide between practices and beliefs. The climate of Geneva itself presents a barrier to eating locally because it limits what can be grown and eaten. While community is often stressed at farm to table restaurants, the price of food often serves as a deterrent to dining there. This awareness of those barriers allow for a deeper understanding of how the movement will sustain itself in Geneva and where it may go in the future.

MILLENNIAL MINDS: A BUSINESS LEADERSHIP CRITIQUE BY MILLENNIALS

Molly Dietrich

Millennials, those between age 20-36, are now the largest generation in the United States. Particularly in the business world, there is an obsession with understanding millennials, especially since they are the most diverse and arguably the most complex generation. Business thought leaders have written many articles that analyze and label millennials, calling them the “mysterious generation” that needs to be figured out.

While older generations of business leaders may not understand millennials, millennials are starting to understand what they want from business leaders. This research utilizes qualitative surveys to examine business leadership through the fresh eyes of millennials. What do millennials think is most important for business leaders to consider about their leadership styles as they move forward?

THE TRUE STORY OF THE OPIATE EPIDEMIC:
DOES POPULAR CULTURE INFLUENCE DRUG USE AND PERCEPTIONS?

Michael Doebelin

Opiate use is currently a major epidemic in the United States; we see high opiate use cutting across all sectors of society, including in the middle class, especially in predominantly affluent suburbs, and even in the Geneva community. As part of my individual project for my capstone course in American studies, I will investigate opiate use in the local community, create awareness to eliminate stigmas about opiate abuse, as well as examine whether the use of drugs in popular culture influences or shapes drug use and the perception of drug users.

I will be comparing pop culture representations like *Breaking Bad* and *The Hangover* to the documentary *Heroin: Cape Cod, USA* and newspaper articles and blog posts for first hand accounts of real addicts. I will also be in contact with local experts in our Geneva community who can help me explore the local sector. My hope is to explore the relationships between pop culture and opiate use, and to provide a thorough understanding of the opiate problem locally and in the United States more generally.

DESTIGMATIZATION THROUGH EXAMINATION:
A CLOSE LOOK AT FURRIES AS AN ANTHROPOMORPHIC SUBCULTURE

Jane Donnabella

The word “fan” is the shortened term for “fanatic”, i.e. a zealous devotee with an obsessive interest in a particular activity or subject. Fan interests range widely, yet Cheeseheads and Deadheads are considered normal, whereas Trekkies and Otakus are regarded as strange. This project sought to examine the furry fandom, a highly stigmatized subculture often taunted for their interest in anthropomorphism and all of its facets.

Under the advisement of Ben Ristow, I began this project for Honors in Writing and Rhetoric by attending Anthrocon 2016, a furry convention located in Pittsburgh, Pennsylvania. I then examined the online and offline presence of the fandom and observed patterns in how the fandom represented itself versus the way it was perceived or misrepresented. The resulting project contains three parts: an anthropological research paper, a video essay that centers on furryphobia in television, and a journalism piece.

It is my hope that this multimodal project will help alter misconceptions and destigmatize the fandom as a whole by providing several access points of information through which people entirely unfamiliar, unwelcoming or uncertain towards anthropomorphism can further understand the subculture and how it relates to popular culture.

MAJOR LEAGUE DISCRIMINATION: WAGE PREMIUMS FOR FOREIGN-BORN PLAYERS IN MAJOR LEAGUE SOCCER

Clint Dunn

Players who are perceived to be highly-skilled are often highly valuable in professional sports. Oftentimes, prejudices can be confounded with performance. In my project for Honors in Economics, I seek to explore the hypothesized discrimination in the labor markets for players in Major League Soccer (MLS), the highest-flight professional league in the U.S. Utilizing data from the 2016 season, differences in wages between domestic- and foreign-born players were found. It is hypothesized that foreign-born players will experience a wage premium.

This paper contributes another finding to the field of sports economics, specifically in regards to discrimination and the monopsonistic and winner-take-all labor markets. For undergraduate students, this paper may provide an entry point for economic discussion. While many college students are familiar with professional sports, they are unaware of the effect of economics on their favorite player.

BOYS AND GIRLS CLUB OF GENEVA: THE TEEN CENTER TUTORING PROGRAM

Emily Feldesman and Jeff Rizza

This project is focused on the nature and effectiveness of the tutoring program at a Boys and Girls Club in Geneva, New York. The Boys and Girls Club of America is a nationwide organization of after-school programs for youth in elementary and secondary schools. The Boys and Girls of Geneva Teen Center provides services to approximately 80-90 students in grades 5-12. One of the services provided is a network of college student tutors from Hobart and William Smith Colleges who work closely with Teen Center staff and assist students with their academic work one hour per day, four days a week.

The goal of this project was to evaluate the current tutoring program and make recommendations to improve its effectiveness. The current state of the program was assessed by reviewing existing documents and reports, conducting interviews with current facilitators of the program, and talking to current tutors about both successes and challenges. Notable strengths and weakness of the program are identified and targeted for evaluation and recommendations, including tutor retention, appropriate tutor placement, and methods for continued evaluation of the tutoring program's effectiveness.

TESTING A METHOD FOR IDENTIFYING OTU'S IN DISPERSED FOSSIL LEAF FLORAS

Mikhail Fischer

Conventionally, fossils are grouped into morphotypes (species) based on the expertise of the researcher. This is problematic however, as multiple researchers may form varying groups based on the characteristics they believe are most important. My Honors project in Geoscience under Professor Nan Arens is part of a joint project aiming to provide an objective approach to place fossils in correct morphotype groups. We will do this by scoring characteristics of individual leaves within a collection and grouping those that are most similar. We have chosen to use a phenetic approach because we want to find the overall character similarity between leaves, not ancestral similarity. If this technique proves to be practical, it can be applied to a multitude of paleontological studies that rely on character relationships between fossils.

To test the capabilities of this approach, we applied a phenetic system to modern leaves because we know cluster formed from these leaves should group on a species-level. We collected 722 angiosperm leaves from 31 known tree species and scored each leaf based on 233 characteristics derived from the Manual of Leaf Architecture (Beth Ellis, 2009). After scoring each leaf on a binary system, "1" for character "present" and "0" for "absent," the data was analyzed with a clustering algorithm, using R stats. This determined the number of operation taxonomic units (OTUs), or number of clusters based on overall shared characteristics. The number of OTUs should represent the number of tree species. The initial dendrogram placed 8 individual leaves (5%) in the wrong OTUs, and created 32 clusters, representing 31 species, with *Aesculus hippocastanum* (Horse Chestnut) forming two clusters. From here, we applied principle component analysis (PCA) to determine which characters appear to be influencing the clusters the most. After determining the heavily weighted characters, we will define how much data can be omitted, and still form the correct OTUs. To do this, we removed 5%-65% of the data in 5% intervals and will run these datasets through the clustering algorithm to determine at what percentage of missing data are the clusters unrecognizable.

Once we determine how much data is needed to create the correct clusters, we can apply this method to fossil leaf collections, where the number of morphotypes (family, genus, species) is unknown. This will allow researchers to more accurately place their samples in clusters, allowing for a deeper understanding of the flora and environment of the depositional setting.

PARENTAL INVOLVEMENT IN BILINGUAL EDUCATION: GENEVA ELEMENTARY DUAL-IMMERSION PROGRAM

Allison Flaherty

The Master of Arts in Teaching Cohort of 2018 conducted research within the dual-immersion program at West Street School. My focus was on parental involvement in the program.

In 2014, Geneva implemented their dual-immersion program to follow a 50:50 model, during which the class is taught equally in English and Spanish throughout the school day. Such dual-immersion programs have been growing in popularity across the country and internationally, to foster bilingualism and biculturalism in schools. My research aimed to hear from both Spanish and English-speaking parents.

Through the use of two separate focus groups with parents, one in each primary language, I seek to elaborate on how Geneva's dual-immersion program is including and incorporating parents into their children's learning processes. It has been shown that parental involvement is a strong indicator of the program's current strengths and weaknesses through parental roles and leadership in the program, which makes this aspect of the program a very important piece to study in terms of the success of this aspect of the program (Gerena, 2011). The research is designed to provide an evaluation of the program in terms of its functionality, potential success, and providing suggestions or improvements for the future of the program, to help the Geneva School District further develop and implement their dual-immersion program.

PHYLOGENETICS OF THE APOCYNACEAE PLANT FAMILY

Abbey Foote and Katarina Kostovic

Phylogenetic trees are hypotheses of the evolutionary relationships among species and can be used to trace the evolution of certain traits of species using their branching order. The purpose of our project is to estimate the evolutionary relationships among plant species of the plant family that includes milkweeds and dogbanes (Apocynaceae) using phylogenetic trees.

Using DNA sequences allows us to track the molecular base pair changes that have occurred as the plant has evolved, and next generation sequencing technologies have allowed us to sequence large amounts of data in little time and at low cost. Consequently, we will observe how the genome sequences of Apocynaceae have changed over time and how these sequences relate to each other. To accurately present this data, phylogenetic trees will be synthesized. We have extracted DNA samples and sent them to be sequenced. Once we obtain sequences, we will assemble the chloroplast genomes of our samples and use a bioinformatics program to assemble the phylogenetic trees from the information about evolutionary history recorded in their DNA.

We hope to resolve the Apocynaceae phylogenetic tree as well as discover how Apocynaceae chloroplast genomes have evolved. The results of this project will provide a framework for the proper identification of Apocynaceae species, which has implications for the use of these plants in medical interventions such as chemotherapy, anti-cancer drugs and wound healing.

RAP AND POLICE BRUTALITY

Peter Gesualdi

Through my case study looking at the emergence of rap in the late 80's and early 90's, I will examine songs of key figures in early hip hop for clues about the relationship between the African-American community and the police. I will be looking at will be the South-Central Los Angeles based rap group N.W.A. and west coast based rapper Tupac Shakur. I will be drawing upon popular songs written by these artists that include "F*** The Police" by N.W.A. and "Trapped" by Tupac Shakur. I will also be looking at newspaper articles from the 80's and 90's to look at this problem. Both of these songs became an anthem for a new wave of activists that were fighting police brutality and racism around the country. I am using this study to try and figure out why this problem still very much exists today.

LEND ME YOUR EARS: MULTIPLE PERSPECTIVES FOR EVALUATION AT THE BOYS AND GIRLS CLUB

Rachel Glatman and Carmelo Guglielmino

The goal of our project is to evaluate data from parents, teachers, and staff associated with the Boys and Girls Club of Geneva to inform the nature and design of specific programs. Most current evaluative work is focused on tutors and students within the club. Our project seeks to provide the club with a wider range of perspectives regarding their programming and outcomes.

The ultimate goal of our project is to establish an understanding of the evaluation methods that are used currently and identify what aspects the Club hopes to improve upon and better implement in the future. By proposing several new surveys and interviews, the project plans to get additional feedback from parents, staff and teachers in ways that inform the effectiveness and success of the Club.

THE JOYS OF WOMEN: A LITERARY ANALYSIS

Hannah Glenshaw

In traveling to West Africa, I witnessed changes in the sequestration of women who were moving into the contemporary workplace that led me to reflect more deeply on the conditions of women and myself. In this paper, my experience in Senegal will be a springboard to examining two works from Nigeria: Buchi Emecheta's *The Joys of Motherhood*, and Chimamanda Adichie's *Purple Hibiscus*. These novels cover two different generations, the mid 20th century and the current generation. I will then use Adachi's "We Should all be Feminist" as a lens through which to exam these two stories and my experience. All of this examination takes place within the context of colonialism and postcolonialism, and focus on the changing role of women within the whole colonial and decolonial process.

HOLLYWOOD'S PORTRAYAL OF COMMERCIAL DEVELOPERS

Adam H. Goodman

As part of my independent research project for my senior capstone, American Studies 465, I researched Hollywood's negative portrayal of real estate developers in feature films like *Glengarry Glennross*, *Chinatown*, *Up*, and *The Goonies*. I want to examine these negative portrayals to look for patterns and norms that appear among portrayals of the main characters. Are they resulting from the typical underdog Hollywood narrative? What do these narratives represent about pop-culture? In order to answer these questions, I will analyze these movies through a Media and Society lens. To complete this analysis, I will compare these films to newspaper articles, specifically from the Boston Herald and the Boston Globe.

THE EFFECT OF CULTURE ON THE PRESENTATION OF PSYCHOLOGICAL DISEASE

Nicole Guardino

In psychology, experts are continuously looking for ways to understand the difference between the respective influence of nature and nurture on human behavior. In the field of medicine, doctors often argue for nature as the source of physical symptoms, and desire specific answers provided by clear lab tests. But doctors might be missing one very important piece of the puzzle: culture. One's culture, or nurture, has an enormous role in the way diseases are presented and treated. Psychological diseases, especially, will be strongly influenced by the patient's surroundings and way of life.

My work will focus on the effect of culture on the presentation of psychological diseases. I will study disorders as they are presented in countries across the globe, comparing and contrasting the cultural values that set each nation apart. My study will include the corresponding treatments of these disorders. My hope is that with increased recognition of the problem, professionals will understand the need to find the proper balance between nature and nurture.

LEVITATION WITH SUPERCONDUCTING ELECTROMAGNETS

Tyler Hanzlik

The focus of my study for Honors in Physics is to critically analyze the properties of Second Generation High Temperature Superconducting (2G HTS) wire, or “tape,” while it is used to build electromagnets designed for levitation. Using Superconducting wire to build AC electromagnets is a very novel approach to magnetic levitation. The mission is to optimize and measure induced magnetic fields and levitation forces while monitoring and minimizing the power dissipated i.e. the heating of the superconducting wire, and the end goal is to demonstrate a self-stabilizing self-levitating superconducting electromagnet design utilizing alternating current.

To achieve this, electromagnets will be wound on 3-D printed spools and contained in encasements filled with liquid nitrogen. AC power will be applied to the electromagnets from a high current power source while placed on aluminum plates. This produces to induced magnetic fields, one coming from eddy currents in the aluminum plates. These repelling magnetic fields ultimately produce the levitation. Permeable cores will be tested in hopes to increase levitation force per unit mass. Self-stabilizing thresholds will be tested using grooved aluminum tracks. Finally an automated temperature monitoring and cooling system will be attempted in hopes to compensate power dissipation loss of the system.

DUAL-IMMERSION AND BEHAVIOR

Anna Hartnett

As part of the Master's of Arts in Teaching Cohort of 2018 I have conducted research on the dual-immersion program in the Geneva School District. In the past decade, dual-immersion programs have emerged as a new approach to foster bilingualism and biculturalism in elementary schools. In the 2014 academic school year, Geneva implemented its dual immersion program which follows a 50:50 model: half of a day in Spanish and the other half in English. The students in each classroom consist both Spanish native speakers and English native speakers.

Using observation and stimulated recall interviews I sought to understand the Geneva dual-immersion program. My project focused on student behavior during English and Spanish instruction in order to understand classroom management strategies. My inquiry was driven by the importance of student behavior and teacher responses, which impact learning opportunities in the classroom. The research is aimed at assessing the program in terms of its functionality, potential success, inspiration for new participants, as well as attempting to provide suggestions or improvement for the future of the program. This research is useful for the Geneva School District in further developing and implementing their dual immersion program.

MUSIC AS AN UNTAPPED RESOURCE IN THE EDUCATIONAL CURRICULUM

Brooke Hayes

What do we know about the influence of music on a student's education in the classroom and its effect on the educational curriculum? I will investigate and evaluate the impact of utilizing music in the educational curriculum so as to create a richer learning environment for their students.

Various educational studies and related scholarly literature that have been conducted within classrooms to determine the impact of music on whether this musical influence is beneficial for students or for the student's education. For example, music can be intertwined with various academic subjects, thereby enhancing the understanding and engagement of the students within the classroom environment. As Barret stated in the article "Interdisciplinary Work and Musical Integrity," "when connections between music and other disciplines are valid the bonds between the disciplines are organic; that is, they make sense without forcing fit or stretching a point. Valid connections carry meaning across the boundaries of subject areas."¹

Learning strategies that students develop when listening, understanding, and critiquing music are strategies that can extend into many other subject fields. In many respects, the introduction of music into the learning curriculum can be much more enjoyable for the student and can serve as a conduit for a more effective learning experience. Using music in the educational environment provides energy in the classroom, creating a creative, motivating, and inspiring learning experience for the students. The deeper knowledge learned from this investigation can help teachers and educators create an effective learning environment for their students.

¹ Saccomano, Dana, Saccomano, Doreen. "A, B, C and Do, Re, Mi: Literacy Strategies in the Music Classroom." *The Language and Literacy Spectrum* 25: 29-41.

THE INTERNET SAID SO!
PREJUDICE AND PERSONALIZATION IN THE DIGITAL AGE

Drew Helbling

In this project, I investigate the segmenting nature of social media through its goal of presenting users with material pertaining to their interests. I seek to determine whether segment-making media exacerbates prejudicial tendencies or ameliorates vituperation in public space. How do social media sites and independent news sources, such as Facebook and various political media sites, affect the growth or reduction of affinity groups?

By analyzing the algorithms media sites and advertisers use to present consumers with specified content, and research on the history of consumer relations with news outlets, I use a Sociological/Media & Society lens to understand the impact media has on social prejudice. Through these lenses I evaluate what is at stake for the future of media-consumer relations and the relationships among the people within media-related societies.

EDUCATIONAL OPPORTUNITY GAPS IN THE UNITED STATES AND SOUTH AFRICA: COMPARING THE PROBLEMS AND FINDING SOLUTIONS

Graham Hughes

When we talk about schools in America we often talk about achievement gaps, between black and white students, between rich and poor students, and how either the individuals themselves or the institution of education has failed, but what American children suffer from is not really an achievement gap: it is an opportunity gap: it is an opportunity gap. Many other nations around the world suffer from similar problems. One such nation that draws significant similarities to the United States is South Africa.

My research was conducted through the Beyond Borders Program at the Centennial Center for Leadership, where I partnered with students from Stellenbosch University in South Africa. I conducted this research by examining academic journal articles, federal and state government publications, and national policy organization work from both nations, focusing on five arenas in which policy intervention must be made: families and parenting, early childhood, K-12 schools, communities, and post-graduation support. Each of these institutions contribute to the opportunity gap all marginalized communities in our nation suffer from, and as such, one cannot be discussed without discussing them all.

By examining all of these institutions and how they interact with one another, this research attempts to demonstrate exactly how together these institutions contribute to the opportunity gaps in the United States and South Africa, and examines several potential policy solutions aimed at narrowing the opportunity gap.

THE NEW WORLD ORDER AND THE US INVOLVEMENT IN THE KOSOVO WAR

Kei Hyska

From March 24, 1999 to June 10, 1999, the Yugoslav province of Kosovo was hit with NATO air strikes lasting 78 days. NATO issued these bombings against Serbian military positioned in Kosovo during the war. The war arose due to a long history of ethnic tensions; Serbian President Slobodan Milošević focused on an ethnic cleansing of the Kosovar Albanians, who made up the majority of the population at 82%. An estimated 11,000 people died as a result of the war, and about 90% of the Kosovar Albanian population was displaced. The Kosovo War was, indeed, definitional genocide. NATO described their involvement as a form of “humanitarian aid” in order to justify using military force without the approval of the UN security Council.

I was born in Albania, thus the Kosovo war neighbored my country and targeted my people. In my research, I have explored how and why the United States got involved in the Kosovo war, thus leading to the air strikes of 1999. The United States has been a witness to many international human rights violations without intervening—why choose to go as far as violate the terms set by the UN security council to intervene in the Kosovo War?

To answer this question, it was important for me to analyze the domestic situation in the US, including Clinton’s personal affairs, as well as the post-Cold War era. I suggest that Clinton’s adaptation of the New World Order can be seen as the driving force for American foreign policy.

OUR SCHOOLS: BUILDING AN ANTI-BIAS CLASSROOM

Stephanie Kenific

The public school curriculum in America is failing its students of color and non-male students. The Common Core and the corresponding “learning modules” provided by EngageNY are embedded in the values of the socially privileged, those who are not forced on a daily basis to consider racial prejudices or the dominating presence of cis-gendered men in discussions. This model of education was designed with the purpose of controlling the masses and quelling those who would create change. Therefore, the curriculum which will combat the stratifying pattern of public education must be created with even more deliberate, informed, and planned choice in terms of language and content.

I have been engaged in constructing a social justice-based curriculum for a 9th grade English classroom in Geneva, N.Y. Interviews with local families and activists proved central to the goal of constructing a new curriculum that met the need for justice in Geneva. The lessons represent a synthesis of dialogue within the local community and deep processing of theoretical works by black feminist scholars such as bell hooks and Audre Lorde.

Consisting of five distinct units, the curriculum is centered on language and power, with the goal of returning authority to the students of the classroom. The curriculum views its potential students not as passive recipients of knowledge but as social actors of the highest potential. To be abundantly clear, this project envisions students as revolutionaries in the here and now, fully capable of protestation and collective action. In affirming student linguistic and personal rights, the curriculum advances the development of these future revolutionaries.

GENEVA'S MULTI-MILLION DOLLAR MAN: CELEBRATING ARTHUR DOVE

Nicolette Kombouras, Katie Meyer, Sam Solomon and Meredith Surette

Arthur Dove's painting, "Boat Going Through Inlet" recently sold at Christies for \$5.43 million. Highly influential in the world of art, with a profound affect on the works of artists such as Georgia O'Keeffe and Alfred Stieglitz, Dove has been largely forgotten and neglected in his hometown of Geneva, New York. The Dove Block Restoration Group plans to open a museum dedicated to preserving the legacy of Dove.

The focus of our Dove Block Project is to determine the best ways to create interest and drive traffic to a museum dedicated to the first American abstract expressionist painter. Through researching existing literature and interviewing regional museum staff and local enterprises, including wineries and small businesses, we strive to understand how niche museums succeed in attaining popularity and notoriety. This project is essential to recognizing a world-renowned artist and helping to revitalize downtown Geneva.

SURVIVOR-CENTERED POLICIES: HWS AND THE PEER ADVOCATE MODEL

Mary Kubinski

In the fall of 2016, I completed my Public Policy Capstone by investigating how American campuses provide confidential resources to the survivors of sexual assault. As HWS Colleges continues to navigate the legal and emotional terrain of sexual assault, this policy brief focused on the experience of the survivor and the creation of a peer-model victim-centered outlet for confidential support.

I focused on the peer model philosophy, which emerged alongside the disabilities rights movement, because traditional service programs were not adequately addressing the needs of people. The foundational idea behind peer support is that matching those with similar life experiences and knowledge allows one to best assist other similarly grouped individuals or cohorts in support, learning, and growing.

The U.S. Department of Education's Office for Civil Rights recognizes that non-professional counselors or advocates provide valuable sources of support for students and strongly encourages schools to designate these individuals as Confidential Resources. I will examine one approach to how HWS can implement a peer advocate program that both educates and prepares student volunteers, noting the challenges of student burnout, turnover among peer students, and campus size.

BEYOND BORDERS: POLICE VIOLENCE
IN THE UNITED STATES AND SOUTH AFRICA

Mary Kubinski

In August 2012, the South African Police Service (SAPS) killed 34 miners and injured 78 miners at Marikana. Within one year of the murder of Michael Brown in August 2014, more than 1,000 U.S. people died at the hands of law enforcement officers acting in the line of duty.

My Beyond Borders independent study examines the violent, racialized policing of the United States and South Africa. Specifically, I argue that both nations have a police force that is continuing a legacy of racial suppression. In the interest of maintaining these systems and the police-civilian power dynamic, legal consequences are minimal, if existent, for the officers that exercise violent and deadly policing strategies.

This study concludes by investigating options for combatting both the police violence and the absence of legal consequence for police officers in the United States or South Africa in cases of police violence. I argue that correcting the trends and power relationships that exist in contemporary American police violence calls for a multi-tier approach. I make the recommendation for America to implement community policing in the short-term, with a longer-term goal of prison abolition, for violent, racist policing cannot exist without the maintenance of the American prison culture.

FAULKNER'S HIERARCHY OF SOCIAL DISGRACE

Elizabeth Lawrence

For my final paper in my senior capstone, Reading Faulkner, I will be investigating the hierarchy of social disgrace that is present within a variety of William Faulkner's novels. Using various class readings in combination with third party critiques and commentary, I hope to discover and present a deeper understanding of Faulkner as a writer, and to illuminate his perspective on the social stigmas that were present during the publishing of his novels.

Faulkner frequently composed his novels around a struggling set of characters who are presented with a difficult task, or a set of less than ideal circumstances. I will show how Faulkner uses this thematic approach to convey a social rank in each character, and through this established rank, how one can develop a deeper level of understanding of Faulkner's South.

I hope to reveal a pathway to a greater sense of Faulkner and the intentions behind the composition of his literary works. To demonstrate my findings, I hope to design an interactive game through which various actions lead the user to see where they might end up at the end of one of Faulkner's novels.

DIFFERENTLY-ABLED BODIES IN COLLEGE PERFORMING ARTS CLASSES

Hannah Lippincott

This pedagogical research project includes the design and implementation of a lesson plan that can be implemented in performing arts classes with differently-abled populations. The lesson design was tested in this year's Arts Experience Festival in a creative movement class in the Deming Theater. In addition to being a part of Arts Experience Festival classes at HWS in the past, I was a participant in a mixed abilities dance class while studying abroad in New Zealand in the fall of 2016. My classroom experiences with physical and cognitive diversity caused me to reconsider the traditional educational modality and norms in American colleges and universities.

The new lesson design could be utilized in dance or theater classes as a way to diversify the college classrooms and studios in performing arts to encourage all types of able bodied and minded people to explore creative movement, whether or not they have prior training in that discipline.

In my research I have found that higher education arts programs rarely include differently-abled dancers, thus creating the gap that I am focused on closing. This inquiry has uncovered only a handful of mixed abilities dance companies, and the few that do exist are not well known nor invited frequently as guest artists to colleges or universities. Inclusive teaching methods and class designs will help bridge that gap by introducing college students to new ways of thinking about bodies that dance, act, and make music.

FUNK ROCK OR ROCK FUNK? A RHYTHMIC AND TEXTURAL ANALYSIS OF THE RED HOT CHILI PEPPERS

Jordan Loretz

My project explores two main questions, “How are the styles of Funk and Rock represented in the music of the Red Hot Chili Peppers (RHCP)?” and “In what ways does RHCP conform to or subvert these styles through instrumentation and rhythm?”

I explore the use of rhythm and instrumentation in RHCP’s music through the lenses of meter and texture, using Mark Butler’s “Conceptualizing Rhythm and Meter in Electronic Dance Music,” particularly his breakdown of even and syncopated rhythms, to describe the distinction between metric spans, a characteristic that may delineate musical genres such as Rock and Funk. For a self-described “Funk Rock” group like RHCP, however, these distinctions are blurred. Texturally, I adapt the approach in Allan Moore’s “Elements of Analytic Musicology of Rock” to highlight the trading of traditional vocal and instrumental roles—sometimes these trades work in cohesion and sometimes in opposition.

This research brings to light the traditional roles of rhythm and texture and the presence of blurring and trading in both melody and accompaniment in modern popular music. It highlights how rhythm can represent an entire genre, and simultaneously how the instruments that play these rhythms can be swapped in order to create a new sound. This adaptability allows groups like RHCP to adjust to a musical world that is constantly changing.

NOTATION AND IMITATION IN THE EAST AND WEST

Jordan Loretz

My project explores two questions, “How have Asian cultures traditionally transmitted their music?” and “How have Asian and Western music influenced one another?”

In seeking the answers to these questions, my research illuminates the success of beginning music study with rote learning followed by notational representation, an approach used in traditional Eastern music and current Western music education (such as the Suzuki and Gordon methods), and contextualizes this approach in relation to Arnie Cox’s “mimetic hypothesis” theory of musical comprehension. At the same time, my studies bring to light the shift of musical learning in the East, seen in the reliance on notation due to globalization and ethnomusicological intervention.

In the investigative portion of my project, I explore the history of transmitting musical knowledge and performance practices from one generation to another in both Eastern (Japan, India, Thailand and Maori) and Western traditions (the United States). I am also researching the current methods of transmission utilized in the East and West today. While I expected to find that Western cultures are dependent on musical notation for transmission, while our Eastern counterparts rely on learning by rote, or imitative oral learning, I am finding that the West is adopting the practice of rote learning while the East is beginning to rely on notation.

I am interested in this topic due to previous coursework in Asian Studies and Music, my work as both a foreign language and music teacher, my abroad experiences in China and Indonesia, and my own interest in music education and ethnomusicology.

DEFLATEGATE IN SOCIAL CONTEXT

Andrew Lukas

Accused of tampering with the air pressure of footballs in the 2015 AFC championship game versus the Indianapolis Colts, the New England Patriots received punishments including monetary fines, loss of draft picks, and a four game suspension of their quarterback, Tom Brady. This controversy has become known as “deflategate” and has for nearly two years become a focus of sports media. As part of the requirement for AMST 465 senior capstone, I will examine Deflategate in social context.

Using news reports, sports commentary, legal documents, and social media activity from players, reporters, and further influential figures, I aim to discover what made Deflategate a social phenomenon. I am investigating why the issue carried on for nearly two years and why it was debated so heavily. I look at why the sports elite as well as the general public cared more about this issue than they did for more pressing league matters including domestic abuse, performance enhancing drugs, and general violence. Would this incident have gained as much media popularity if it had happened to a struggling organization or a low level quarterback? Does America have a unique fascination with cheating and fraudulent culture that propelled this story to the top of the headlines? This project examines what drives human interest, what makes a controversy, and specifically what aspects about this controversy gave it such popularity.

NEGOTIATING INTUITION WITH THEORETICAL KNOWLEDGE IN THE CONTEXT OF MUSIC COMPOSITION

James Mandart

The crux of my project is a multi-movement musical score (11th Hour) that I created for Pierrot ensemble (i.e. flute, clarinet, violin, cello, piano, and percussion). As part of my Honors project, I examined my musical score through the lens of other composers' works (many of which are seminal canonical works) that have directly informed my own musical rhetoric. After writing my piece, I asked myself three questions designed to challenge my own understanding of how the creative process of musical composition is tied to both theory and inspiration: "How should music composition be taught?" "How should music writing be approached?" and "How much of writing music is an intuitive rather than a purely theoretical process?"

Throughout my analysis, I am able to identify instances where I have appropriated compositional techniques from works that have informed my own process and compositional language in a supporting document. In addition, I include a theoretical analysis of my music and discuss issues such as large-scale form and other formal considerations. Finally, I discuss techniques for writing and teaching composition. Ultimately, it is my assertion that while theoretical knowledge is an imperative tool, the act of writing music is primarily an intuitive process.

HOW DOES YOUR GUT BACTERIA INFLUENCE YOUR WEIGHT?

Grace Marola

The bacteria that populate the gut are unique to every individual and the contents are largely a result of environment and dietary habits, and analyzing microbial communities that reside in the human gut is at the forefront of genomic research. Investigating the role of the gut microbiomes has gained considerable respect, as a growing number of health-related aspects are found to be related to the bacterial colony's content: the gut microbiome has been found to play a role in the development of many diseases such as gastrointestinal diseases, multiple sclerosis and many metabolic disorders including diabetes and obesity.

Because research suggests the bacterial colonies play a significant role in the development and maintenance of obesity, it is probable that the bacterial colonies play a significant role in the development and maintenance of eating disorders such as anorexia nervosa. Currently, we have a more in depth understanding of the psychological aspects of anorexia nervosa relative to the biological aspects. By combing my two areas of study, biology and psychology, I will mesh the two understandings to gain a full picture of how anorexia nervosa manifests.

A comprehensive literature search has been conducted to determine the current knowledge on how the gut microbiome influences or is distinct in individuals with anorexia nervosa. Locating the knowledge gaps in the literature will inform further research in an effort to aid the difficult recovery process of individuals suffering from anorexia nervosa or indicate the likelihood of development in high risk individuals.

WATERED DOWN LIVES: A COMPARATIVE ANALYSIS OF WATER INEQUITY IN FLINT, MICHIGAN AND CHATSWORTH, SOUTH AFRICA

Kelly Mauch

Inspired by the Beyond Borders Program, this project offers a comparative, solution-based analysis of water access and inequality in two communities: Flint, Michigan and Chatsworth, South Africa. Similar in size, socioeconomic makeup and political agency of its residents, Flint and Chatsworth have been plagued with contaminated drinking water. In Flint, faucets spew lead contaminated water, and in Chatsworth, increased water privatization forces residents to pay for water they cannot afford and drink from polluted sources. Thus, due to bacterial and chemical contamination, both communities face the burdens of hygienic concerns, developmental issues, and even death.

This project will investigate the roles that stakeholders, such as the government (local, state, and federal) and private water organizations, play in the delivery of clean water to communities like Flint and Chatsworth by examining American and South Africa government census data, investigative journalism, and academic research.

Decisions in water management that compromise the well-being of a community might be swept under the rug temporarily, but often come back to haunt thirsty residents and the institutions that enforce inequitable water solutions. How can factors that cause water inequity be mitigated? And in what ways can residents gain power, and a voice, in the decision-making that impacts their water supply and health?

VOTING RIGHTS: DEMOCRACY AT RISK AND POLICY SOLUTIONS TO BOLSTER PARTICIPATION IN THE AMERICAN POLITICAL SYSTEM

Gabriella McCready

I examine the exclusionary nature of what it means to be a US citizen, by looking specifically who has voting rights and who doesn't, and why only 60% of eligible voters actually voted in November's presidential election. I discuss how the Electoral College as a system not only mitigates the strength and importance of peoples' votes, but also how it is manipulated by political parties in order to acquire a favorable outcome.

I will explain a number of possible policy solutions that could be helpful in healing the disgruntled attitudes when it comes to American democracy, such as having to show ID at the voting station, and a Federal mandate which holds voting hours for an entire week instead of just one day.

PRIVATE, PUBLIC, AND IN-BETWEEN: THE EDUCATION OF MENNONITE STUDENTS WITH DISABILITIES

Lucie Mendelson

In New York State, there are five hundred Old Order Mennonite households alone (Amish Population Profile, 2014). These communities value tradition, simple living, and frugality. Today, many Old Order Mennonite students are educated in community-based private schools. Several of these schools can be found throughout the Finger Lakes Region. Students with disabilities (a notably large population within the Mennonite community), however, often receive educational services from their local public schools (Leichty, 2006).

This qualitative, interview-based pilot study, jointly written with Professor Diana Baker, examines the experiences of three educators (an Occupational Therapist, a Physical Therapist, & a Speech and Language Therapist) in providing services to Mennonite students with disabilities. Findings reveal the continuum of placements these students experience – from private, to public, and in hybrid; the nature of collaboration among educators and family members; and how educators navigate different viewpoints and values. Implications for inclusion within the classroom and community and collaboration to support Mennonite students with disabilities are discussed.

SENECA LAKE'S IMMINENT INVADER: THE ROUND GOBY

Noland Michels

The Round Goby (*Neogobius melanostomus*) is a benthic invasive fish species that recently invaded the Finger Lakes after establishment in the Great Lakes. Round Gobies are known for disrupting the local ecosystem through egg predation on native fish species, displacing adult native fishes such as Darters and Sculpins through competition, as well as consuming dreissenid mussels which releases contaminants that have accumulated and left undisturbed, until now. Round Gobies display a generalist diet that mainly consists of dreissenid mussels, macroinvertebrates, and fish eggs. Cayuga Lake contains a recently established Round Goby population that is currently spreading towards Seneca Lake.

As part of my thesis for Honors in Biology, I studied Round Goby dietary additions, providing evidence for the consumption of Bloody Red Shrimp (*Hemimysis anomala*) and various snail families. Fish were collected using seine nets, trapping, and rod and reel from Cayuga Lake and tested along the Seneca-Cayuga Canal. Controlled feeding experiments were used to determine the potential to consume prey. Fish were measured for total length, weighed, and sexed. Consumption of Bloody Red Shrimp was variable across length classes as well as between trials (June and September). Snail families were not consumed in high amounts, but further studies are needed to determine Round Gobies' preferences on snail prey. These findings will help provide direction for future Round Goby research as well as the importance of monitoring aquatic communities immediately after Round Goby establishment, especially within the Finger Lakes.

ARE WE OVERLOOKED? THE STUDY OF OUR WATERSHED

Noland Michels and George Pye

The health of the local watershed impacts the local economy, public health and environmental integrity. The Seneca Lake watershed is comprised of 5 counties, 40 municipalities, and covers approximately 457 square miles. The full watershed also includes the entirety of the Keuka Lake watershed, which drains into Seneca Lake via the Keuka outlet. Recent awards of large grants have gone to areas such as the Catskills region and the Hudson Valley, while the Finger Lakes region has received relatively small amounts of funding.

In 2012, members of the Seneca Lake watershed completed a watershed management plan that identifies key threats to the integrity of the watershed. This project builds on the Seneca Lake Watershed Management Plan in two ways: first, we identify active water quality research and/or enhancement projects focused on issues identified as high priority in the SLWMP, and assess which organizations are carrying out those projects, the sources of funding for those projects, and existing collaborations among these organizations. The second step in the project is to identify potential and unrealized opportunities for collaboration and data sharing among organizations.

Using a mixed method study consisting of key informant interviews, snowball sampling, and researching publicly available sources we will be collecting data on their funding sources, the current phase of the project, existing collaborators, and geographic scope of the project. We expect a general trend of projects to experience high competition for funding within the watershed and missed opportunities for beneficial collaboration among projects and organizations. We hope to be able to communicate clearly the geographic distribution of research improving water and ecosystem quality within the watershed.

BIOLOGICAL EVALUATION OF ANTI-CANCER ACTIVITY OF SIMPLIFIED STAUROSPORINE ANALOGS

Namita D. Neerukonda

Protein Kinase C (PKC) is a family of enzymes involved in numerous cellular functions, such as proliferation, apoptosis, morphological changes, and migration.¹ Overexpression of PKC has been implicated in numerous diseases, including cancer, and thus PKC is a promising therapeutic target. Staurosporine, a natural bacterial compound, was the first indolocarbazole PKC inhibitor identified; however, it is too promiscuous for clinical applications. Simplified staurosporine analogs have increased specificity and have been tested for therapeutic potential.

This project under the direction of Professor Patricia Mowery includes testing compounds synthesized by Professor Erin Pelkey's lab group. The group has synthesized numerous simplified derivatives of staurosporine, which have promising structural features for inhibiting PKC; the analogs contain a central 3-pyrrolin-2-one core with different methoxyphenyl and/or indole substituents. We tested the cytotoxicity of the analogs on human myeloid U-937 cells using a MTT [3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide] assay to determine IC₅₀ values along with direct cell count confirmations. We learned flexibility of the molecule was critical, as cyclization eliminated or significantly reduced activity. Overall, three analogs were found to have low μM IC₅₀ values representing two structurally related but distinct classes: 3-pyrrolin-2-one cores with C4 methoxyaryl-substitution and C3 substitution of either indole or an additional methoxyaryl (bis-aryl analogs). Studies are currently underway to determine if the most potent compounds induce toxicity via apoptosis and the target(s) of the two structural classes. Overall, this work provides guidance to better understand structure-activity relationships for inducing anti-cancer activity in diaryl heterocyclic scaffolds.

¹ Mochly-Rosen, D., Das, K., Grimes, K. Protein kinase C, an elusive therapeutic target? *Nature* 11, 937-957 (2012).

AM I SMART? DUAL-IMMERSION, SELF-ESTEEM, AND CLASS PARTICIPATION

Jessica Shae Nelson

The Master of Arts in Teaching Cohort of 2018 has conducted research on several aspects of the dual-immersion program at West Street School in Geneva, New York. Dual-immersion programs have recently emerged as a new method to encourage the development of bilingualism and biculturalism in schools. Geneva established its first dual-immersion program in the 2014 academic school year. The model follows a 50:50 design, which requires half of the day to be taught in Spanish and the other half in English. The unique program contains both native English and native Spanish speakers and encourages students with all language abilities to participate.

Despite the vast amounts of research conducted on the academic progress made in these classrooms, little research focuses on the self-esteem development of these students. Using a qualitative approach including a survey and classroom observations, I sought to evaluate the relationship between students' bilingual development and their reported self-esteem, as well as their participation patterns in a second grade classroom in the program. My study adds a new perspective to the previous research conducted on dual-immersion programs within the United States. This inquiry-based exploration is important for the Geneva School District to utilize in the future development and adaptation of their dual-immersion program.

A JOINT RESPONSIBILITY TO DECREASE POLLUTION AT LAKE ATITLAN, GUATEMALA

Hannah Nichols

Guatemala has long been known for its beautiful Lake Atitlan. Today, the lake is struggling to survive an increase in pollution leading to the development of semi-regular cyanobacterial blooms. The lake is a central part of life to those who live near its banks. Local people depend on the lake for transportation, fishing, cleaning, drinking, tourism, and leisure – all of which are being influenced by the contamination.

To better understand the direct and personal impact the lake contamination is having, my study abroad group conducted preliminary interviews with two small focus groups comprised of people living near the lake: one with a group of local men (N = 3), and one with a group of women (N = 4). With the focus group participants, we discussed the changes in the lake, what is contributing to the changes, the impact these changes have on daily lives, and what needs to be done to help save the beloved lake and its resources. After the focus groups, which were recorded and transcribed, I analyzed the transcripts for emerging themes and patterns. In the focus group with women, there was a strong pattern of responses indicating a lack of communication and lack of action around the issues the lake is facing. In the focus group with men, there was a strong pattern of responses indicating fault in other's actions. Compared to the men, who tended to place the responsibility on the government, the women tended to believe it was everyone's responsibility to improve the conditions of the lake.

These findings suggest that improvements in Lake Atitlan will require strong leadership to take the initiative in providing transparent communication, involving those who live on its banks, and fostering positive interaction between the people and governmental institutions.

BODIES AND BOUNDARIES: SOCIAL DEVIANCE IN SITE-SPECIFIC DANCE

Katerina Núñez

When considering the interconnections among my three majors, LGBT Studies, Dance, and Media & Society, I was inspired to curate a research project based on these three fields of study. In doing so, I explored the questions: "In what way is site-specific performance an act of social deviance?" and "In what way does social deviance through site-specific performance redefine spatial locations and create liminal spaces?"

My interest in site-specificity evolved from a desire to move my self-choreographed solo for the 2017 Junior/Senior Choreographers Concert from the spatial boundaries of the Deming Theatre stage to three public spaces on the HWS campus. As an act of social deviance, this concept was inspired by my academic coursework in the field of LGBT Studies.

I conducted my study by performing my solo at four locations on the HWS campus: the Deming Theatre stage, the Warren Hunting Smith Library, the Scandling Center Café, and the HWS Quad. I used basic film recording to document this fieldwork, and I accompanied this research with a comprehensive reflection paper that analyzes the site-performances and references academic literature regarding body, space, and deviancy.

Through this research, I discovered that site-specific dance performance challenges the normative function of public spaces and allows for a rethinking and restructuring of those spaces. Additionally, I found that site-specific performance liberates dancers from the boundaries of on-stage performance spaces. Site-specific dance performance is socially deviant because it causes disruption in public spaces and goes against the normative acts associated with those spaces.

RAINFALL VARIABILITY IN THE FINGER LAKES REGION 2015

Emily Ott

The Finger Lakes region is composed of a variety of terrains and lakes. Many Finger Lakes have degraded in water quality as a result of heavy rains and associated nutrient and sediment runoff (Halfman et al., 2016). The amount of precipitation is proportional to erosion and runoff rates, and delivers a proportional amount of nutrients and sediments into the Finger Lakes. This process is called nutrient loading, and, in excess, often coincides with the onset of large blue-green algae blooms (Halfman et al., 2016). Algae blooms degrade the water quality within a lake, as they decrease dissolved oxygen levels.

I downloaded daily rainfall data for 2015 from the National Oceanic and Atmospheric Administration (NOAA) for 69 stations within the greater Finger Lakes Region within an extend area around the Finger Lakes watershed. This data were synthesized and rainfall events with greater than 1 inch of rainfall were selected for analysis. Consecutive days meeting this standard were classified as one event, and the top ten rainfall producing events were analyzed using a Geographic Information System (GIS) software and rainfall totals were graphically displayed. Variable rainfall totals were clearly observed, demonstrating that precipitation events are not uniform across the region. Further research will look at how major stations like Penn Yann and Ithaca represent the entire region. The relationship of nutrient loading and rainfall variability within the Finger Lakes region necessitates further study, so that runoff and its impacts on water quality can be better managed.

MADNESS IN MUSIC: BIPOLAR DISORDER AND ITS RELATIONSHIP WITH MUSIC

Elena Parkins

I am investigating bipolar disorder and its relationship with music in the context of Robert Schumann. Due to the abundance of information and documentation on both his works and his mental illness, Schumann is an exceptional composer to help foster this investigation.

I am researching how bipolar disorder is seen to impact the music of Schumann, as well as how it more generally affects other artists in their respective art forms. Through my research, I found that themes of bipolar disorder, whether intentional or not, were displayed regularly in Schumann's works.¹ There does not seem to be a direct impact of the disorder on levels of creativity, although Schumann's manic episodes did increase efficiency.²

My interest in this topic stems from my Seminar in Music class and brings together two of my majors: Music and Psychology. My interest in bipolar disorder, specifically, is sparked by my Psychopathology course and my recent attendance at two mental health conferences. The aim of this work is to help us better understand how bipolar disorder can help us analyze the music of past and current composers with mental illnesses.

¹ Kay R. Jamison, *Touched With Fire: Manic-Depressive Illness and the Artistic Temperament*, (New York: Simon & Schuster, 1994), 128.

² Robert W. Weisberg, "Genius and Madness?: A Quasi-Experimental Test of the Hypothesis That Manic-Depression Increases Creativity," *Psychological Science* 5, no. 6 (1994), 361.

WONDERS BEYOND: A TRAVEL MAGAZINE

Keirys Pena

Wonders Beyond, a project for my Intro to Publishing class, takes millennial readers to places they've never been or have always wanted to go. Descriptive articles engage readers with topics on packing, travel accessories, hotels and international fashion. *Wonders Beyond* feeds the curious, promotes connections, and celebrates global diversity. *Wonders Beyond* inspires those who want to look beyond the local and explore the world beyond.

Traveling is my biggest passion and I thought creating my own Travel Magazine would not only help me share mine and other people's experiences but also inform and educate other students and adults about Traveling. After I established the foundation of my Magazine and the content, I began to design it on InDesign. I learned I could be creative through different outlets like magazine design and I found that I discovered new styles and techniques that helped me throughout the design process, like getting inspiration from other magazines. As I continue designing my Magazine, I look forward to having a visual magazine because I believe this is the best way to engage my readers.

This project is important to me because I have become my own boss: I work independently to create a work of art I can call my own.

COMEDY AND ERRORS: EXPLORING THE FUNCTION OF COMEDY AND MEDIA ADMIST POLITICAL TURMOIL

Alexandra Roman Peters

For decades the American people placed their trust in iconic journalists like Murrow and Cronkite, icons who, in 2017, have no clear successor. This absence has given a platform to a new type of truth-teller: the comedian. The modern day comedian functions as more than just an entertainer, serving instead as a public intellectual and instigator for vital political conversation; In lieu of a traditional trustworthy news source, the American people turn instead to shows like *SNL*, *The Late Show with Stephen Colbert*, *Late Night with Seth Meyers*, *Full Frontal with Samantha Bee*, and *Last Week Tonight*. In an ever-evolving cultural climate, the people look to Louis C.K. rather than their local politicians to articulate their concerns. These comedians function as more than just a pop-culture touchstone – their content is vital viewing for those who wish to stay informed. This presentation will explore the relationship between journalism, comedy, politics, and the now-nebulous concept of “truth” to discover how comedy plays a role in our national discourse.

THE VISUAL NEUROSCIENCE OF MASKS

Nina Prescott

This research is a continuation of previous work regarding face perception and visual neuroscience in the area of art perception—observing how faces are represented in art, as well as how those face representations are perceived¹. Specifically, my research focuses on how masks differ from human faces and painted portraits, and whether or not masks are perceived as faces or as objects.

Measurements of length, width, and feature dimensions were recorded and length ratio values were calculated for 137 masks. Compared to faces and portraits, greater mean length ratio values are found in masks, indicating a vertical exaggeration of masks. Mask measurements also have the greatest variation, perhaps because masks are a fairly “culturally ubiquitous” art form². Correlations between eye length and nose length with length ratio values in masks indicate a tendency towards larger eyes and/or noses in the art of mask-making.

Using methodology similar to that of human face perception research, symmetry detection tasks test the use of higher-level cortical face processing in the perception of masks³. Stimuli were created using face morphing software and Photoshop to create symmetrical and asymmetrical masks, shown to participants in upright and inverted sequences during the symmetry detection experiment. Participants showed accuracy in symmetry detection to be greater than chance, but with no significant distinction between upright and inverted stimuli, indicating successful symmetry detection yet without the advantage of facial perception for upright stimuli. Thus, masks are likely perceived as objects rather than faces.

¹ Graham, D., Pallett, P.M., Meng, M. & Leder, H. (2014). Representation and Aesthetics of the Human Face in Portraiture. *Art and Perception* 2, 75-98.

² Laughlin, J.Y. & Laughlin, C.D. (1988). How Masks Work, or Masks Work How? *Journal of Ritual Studies*, 2:1, 59-86.

³ Rhodes, G., Peters, M., Lee, M.K., Morrone, C., Burr, D. (2005). Higher-Level Mechanisms Detect Facial Symmetry [Abstract]. *The Royal Society*. 272. doi: 10.1098/rspb.2005.3093.

RAPE AND REFORM: THE POLITICS OF PROTECTION AND COMPLACENCY

Sophia Richards

My research concerns sexual violence, institutions and the potential relationship between the two, specifically with regards to ways in which private institutions may provide shelter to those perpetrating such violence. This research has been driven by the following framing questions: do private institutions work to protect and shelter perpetrators of sexual violence? Furthermore, do popular discourses and conceptions of women needing protection inform the sorts of reforms and educational programs that colleges and universities develop to address sexual assault? And, how do politics and creation of dependency play out?

To address these research questions, I apply three different methodological lenses: historical contextualization, discourse analysis, and personal narratives gleaned through semi-structured interviews. Ultimately, I argue private institutions, both intentionally and unintentionally, shelter perpetrators of sexual violence. This protection can be understood as a byproduct of hegemonic narratives surrounding sexual violence, the bureaucratization of both sexual assault and reform, and the ways in which institutions interpret federal regulations.

*LEADERSHIP INSTITUTE 2017: EMPHASIZING UNITY
AND COMMON PURPOSE*

Julianne Rizzotti

This year I served as one of two Student Coordinators for *Leadership Institute 2017*, a two-and-a-half day professional conference sponsored by the Centennial Center for Leadership. The purpose of *Leadership Institute (LI)* is to offer attendees the opportunity to both develop and enhance their leadership skills, and this year's theme focused on creating change.

LI 2017 featured an emphasis on unity and common purpose. The goal was to allow attendees to draw from personal experiences and share with those around them, uniting and finding common ground in their differences. The conference allowed everyone the chance to partake in discussions that drew together the personal and political, the local and global.

Throughout the weekend, it was important to challenge attendees to step out of their comfort zone and to have conversations about critical issues and leadership. The most exciting part is that over 100 students voluntarily came together to not only develop and enhance their leadership skills, but also to challenge their perspectives and to gain a better understanding of those around them. *LI 2017* provided a space to help students cultivate their leadership skills, as well as have discussions pertinent in helping find common ground to solve relevant issues in the community, in the nation, and in the world.

GERMINATION SUCCESS OF BIRDS AND BAT-DISPERSED SEEDS AFTER BAT INGESTION

Alicia Roistacher

Over 90% of seeds from tropical fruits are dispersed by animals, some by birds, others mammals, and some both. The consumption of these seeds allow for the breaking down of the seed's outer coating; this is known as scarification. Bat-dispersed *Solanum* seeds and bird-dispersed *Acnistus* seeds (both Solanaceae) were tested with *Carollia* bats to see if passing through the bat digestive system helps or hurts germination.

This study was conducted in Monteverde, Costa Rica in a lab setting with 10 *Carollia* bats; while studying throughout Costa Rica, I took a great interest in the frugivorous bats. Specifically, I wanted to study their mutualistic relationship with tropical fruits to demonstrate any possible evidence of coevolution occurring between the two. Bats were fed the three Solanaceae fruits and guano samples were collected for four nights. Samples were then analyzed in a lab where seeds were extracted from the samples, watered, and checked for germination success daily. Passage through a bat neither helped nor hurt germination of either bird or bat-dispersed seeds. This study shows no evidence, then, that the fruit and its disperser evolved in coordination with one another. Specifically, seeds from these three fruits are not adapted to increase germination after passing through bat guts. Selective forces may be acting on fruit characteristics to assure that an optimal frugivore disperses its seeds or there may be other mutualistic interactions that were not tested in this study.

Conservation of tropical plants, such as Solanaceae plants, in regenerating forests requires information about species interactions such as mutualisms. It is important that we consider plant-disperser interactions, as they are crucial to our understanding of forest biodiversity.

CONCEPTUALIZING “THE HERO”: A DISCURSIVE ANALYSIS

Taylor Rugg

What is a hero? This is a question that scholars, authors, and filmmakers alike have explored through various mediums. The conceptualization of the hero can be seen in nonfiction and fictional representations throughout literature and films, and both of these genres have been studied by scholars to create theories around heroism. The common perspective of “the hero” often comes from films that portray a binary between superheroes and villains. In the military, the perception of “heroism” changes, in a variety of ways. The heroic actions that are perceived as such by civilians are acts that service members see as just part of their job. The difference in perception can cause a disconnect between the two populations.

My undergraduate studies have focused on the study of the portrayal of the service member experience through literature and film, with a particular focus on personal narratives, and thus, my conceptual framework for heroism has been influenced by this. My hypothesis about heroism was that the military and society have a different conceptualization of the “hero” and acts of heroism. In order to test this hypothesis, I conducted 26 interviews—13 with veterans of different branches of the military and 13 with civilians. These interviews were designed to acquire information regarding the concept of heroism—its definition, the participant’s perception of it, the participant’s experience with it. Through this research, I hope to demonstrate the differences and similarities between the perceptions of heroism in these two populations as a starting point for an improved relationship between the service members and civilians, which can assist in improving the transition for veterans returning to civilian life post-service.

THE PERFORMATIVITY OF HEROIC ACTS:
A QUALITATIVE STUDY OF THE DISCURSIVE PRODUCTION OF THE HERO

Taylor Rugg

Identity is a concept that is both determined by each individual, but that individuals can also determine for others. Some identities are “bestowed identities”—this is a phrase that I have created to refer to identities that cannot be self-assigned and must be given to an individual by others. This project aims to determine under what conditions the identity “hero” is constituted and how the identity is bestowed upon an individual, as well as to examine the ways in which veterans identify themselves in one-on-one interactions. I set out to answer these questions by analyzing three selected interviews that I conducted with veterans. I chose these interviews because they indicate the ways veterans might constitute themselves in contrast to the ways others might constitute them. I conducted these interviews to acquire information regarding the concept of heroism—its definition, the participant’s perception of it, the participant’s experience with it. I analyzed these interviews using discourse analysis in order to study the specific ways language is used to index and position the veterans.

Through this project, I have discovered that the “hero” identity is a bestowed identity, meaning that it is not self-assigned and must be granted upon one by another individual(s). I also discovered consistencies between the participants’ conceptualization of heroism as requiring both a visual and physical component, which I refer to as witnessing and the performative. The recognition of the ways in which veterans make sense of the hero identity and their own identities can lead to improved communications with the veteran population, as well as possibly the military at large.

TO GENEVA AND OUT AGAIN” A STUDENT’S TALE

Matt Skinner

My topic for the Senior Symposium is my personal philosophy; my process for navigating this world, and how I came by it through my journey as a student over the past four years. My goal is not to persuade anyone that my discoveries are for them or need to be lived by everyone, but to tell those who are willing to listen how my HWS education, rooted in philosophy in action, came to be the rock on which I will forever be able to stand, no matter where I am or what I am doing.

My methodology will be a series of personal reflections. I have journaled sporadically throughout the past few years, which allows me to look back at certain key points in my life. I will also reflect from the position of the present moment, using how I feel and think now to analyze how events and occurrences in the past have shaped my ideas. Through my written reflections, thought experiments, and conversations with my adviser in my Philosophy Major, I will document a journey through key moments, both serendipitous and monumental, and which details what I believe is right and how my time at HWS, in the classroom and otherwise, has helped me realize this truth. I want to show how these ideas have taken root in my life, and how as I leave campus, they will continue to be a benchmark for action. My goal is to create a hard document that is the holistic and culminating record of my time on this campus.

SPEED IN THE KITCHEN: EXPLORING EMPOWERMENT THROUGH SLOW AND FAST COOKING PRACTICES

Emily Spraggs

My research examines the relationship between cooking practices and feminist values. Specifically, I am interested in examining the ways that feminists make sense of their “fast” and “slow” cooking practices, as well as the ways that such practices may overlap in homemaking and everyday life. In my research, “fast” includes utilizing microwavable, frozen, take out, or otherwise speedy foods, while “slow” includes activities such as gardening, chicken keeping, and fermentation. Both sets of practices are theoretically important to feminism; fast cooking practices relieve women of their traditional “duty” as food providers, and slow cooking practices empower women to be able to sustain themselves while resisting processed foods and the control of the food system by multi-national corporations.

In order to explore these ideas, I interviewed ten women of different ages who had a strong connection to feminism. The interviews inquired about their identity as feminists, their relationship to particular foods and cooking practices, and also how family, financial, or other constraints may impact their day to day food and cooking habits. My findings show a varied relationship to food practices among different feminists. The results of this research are useful to public health and nutrition outreach initiatives that seek to understand and empower women as food providers.

UPSCALING DOWNTOWN GENEVA: URBAN NIGHTLIFE AND THE CONSEQUENCES FOR DIVERSITY

Chloe Sudduth

Geneva, New York has recently experienced noticeable changes in the downtown commercial consumption scene. The majority of these businesses have been significantly more expensive than other businesses in Geneva, upscaling seen as a part of the larger “uniquely urban” movement on the part of the city, which is marketing Geneva as a city with the big city convenience and the small-town feel.

For my Honors Project in Sociology, I am investigating Geneva’s bar night life scene based upon its numerical and spatial centrality within this upscaling trend. I investigate how this upscaling bar scene is changing how different interest groups understand this “uniquely urban” shift and what it means for diversity in the city. I examine three distinct “cultures of consumption” that represent the character of Geneva: the local/working class bars, the college bars, and the upscale bars. Along with some archival work and content analysis, I utilize ethnographic fieldwork and interviews to gather data about this upscaling from the three main interest groups of bar owners, bar workers, and patrons.

I hope to assess include how these new businesses are impacting the overall character and social fabric of downtown Geneva. This research will illuminate this development’s consequences for the equity and social sustainability of the city of Geneva, as well as its place in relation to the larger trend of post-industrial urban development centered on consumption culture and urban nightlife.

SPORTS ILLUSTRATED, SWIMSUIT EDITION:
WOMEN OF COLOR AND BODY IMAGE

Jennifer Sullivan

Is *Sports Illustrated, Swimsuit Edition* selling only sex appeal, or does the magazine's swimsuit edition offer commentary on the changing perceptions of the female body?

As part of my study for my senior capstone in American Studies, I am researching portrayals of women of color in *Sports Illustrated, Swimsuit Edition*. By analyzing the images and rhetoric in the swimsuit edition, I will track how the portrayal of women of color has evolved over the last decade, from 2005 to 2017. Using historical and sociological criteria, I will examine the swimsuit editions as potential sites of objectification, subjugation, and agency.

This project specifically focuses on body image and sexuality of women of color in this popular cultural artifact. It aims to shed light on American society's perception of women's bodies. Through this process I hope to gain a better understanding of society's perception of women of color. Specifically I will explore how *Sports Illustrated* depicts these women's bodies for an intended audience of both male and female viewers.

THE COST OF WORDS: MEDIA IMPACT ON PROFESSIONAL ATHLETES

Shane Sweeney

Cam Newton took the stage for his mandatory press conference following the loss of the biggest game of his career at Super Bowl LXXI. After being battered by several questions from the media, Newton walked off the stage unprecedentedly, not knowing the social media storm ahead of him.

As social media has become a way for the public to offer their critiques, I will explore the tension between social media users and professional athletes. I will be looking at the patterns among the reactions of the public through social media, which might illuminate to what extent these reactions tend to reveal social and cultural trends. I further hope to explore to what extent these social media reactions impact these athletes' portrayals in the legitimate news media.

HAMILTON AND AMERICAN IDENTITY: A RETHINKING OF AMERICA'S FOUNDING

Kevin Teel

Following Alexander Hamilton's death at the hands of Aaron Burr, Thomas Jefferson began to spread a negative image of his long-time political rival. Jefferson's example began a longstanding American tradition of relegating Hamilton to the outskirts of American history and political thought, despite his enormous influence during the country's founding era. One example of this can be seen when, beginning in the 1950's, a historical debate began about the ideology under which America was founded. One camp, that of Boorstin, Hartz, and Diggins, supports a founding in the liberal tradition largely influenced by the writings of John Locke. The second camp, that of Bailyn, Wood, Pocock, and Appleby, believes that America was instead founded in a republican tradition falling in line with the work of Jean-Jacques Rousseau. Continuing the tradition set forth by Jefferson, this debate over the founding ideology of the country is largely devoid of discussion about Hamiltonian ideas or principles.

As the first Secretary of the Treasury and the founder of one of America's first political parties, Hamilton had an enormous influence in shaping American society and early interpretation of the Constitution. My Honors project is a historiographical examination that attempts to enter Hamiltonian concepts into the debate to see how it looks when he is included. On the line is nothing less than the establishment of American society, and in the words of Pulitzer Prize-winning journalist, George F. Will, while "there is an elegant memorial in Washington to Jefferson, [there is] none to Hamilton. However, if you seek Hamilton's monument, look around. You are living in it. We honor Jefferson, but live in Hamilton's country." It's time to give Hamilton a little honor, too.

THE ROLE OF TIME IN A DUAL-IMMERSION CLASSROOM

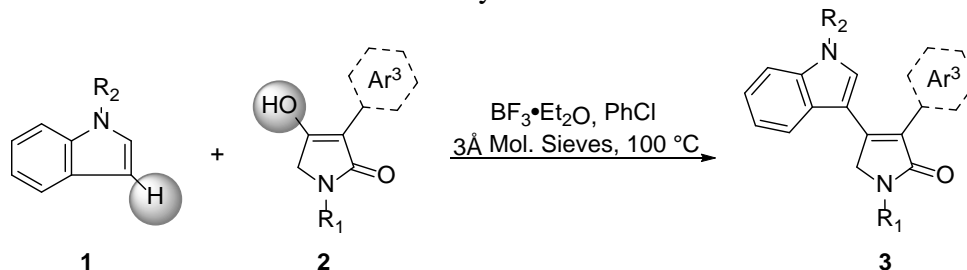
Kevin Teel

As per New York State requirements, the Geneva City School District introduced a dual-immersion program in 2014 to help foster bilingualism and biculturalism in school. The voluntary program is made up of 50% native English speakers and 50% native Spanish speakers, who, upon entry to the program, are monolingual. The program requires students to spend half of the day learning only in English, and the other half of the day learning only in Spanish. Students cover the same material during both halves of the day, so that what they learn in one language, they also learn in the other. This setup leaves each teacher with only half the amount of time to cover material.

Using a qualitative approach involving classroom observations as well as a post-observation interview with a teacher, my research seeks to gain an understanding of how time plays a role for the teacher and the students. Previous research on related topics suggests that time, and how it is spent, is an important factor in academic comprehension and retention rates. With a teacher's already valuable time now cut in half, it is important to assess how that time is being managed and how it is affecting the students in the program. This research is useful for the Geneva City School District in further developing and implementing their dual-immersion program.

BF₃·Et₂O MEDIATED ELECTROPHILIC AROMATIC INDOLYLATION OF ALKYL PROTECTED 3-ARYLTETRAMIC ACIDS

Nathanyal Truax



3-pyrrolin-2-ones (like **3**) are the base pharmacophore found in many biologically active compounds including staurosporine, a protein kinase C (PKC) inhibitor. Staurosporine and many of the compounds synthesized in this ongoing collaboration among HWS labs have shown anti-proliferative activity against cancer cells. The promise of 3-pyrrolin-2-ones as potential anti-cancer small molecule inhibitors make them a desirable synthetic target.

The synthesis of 3-aryl-4-(indol-3'-yl)-3-pyrrolin-2-ones (**3**) has been achieved via a BF₃·Et₂O mediated electrophilic aromatic substitution of various 3-aryltetramic acids (**2**). Extensive investigation of reactivity while blocking the lactam nitrogen with a propyl group at R₁ was completed to find general reaction conditions. With working conditions we looked to replace the propyl moiety with a removable protecting group. This led to the application of allyl protection of both the base 3-pyrrolin-2-one lactam ring and the indole nitrogen (R₁ and R₂ respectively) en-route to the total synthesis of staurosporinone.

DANCE ON FILM: EXPLORING TECHNOLOGY'S EFFECT ON INTERPERSONAL RELATIONSHIPS AND THE BODY

Tanina Urbanski

My project explores two questions, “How has technology provided the body with new postures and gestures?” and “How does technology affect our interpersonal relationships?” My answers are presented in a trilogy of dance films. The first film explores new performative gestures created by individuals using technology, the second physical shifts in social interaction between individuals due to the overuse of technology, and the third the effect of technology on society.

This project was inspired by combining my interests in technology and dance. In the investigative portion of my project, I observed students on campus interacting with each other in different spaces: Saga, the library, and downtown. I observed expressions of their bodies' postures and personal gestures in response to their phones, laptops, and nearby people. The content of the video is also inspired by Sherry Turkle's *Alone Together* and *Reclaiming Conversation*. Her writings on the threat of electronic communication to humanity and lack of human empathy in relationships inspired many of the themes in the videos.

I have chosen film to capture and record this choreography, instead of performing it live, not only because of my interest in dance and multimedia, but also to emphasize the effect technology has on the arts and how arts can be displayed as multi-layered manifestations of complex human and technological interactions.

HIV/AIDS: FROM PAST TO THE FUTURE

Linqi Wang

As part of my major requirement of public policy, I researched a policy brief on HIV/AIDS. Despite the decades of prevention of HIV/AIDS, the infection rate of this disease is still going up, and the government still cannot provide an efficient solution for this disease, which makes HIV/AIDS a good focus for policy analysis.

Synthesizing both course content and independent research, my brief focuses on the disease history and policy efforts, including state or federal government policies, and eventually proposes my own related policy. The most essential part of my proposed policies is to ask federal and state government to increase awareness and prevention policies about HIV/AIDS and provide more medical treatment to people who already are infected, since this is the most effective way to fix the problems of HIV/AIDS. Due to the fact that lack of awareness and education about safe sex seems to be the largest cause of infection increases, having increased prevention policies would be the most effective way to decrease infection rates.

“PIANO FOR PATIENTS”: A SERVICE PROJECT

Marni Wilkoff

My community service project focuses on healing people through the power of music. For the past six years I have been traveling to local nursing homes in my hometown on Long Island, as well as in Geneva, to play piano for the residents on a weekly basis.

Through my service, I strive to fill a gap in emotional care. Throughout the years, I have seen a dramatic change in the personalities of the residents, as many previously sat motionless in their rooms but have since wheeled themselves into the performance space during my weekly visits. Upon my entry, their faces light up, suggesting that they are truly happy. This emphasizes how important emotional care is the overall healing process; in the healthcare field, physical care is often regarded as the most important form of care and emotional care is often forgotten.

Through my service, I have learned how a combination of physical and emotional care has the potential to lead to greater healthcare success. The project is helping me think about my future career as a doctor, but I also hope to encourage others to get involved in community service, which has the potential to directly impact someone's life.

BEING BLACK AND FEMALE AT WORK: A VIDEO ESSAY

Amber Williams

Using the knowledge that I have gained over the past four years as a Media and Society major and a Women's studies minor and my current BIDS 390 course "The Video Essay," I will be creating a video essay that will document and examine aspects of the experience of black women in the workplace. This is an independent project that arose out of my passions for both broadcast and other media and for analyzing the black female experience, particularly in the context of the need to tell black women's stories-- something that my experience in a predominantly white institution puts front and center for me.

I will be interviewing a selection of black women in the workplace to gather in-depth information about their experiences. I also will use the BET television series "Being Mary Jane" as the basis of my work, using the show's depiction as a way to formulate the thematic categories of questions that I would ask my interview subjects. I will then use my personal experiences with past jobs and internships in order to personalize my video essay.

FOOD (IN)SECURITY: COMPARING SOUTH AFRICA AND THE UNITED STATES

Ren Workman

We live on a planet where malnutrition and shopping malls coexist: “The United Nations Food and Agriculture Organization estimates that 795 million people of the 7.3 billion people in the world, or 1 in 9, were suffering from chronic undernourishment in 2014-2016” (FAO 2016). This project seeks to understand the drivers of food insecurity on a national level in both South Africa and the United States through the lens of positionality, which asks us to understand how factors such as race, class, and gender impact access to food.

As part of the Beyond Border program through the Centennial Center for Leadership (CCL), this project serves as my independent study portion of the course, which aims to compare and contrast different issues in both South Africa and the United States. As a double major in Anthropology and Environmental Studies, this topic is one that allows me to bring my knowledge from both areas of study into practice.

As Shields argues, “there is little doubt that people of color are represented disproportionately among the hungry in the United States” (Shields: 3). Women are also more at risk because of their general position in families; “growing evidence shows that income in the hands of women contributes more to household food security” than men (Quisumbing: v). This project will explore why it is that these issues exist, and look at specific case studies to do so.

"2016 WORLD HUNGER AND POVERTY FACTS AND STATISTICS." *Worldhunger.org*.

World Hunger Education Service, 2016. Web. 1 Mar. 2017.

Quisumbing, A. R., Brown, L. R., Feldstein, H. S., Haddad, L., & Peña, C. (1995). Women: The key to food security. *Food policy statement*, 21.

Shields, D. L. (Ed.). (1995). *The color of hunger: Race and hunger in national and international perspective*. Rowman & Littlefield Publishers.

EVALUATION OF APOGEE AND OTHER TREATMENTS FOR FIREBLIGHT

Amelia Zhao

Fireblight, caused by the bacteria *Erwinia amylovora*, is a disease that infects apples, pears, and other plants. In apple trees, it is very destructive and can quickly kill entire orchards. Thus, fireblight is a major cause of yield loss for apple growers. A typical treatment uses a growth regulator, Apogee, but a drawback thereof is that it can stunt growth. However, the timing of the treatment may be able to alleviate these undesirable effects. To test this, Apogee and other common fire blight treatments were applied at varying times. Infection progress and tree growth were tracked to understand 1) level of disease control and 2) effect on fruit and tree growth.

All treatments showed good control of fireblight, with the typical antibiotic treatments providing the most control; early-application prohexadione-calcium provided the least control. The streptomycin, an antibiotic, caused a low mean number of fruit, whereas the other treatments caused an increase. The late-application Apogee diminished first-year shoot growth, while the other treatments were normal. The early apogee treatments were effective in controlling fireblight infection while still allowing growth. These treatments can, in the future, work in conjunction with antibiotic treatments to prevent fireblight.

