


share your intellectual passions **2010**

HOBART AND WILLIAM SMITH COLLEGES

April 9, 2010

Sponsored by the
Center for Teaching and Learning

**The Senior
Symposium** 

HOBART
AND
WILLIAM SMITH
COLLEGES

Dear Members of the Hobart and William Smith Community:

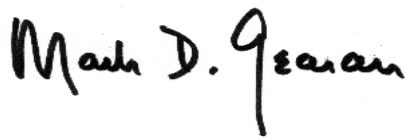
Hobart and William Smith Colleges have a long and proud history of academic success. Our faculty members work in collaboration with our students in classrooms, laboratories, studios and in the community to foster a broad range of intellectual interactions and interests.

The Senior Symposium is an opportunity to come together as a community to celebrate that academic rigor and those rewarding collaborations. It is also an occasion to affirm the power and boundless possibility inherent in an HWS education.

Whether discussing their intellectual passions, independent projects, creative works or scholarly research, students participating in the Symposium have the unique opportunity to voice their work to a broad audience and to engage in lively debate across the curriculum. The Senior Symposium is also an example to first-years, sophomores and juniors of the level of intellectual engagement we as an institution expect from our students.

I am proud of the more than 80 seniors who chose to participate in the Colleges' first Senior Symposium. I am grateful to the many faculty members who mentored these students and who encouraged them to tackle complex research and creative topics. Finally, I am thankful to the Center for Teaching and Learning and to Dr. Susan Pliner and her staff for their vision and leadership in making the Senior Symposium possible.

Sincerely,



Mark D. Gearan
President

HOBART AND WILLIAM SMITH COLLEGES

Member of the HWS Community

The *Senior Symposium* is an exciting event which 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 faculty advisors, to engage each other as teachers and learners.

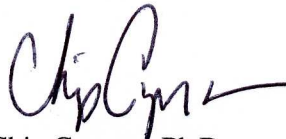
The day long Symposium features presentations by Hobart and William Smith Seniors, arranged in panels and organize around a variety of research and experiential fields

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

Sincerely,



Eugen Baer, Ph.D.
Dean
Hobart College



Chip Capraro, Ph.D.
Associate Dean
Hobart College



David Mapstone
Assistant Dean
Hobart College



Cerri A. Banks, Ph.D.
Dean
William Smith College



Valerie Gunter
Assistant Dean
William Smith College



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

HOBART
AND
WILLIAM SMITH
COLLEGES

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

Welcome to the second annual Hobart & William Smith Senior Symposium, the second time the work of our graduating seniors is celebrated and highlighted in one collective event. On this day, April 9, 2010, we recognize the diversity and breadth of work here at the Colleges, and honor the academic interests, passion, and creativity of the Senior class.

The Senior Symposium reflects the mission of the Center for Teaching and Learning: cultivating, perpetuating, and sharing intellectual passion in all areas of study. As with many other CTL initiatives, the Senior Symposium is rooted in a love of learning and promotion of student academic engagement. The Symposium provides and prompts us to carry on an interdisciplinary dialogue across the diverse areas of study offered here at the Colleges, an essential part of a liberal arts education.

The Symposium also highlights the HWS curriculum goals, particularly Goals 1 & 2, as it is a way for students to communicate their ideas and demonstrate their ability to think critically, articulate questions, and access information. What better way to share their years of hard work in developing these skills than through this celebration in front of the HWS community?

The 2010 Senior Symposium allows graduating seniors to leave a legacy of their passions and pursuits to inspire upcoming classes to cultivate their own interests. This is the continuation of a rich tradition here at the Colleges.

I would like to extend my sincere thanks to Ruth Shields, Susan Hess, Caitlin Caron, the CTL staff, and Communications for their dedication and hard work towards making this event possible.

Sincerely,



Susan M. Pliner, Ed. D.

Associate Dean of Teaching, Learning, and Assessment

ACKNOWLEDGEMENTS

The second annual Senior Symposium 2010 was made possible by the vision, leadership, and efforts of many in the Hobart and William Smith community.

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Cassia Horvitz, Julie Isaacson, Kelly Morell, Susan Pliner, Maria Trainor,
Ruth Shields, David Silver, Evelyn Sperry, Sam Vann

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Jamie Bodenlos, Rob Carson, Khuram Hussain, Darrin Magee,
Sarah Russo, Ew Quimbaya-Winship,

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:

African Studies Association Conference
American Chemical Society Petroleum Research Fund
Grants from the Department of International Relations, Developmental Studies, and African Studies
The Kloman Fellowship Fund: Hobart Deans Office
Summer Science Fellowship: Provost Office & Geoscience Department
USDA/University of California Pierce's Disease Research Grants Program
William Smith Deans Award
Young Memorial Fund

Senior
Symposium
2010
Presenters

SENIOR SYMPOSIUM 2010 PRESENTERS

Last Name	Department/Program	Sponsor	Time	Room
Amato, Evan	Art and Architecture	Stan Mathews	3:10	Vandervort 1
Antonucci, Francesca	Education	Cerri Banks	10:50	Vandervort 1
Antonucci, Francesca	Sociology	Jack Harris	9:50	Vandervort 2
Araiza, Diana	Sociology	Jack Harris	4:10	Vandervort 2
Arnold, Roger	Africana Studies	James McCorkle	8:30	Vandervort 2
Austerlitz, Michael	CCESL	Katie Flowers	11:00	Vandervort 2
Baah, Innis	Education	Cerri Banks	10:50	Vandervort 1
Banker, Kielynn	CCESL	Katie Flowers	8:40	Vandervort 1
Bashaw, Bethany	Biology	Mark Deutschlander	10:10	Vandervort 2
Bernbaum, Jonathan	English	Laurance Erussard	11:10	Vandervort 2
Bernbaum, Jonathan	Philosophy	Carol Oberbrunner	8:40	Vandervort 2
Billington, Jamie	Sociology	Jack Harris	8:55	Vandervort 1
Blum, Travis	Chemistry	Justin Miller	2:00	Vandervort 2
Bowers, Alexandra	Education	Cerri Banks	10:50	Vandervort 1
Branlund, Franchessa	Anthropology	Barbara Nikolovska	3:05	Vandervort 2
Butterini, David Nicholas	Art and Architecture	Kirin Makker	3:00	Vandervort 1
Cahill, Kerry	CCESL	Katie Flowers	8:40	Vandervort 1
Caron, Caitlin	Education	Jim MaKinster/Nan Crystal Arens	10:00	Vandervort 1
Chidester, Kailey	Biology	Mark Deutschlander	2:50	Creedon
Cohen, Jessica	Theater	William Burd	8:50	Vandervort 2
Connell, Alexandra	Education	Susan Pliner	12:35	Creedon
Connell, Alexandra	Education	Cerri Banks	10:50	Vandervort 1
Connell, Alexandra	Psychology	Julie Kingery	2:50	Vandervort 2
Cooper, Kirsten	English	Eric Bulson	8:45	Creedon
Crogia, Adam	Education	Cerri Banks	10:50	Vandervort 1
Crupnick, Jennifer	Environmental Studies	Darrin Magee	8:30	Vandervort 1
Cummings, Carly	Art	Michael Bogin	1:30	Vandervort 2
Cunningham, Erin	Women's Studies	Alison Redick	10:50	Vandervort 2
Daley, Emma	Philosophy	Eugen Baer	11:20	Vandervort 1
Damon, Shari	Geoscience	Nan Crystal Arens	9:40	Vandervort 1

SENIOR SYMPOSIUM 2010 PRESENTERS

Last Name	Department/Program	Sponsor	Time	Room
De Nose, Dan	Education	Susan Pliner	12:20	Creedon
Dean, Meredith	Sociology	Jack Harris	4:10	Vandervort 2
DiPalma, Abigail	Education	Kimberly Williams	11:10	Creedon
DiStefano, Molly	Africana Studies	Thelma Pinto	10:50	Creedon
Duplissie-Johnson, Addie	Art and Architecture	Kirin Makker	2:40	Vandervort 1
Feasel, Zachery	Psychology	Jon Iuzzini	12:35	Vandervort 2
Flaherty, Brittany	Environmental Studies	Beth Kinne	12:20	Vandervort 1
Gehring, Renee	Sociology	Jack Harris	8:55	Vandervort 1
Geise, Katie	Sociology	Jim Spates	12:20	Vandervort 2
Greene, Elizabeth	Religious Studies	Richard Salter	11:10	Vandervort 1
Harris, Elisha Beth	Geoscience	Nan Crystal Arens	2:40	Creedon
Hendry, Robert	Mathematics & Computer Science	Marc Corliss	1:40	Vandervort 2
Henry, Alexander Daly	Environmental Studies	Thomas Drennen	3:10	Creedon
Hollander, Jennifer	Sociology	Jack Harris	12:50	Vandervort 2
Hopkins, Morgan	Psychology	Jon Iuzzini	11:20	Creedon
Horshaw, Rick	Sociology	Jack Harris	3:50	Creedon
Horvitz, Cassia	Environmental Studies	Thomas Drennen	12:35	Vandervort 1
Isaacson, Julie	Sociology	Jack Harris	1:40	Vandervort 1
Kahan, Josh	Sociology	Jack Harris	3:50	Creedon
Kallet, Hannah	Writing and Rhetoric	Cheryl Forbes	2:40	Vandervort 2
Keyes, Alex	Sociology	Jack Harris	3:50	Creedon
Kluber, Sean	Education	Kimberly Williams	4:10	Creedon
Kröll, Bernd	Asian Studies	Darrin Magee	1:30	Vandervort 1
Kuechle, Megan	Psychology	Portia Dyrenforth	4:00	Vandervort 2
Lagana, Kelsey	CCESL	Katie Flowers/Khuram Hussain	9:40	Vandervort 2
Lagana, Kelsey	Political Science	Cedric Johnson	11:20	Vandervort 2
Lefurgy, Cecelia	Sociology	Jack Harris	9:50	Vandervort 2
Lieberman, Molly	Sociology	Jack Harris	4:10	Vandervort 2
Losito, Elizabeth	Biology	Patricia Mowery	1:50	Creedon
Lucid, Annie	Art and Architecture	Kirin Makker	3:20	Vandervort 1

SENIOR SYMPOSIUM 2010 PRESENTERS

Last Name	Department/Program	Sponsor	Time	Room
Martin, Laura	International Relations	Kevin Dunn	9:55	Creedon
Maticic, Lisa	Anthropology	Brenda Maiale	1:50	Vandervort 1
Meyers, Jessica	English	Eric Bulson	8:30	Creedon
Monaco, Brian	Biology	Kristy Kenyon	1:30	Creedon
Morgan, Ben	Sociology	Jack Harris	8:55	Vandervort 1
Morrell, Kelly	English	Melanie Conroy- Goldman	1:50	Vandervort 2
Ockenden, Andrew	Religious Studies	Etin Anwar	2:00	Vandervort 1
Palmer, Sarah	Art and Architecture	Kirin Makker	2:50	Vandervort 1
Peneston, Kelly	Psychology	Julie Newman Kingery	12:50	Creedon
Pluchino, Carolyn	Anthropology	Barbara Nikolovska	3:05	Vandervort 2
Sarokin, Emily	Art History	Michael Tinkler	11:00	Creedon
Smith, Easton	Sociology	Jack Harris	9:50	Vandervort 2
Sperling, Carly Allison	Education	Cerri Banks	10:50	Vandervort 1
Stacey, Patricia	English	Rob Carson	3:50	Vandervort 2
Tandle, Samantha L.	Biology	Kristy Kenyon	1:40	Creedon
Tompkins, Sarah	English	Eric Bulson	9:00	Creedon
Trainor, Maria R.	Political Science	Vikash Yadav	10:10	Creedon
Triplett, Regina L.	Biology	Mark Deutschlander	9:40	Creedon
Turney, Fredrick	Sociology	Jack Harris	12:50	Vandervort 2
Walkley, Janelle	Chemistry	Christine de Denus	9:00	Vandervort 2
Weiss, Hannah	Geoscience	Nan Crystal Arens	9:40	Vandervort 1
Wells, Stephanie Y.	Psychology	Julie Kingery	2:50	Vandervort 2
Youngmann, Jordan L.	Biology	Susan Cushman	12:50	Vandervort 1
Youngmann, Jordan L.	Biology	Susanne McNally	10:10	Vandervort 1
Yovanoff, Maggie	Biology	Susan Cushman	2:00	Creedon
Zinsser, Elizabeth	Biology	Susan Cushman	3:00	Creedon

Senior
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2010
Schedule

Vandervort 1

Panel Time	Presenters	Abstract Title	Department/Program
Geneva Connections (Moderator: Kristy Kenyon)			
8:30 - 8:40	Crupnick, Jennifer	City of Geneva: Leachate Regulations	Environmental Studies
8:40 - 8:55	Banker, Kielynn; Cahill, Kerry	Geneva Heroes: Mentoring through Community Service	Community Engagement and
8:55 - 9:10	Billington, Jamie; Gehring, Renee; Morgan, Ben	Improving Business Improvement	Sociology
9:10 - 9:30	Questions and Answers		
Nature, Education, and Children (Moderator: Sarah Russo)			
9:40 - 10:00	Damon, Shari; Weiss, Hannah	Roots and Shoots: Averting the Human/Nature Gap	Environmental Studies
10:00 - 10:10	Caron, Caitlin	The Kitchen Kindergarten	Education
10:10 - 10:20	Youngmann, Jordan L.	Volunteer Monitoring of Regional Streams in the Finger Lakes through the Efforts of Local Middle and High School	Environmental Studies
10:20 - 10:40	Questions and Answers		
Community and Power (Moderator: Renee Monson)			
10:50 - 11:10	Antonucci, Francesca; Baah, Innis; Bowers, Alexandra; Connell, Alexandra; Croglia, Adam; Sperling, Carly Allison	Living in a Multicultural World	Education
11:10 - 11:20	Greene, Elizabeth	Authority, Community, and <i>El Espíritu Santo</i> : An Ethnographic Study of Pentecostal Theological Praxis	Religious Studies
11:20 - 11:30	Daley, Emma	Wanted: New Paradigm	Philosophy
11:30 - 11:50	Questions and Answers		
Sun and Water (Moderator: Susan Cushman)			
12:20 - 12:35	Flaherty, Brittany	Groundwater Resources of New York State: Contamination Threats and Surface Water Interactions	Environmental Studies
12:35 - 12:50	Horvitz, Cassia	Should HWS Harvest the Sun?	Environmental Studies
12:50 - 1:05	Youngmann, Jordan L.	The Hobart and William Smith Winter Greenhouse Gardening Project	Biology
1:05 - 1:20	Questions and Answers		

Panel Time	Presenters	Abstract Title	Department/Program
Global Perspectives (Moderator: Jo Beth Mertens)			
1:30 - 1:40	Kröll, Bernd	Democracy in Hong Kong	Asian Studies
1:40 - 1:50	Isaacson, Julie	Imperfect Stranger	Sociology
1:50 - 2:00	Maticic, Lisa	Linking Environment and Culture: Implications of Global Policies in Local Politics	Anthropology
2:00 - 2:10	Ockenden, Andrew	Myth, Symbolism, and Cultural Revolutions in the Iranian Revolution	Religious Studies
2:10 - 2:30	Questions and Answers		
Concept and Craft (Moderator: Kirin Makker)			
2:40 - 2:55	Duplissie-Johnson, Addie	Interaction: Simple to Complex	Art and Architecture
2:55 - 3:10	Palmer, Sarah	The Evolution of My Art and Design	Art and Architecture
3:10 - 3:25	Butterini, David	Processing the Process	Art and Architecture
3:25 - 3:40	Lucid, Annie	Art and Architecture Portfolio Design	Art and Architecture
3:40 - 4:00	Questions and Answers		

Vandervort 2

Panel Time	Presenters	Abstract Title	Department/Program
Visual Creations and Aesthetics (Moderator: Leah Shafer)			
8:30 - 8:40	Arnold, Roger	"Africa" on Display: Representations of African Visual Culture in American Museums	Africana Studies
8:40 - 8:50	Cohen, Jessica	<i>The Vampires</i> Melt Under My Light	Theater
8:50 - 9:00	Bernbaum, Jonathan	Looking for Aesthetic Value in the Automobile	Philosophy
9:00 - 9:10	Walkley, Janelle	How Small Can Your iPod Get? Synthesis of Ferrocene Based Potential Molecular Wire Candidates	Chemistry
9:10 - 9:30	Questions and Answers		
Community Outreach and Development (Moderator: Laurence Erussard)			
9:40 - 9:50	Lagana, Kelsey	North and West Street Elementary School Reconfiguration and the Introduction of Learning Cohorts	Community Engagement and Service Learning
9:50 - 10:10	Antonucci, Francesca; Lefurgy, Cecelia; Smith, Easton	Lyons Community Center Programming Research	Sociology
10:10 - 10:20	Bashaw, Bethany	Creation of a Braddock Bay Bird Observatory Species Monograph: Needs Assessment	Biology
10:20 - 10:40	Questions and Answers		
New Perceptions (Moderator: Luciana Cursino Parent)			
10:50 - 11:00	Cunningham, Erin	Forbidden Couplings: <i>Battlestar Galactica</i> and Evolution	Women's Studies
11:00 - 11:10	Austerlitz, Michael	What Does it Mean to be Civically Engaged?	Community Engagement and
11:10 - 11:20	Bernbaum, Jonathan	Ravenous Dragons, Vikings, and a Medieval Wedding: Integrated Experiential Learning	English
11:20 - 11:40	Lagana, Kelsey	The Latino Perspective: An Analysis of the Latino Cohort on a National and Local Level and Their Relationship with the Republican Party	Political Science
11:40 - 12:00	Questions and Answers		
Sex and Gender (Moderator: Richard Salter)			
12:20 - 12:35	Geise, Katie	Gender and Service: A Study of Student Service at HWS	Sociology
12:35 - 12:50	Feasel, Zachery	Gender Promiscuity at HWS	Psychology
12:50 - 1:05	Hollander, Jennifer; Turney, Fredrick	R.E.A.L.: Responsible for Every Action in Life	Sociology
1:05 - 1:20	Questions and Answers		

Panel Time	Presenters	Abstract Title	Department/Program
Creation (Moderator: Charlie Temple)			
1:30 - 1:40	Cummings, Carly	Exploration in Art and of the Self: Navigating between Abstraction and Realism	Art
1:40 - 1:50	Hendry, Robert	Intuitive Compiler Specification	Mathematics and Computer Science
1:50 - 2:00	Morrell, Kelly	The Craft of Fiction	English
2:00 - 2:10	Blum, Travis	Toward the Synthesis of Cysteine- Containing Depsipeptide FK228	Chemistry
2:10 - 2:30	Questions and Answers		
Literacy (Moderator: Kim Williams)			
2:40 - 2:50	Kallet, Hannah	The Impact of Informal Forms of Communication on Student Writing	Writing and Rhetoric
2:50 - 3:05	Connell, Alexandra; Wells, Stephanie Y.	The Relationship between the Home Literacy Environment and Literacy Skills of Incoming Kindergarteners in Geneva Elementary Schools	Psychology
3:05 - 3:20	Branlund, Franchessca; Pluchino, Carolyn	Tupo Pamoja: Promoting International Trust and Understanding through the <i>Use of Literacy in Tanzania</i>	Anthropology
3:20 - 3:40	Questions and Answers		
Laughter, Mood, and Satisfaction (Moderator: Julie Kingery)			
3:50 - 4:00	Stacey, Patricia	Laughing at Death: The Clowns in <i>Hamlet</i> and <i>Macbeth</i>	English
4:00 - 4:10	Kuechle, Megan	Positive Mood and Social Attention	Psychology
4:10 - 4:25	Araiza, Diana; Dean, Meredith; Lieberman, Molly	The Satisfaction of Subsidized Housing in Geneva, New York	Sociology
4:25 - 4:45	Questions and Answers		

Creedon

Panel Time	Presenters	Abstract Title	Department/Program
Translation and Dizziness (Moderator: Eric Bulson)			
8:30 - 8:45	Meyers, Jessica	Broken Teapots and Gertrude Stein	English
8:45 - 9:00	Cooper, Kristen	The Do's and Don'ts of Translation: A Close Reading of Ezra Pound and	English
9:00 - 9:15	Tompkins, Sarah	All the Stage's a World: The Stage as Reality in Luigi Pirandello's <i>Six Characters in Search of an Author</i>	English
9:15 - 9:30	Questions and Answers		
Blind Spots (Moderator: Rob Carson)			
9:40 - 9:55	Triplett, Regina L.	Blinded by the Right: An EEG Study of Recovery from Partial Blindness	Biology
9:55 - 10:10	Martin, Laura	Post-Conflict in Rwanda: A Comparative Study of Different Channels of Justice in Rwanda and Their Contribution to the Process of Reconciliation	International Relations
10:10 - 10:25	Trainor, Maria R.	Rastafarianism: A Model of Hybridity	Political Science
10:25 - 10:40	Questions and Answers		
Gendered Views (Moderator: Lynn Shollen)			
10:50 - 11:00	DiStefano, Molly	Ken Bugul: "One Who Is Not Wanted"	Africana Studies
11:00 - 11:10	Sarokin, Emily	Neither Gladiators nor Gods: Genteel Roman Men in Late Antiquity	Art History
11:10 - 11:20	DiPalma, Abigail	Historical Heroes: How Social Studies and Textbooks Shape Children's Views of Historical Figures	Education
11:20 - 11:30	Hopkins, Morgan	The Relationship between Benevolent Sexist Attitudes and Recognition of Male Privilege	Psychology
11:30 - 11:50	Questions and Answers		
Camp (Moderator: Portia Dyrenforth)			
12:20 - 12:35	De Nose, Dan	Boys to Men	Education
12:35 - 12:50	Connell, Alexandra	Project Eye-to-Eye: Establishing a Mentoring Organization	Education
12:50 - 1:05	Peneston, Kelly	The Role of Parent Expectations and Child Anxiety as Predictors of Homesickness During Summer Camp	Psychology
1:05 - 1:20	Questions and Answers		

Panel Time	Presenters	Abstract Title	Department/Program
Disease and Development (Moderator: Justin Miller)			
1:30 - 1:40	Monaco, Brian	Eyeless Flies: A Study of Protein Interactions Important for Fruit Fly Eye Development	Biology
1:40 - 1:50	Tandle, Samantha L.	Genotypic Characterization of <i>Phytophthora Capsici</i> Populations in New York State	Biology
1:50 - 2:00	Losito, Elizabeth	A Study of Proteins Involved in Motility of the Bacteria Causing Pierce's Disease in Grapevines	Biology
2:00 - 2:10	Yovanoff, Maggie	Pumpkinseed Sunfish (<i>Lepomis Gibbosus</i>): Age Determination and Population Dynamics at the Henry H. Hanley Biological Field Preserve	Biology
2:10 - 2:30	Questions and Answers		
Air, Land, and Water (Moderator: Sigrid Carle)			
2:40 - 2:50	Harris, Elisha Beth	A Mid-Cretaceous Angiosperm-Dominated Macroflora from the Cedar Mountain Formation of Utah: Implications for Diversity and Climate	Geoscience
2:50 - 3:00	Chidester, Kailey	Determining Land Quality for Migratory Birds Near the Lake Ontario Shoreline	Biology
3:00 - 3:10	Zinsser, Elizabeth	Habitat Preferences of Native and Non-Native Species in a Restored Cold-Water Stream	Biology
3:10 - 3:20	Henry, Alexander Daly	Victor Greenhouse Gas Inventory and Analysis	Environmental Studies
3:20 - 3:40	Questions and Answers		
Learning In and Out of School (Moderator: Khuram Hussain)			
3:50 - 4:10	Horshaw, Rick; Kahan, Josh; Keyes, Alex	Status of Out of School Programs in Geneva	Sociology
4:10 - 4:25	Kluber, Sean	Finding the "Truth"	Education
4:25 - 4:45	Questions and Answers		

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2010
Abstracts

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THE EFFERVESCENT EXPLORATION OF PLAY: ARCHITECTURAL PORTFOLIO

Evan Amato

My portfolio: an investigative, evanescent snap shot, a condensation of my design convictions frozen on 43 pages of 100lb pressed, semi-gloss paper.

The work comprising my portfolio is not just a simple summation of my endeavors at Hobart and William Smith. In my effervescent exploration of play within my portfolio, I construct visual hierarchies through various common interpretive languages that arrange my portfolio. At first glance the arrangement can seem arbitrary and whimsical but, when considering a liberal arts education, one can start to see specific spheres of influence and on each page. I was able to achieve this complexity by incorporating the various mediums I had studied during my career at HWS. These investigations ranged from sculpture and photography to painting and drawing. Deriving from those core mediums, I was able to administer artistic principles and techniques as simple as the application of paints to a canvas or as complicated as the architectural layout of building structures to my portfolio.

My design methodology is best defined as an investigatory interpretation of my relative environment, real or perceived, genuine or imaginative. To escape from the norm is to play and to play is perfect for design.

LIVING IN A MULTICULTURAL WORLD

Francesca Antonucci, Innis Baah, Alexandra Bowers, Alexandra Connell, Adam Croglia,
Carly Allison Sperling

This project originates from a group independent study class called “Living in a Multicultural World,” which examines diversity, multiculturalism, social justice and education from a variety of perspectives. In this course, we strive to elucidate the systemic nature of identity, difference, privilege, dominance, culture, and other related topics in order to better understand the impact of these on human interactions and societal institutions.

Because we have a variety of interests, our goal is to show how theories related to difference can inform a range of intellectual and professional pursuits. Our individual topics of focus include: defining and evaluating inclusive excellence, multiculturalism in elementary classrooms, teacher preparation, higher education administration, social policy, and school inclusion and disability.

Our common project is to create a video that reflects our learning journey and share that during a screening on campus as a way to create dialogue.

LYONS COMMUNITY CENTER PROGRAMMING RESEARCH

Francesca Antonucci, Cecelia Lefurgy, Easton Smith

Our research project involved using a survey and open-ended questionnaire to determine how the Lyons Community Center could better address the needs of the community in terms of offering programming and services.

The Lyons Community Center is the primary provider of recreation and social activities in Lyons, NY including education, social and athletic events focused on enhancing the health and wellness of community members. Recently under new management, the center was interested in reaching out to the community to find out what kinds of programs will bring more community members to the center.

In the investigative portion of our project, we surveyed individuals, from three age groups, within the village of Lyons. After collecting a sufficient amount of data, we analyzed the data to determine the levels of interest in specific kinds of programming. We took open-ended responses into account, in order to provide more ideas for future programming and possibly for future investigative work.

THE SATISFACTION OF SUBSIDIZED HOUSING IN GENEVA, NEW YORK

Diana Araiza, Meredith Dean, Molly Lieberman

In our project for the Sociology Senior Seminar, we are seeking to obtain information regarding resident's satisfaction with subsidized housing in Geneva, New York. We will be surveying the satisfaction of residents in Elmcrest Apartments, Seneca Apartments, Geneva Courtyard Apartments, and Lyceum Heights, each owned and maintained by Geneva Housing Authority.

We will be distributing bi-lingual surveys to each of the 320 residents. Using these anonymous and confidential surveys, we will review the resident satisfaction of facilities, programming, staffing, safety and security. Our surveys will be based on previous surveys administered US Department of Housing and Urban Development (HUD) and Geneva Housing Authority.

Ultimately, we will be acting as consultants to the Geneva Housing Authority in order to assist them in ensuring a quality living environment for their residents.

“AFRICA” ON DISPLAY:
REPRESENTATIONS OF AFRICAN VISUAL CULTURE IN AMERICAN MUSEUMS

Roger Arnold

As the primary means by which most Americans come into contact with African cultural products, museum exhibitions are important sites for the construction of meaning about Africa and its peoples in the US. However, exhibitions do more than simply provide information about African culture; they also reveal Americans’ perceptions of themselves and their positions in US society and the world. Exhibitions of African art therefore represent both Africa and the United States; these dual acts of representation are the core of my project and presentation on the production of knowledge about Africa by United States museums in the 20th century.

In looking towards an analysis of the display, labels, educational programming, and exhibition publications, I consider the choices regarding the physical layout of the objects and the types of information provided to visitors that influence understandings of African art and cultures. At the same time, I take into account the ideas and attitudes that inform this production of knowledge, in particular the discourses of modern art and poststructuralism. These ways of thinking have implications that extend beyond the creation of ideas; they impact experiences of the world, for it is in this that people formulate social positions and identities around objects. To this end, I also hope to explore how the exhibitions previously mentioned make evident concerns about the stance on cultural imperialism and multiculturalism. I point to the negotiation of racialized identities in the US as they occur around African art objects.

Through a consideration on how representation becomes a cross-cultural enterprise, seeking to understand the politics and power that is present in the representation of another, I conclude that African objects in museums make Africa present. They evoke dimensions of African cultures, and they stand for the specific groups of people that made them. In attempting to understand display and interpretive strategies for exhibitions and collections under consideration, I am in fact seeking to interpret various methods and notions of representation itself, which are as varied in display strategies as in ideas represented as in objects displayed.

BONNER LEADER: WHAT DOES IT MEAN TO BE CIVICALLY ENGAGED

Michael Austerlitz

Over the past four years, I have been involved in the Bonner Program, a national program at over 80 schools that gives students scholarships and financial opportunities [bit cut] in exchange for a commitment to community service and development as a student leader. In conjunction with this program, I participated in AmeriCorps' national service initiative, completing 1200 hours of community engagement activities and service in two years.

My experiences in these programs have shaped who I am by allowing me to step [outside the self-absorption that often accompanies being] a college student. While working at a local soup kitchen and afterschool program for "at-risk" youth, I began to emulate the Bonner leadership model by attending national conferences with other students in the program, and eventually giving workshops at these conferences. Over my four years with Bonner, I have developed the skills necessary to not only serve my community(ies) but also have figured out what vocation I want to pursue: Either law or journalism pertaining to social justice.

I am now the Bonner Senior Intern and oversee the community work of our 6 HWS Bonners. Further, in my two years since transferring to HWS, I have become the liaison between the school and the Geneva Community Lunch Program as well as a regular volunteer there. All of this work has allowed me to see my school-work with different eyes, approaching the material in the classroom, such as racial and class dichotomies, with real-life experience. My presentation will prove not only how my life has changed from these experiences, but how easy it is for others to get involved. Just by volunteering once or twice at a community agency, one can gauge the social injustices in their communities. From there, it becomes easy to become passionate about an issue. If you feel that food issues are important, you may begin dedicating your time at your local soup kitchen. Once a regular volunteer, you may ask yourself why there are food problems and why people cannot afford to eat. This may lead to a policy brief in which you explore the problems underlying the major problem. Then, from a regular volunteer, one can become an ally for a community agency in assisting with ending the problem, if not alleviating it completely. This is a far-reaching goal, but one I always keep in the back of my mind.

GENEVA HEROES: MENTORING THROUGH COMMUNITY SERVICE

Kielynn Banker and Kerry Cahill

For the past three years, we have worked closely with the Center for Community Engagement and Service Learning and other Geneva partners to revive the Geneva Heroes mentorship and community service program. Through this program, Geneva Middle and High School students are mentored by HWS students selected for their excellent leadership skills, interest in community service and in educating youth. The group works together to complete service learning projects in the Geneva community each Saturday morning throughout the spring semester. The project has two primary goals: to foster an understanding of the importance of community service in middle school students, and to help high school and HWS students develop leadership skills.

Each week, the group visits a new site and completes challenging and exciting service projects. Students serve at a variety of places such as Happiness House, animal shelters, and Seneca Lake State Park; therefore, our projects range from spring cleaning and walking dogs, to sorting books, painting, and beautifying the lakeshore. In addition to the primary focus on service, the middle and high school students have an opportunity to experience the college atmosphere and sample the wide range of student interests on our campus. From pizza at the Intercultural Affairs House to barbeques at fraternities, the group enjoys lunch when it reconvenes at the Colleges upon completion of each day's project.

As coordinators, we have worked with previous leaders of the program to identify areas in need of improvement. By establishing new goals and expanding the scope of the program, new additions including the weekly newsletter, reflective journals, and the Leaders' Project have been made. These supplemental components mirror our objectives to cultivate leadership, communication, and teamwork skills among our group members, all the while developing lasting friendships and a lifelong desire to help others through community service.

At present, we are investigating the best processes for handing over the program.

CREATION OF A BRADDOCK BAY BIRD OBSERVATORY SPECIES MONOGRAPH: NEEDS ASSESSMENT

Bethany Bashaw

In my project I will attempt to assess the needs and desires of the scientific community and the general public for the creation of a species monograph on migratory birds that travel through our region. Building on experiences from my senior capstone biology seminar, which focused on bird migration, I will help to determine how to incorporate a decade of data collected at the Braddock Bay Bird Observatory near Rochester, New York into a comprehensive ecological monograph. Monographs such as this are crucial in inspiring and facilitating the direction of future scientific research, as well as in protecting migrating bird species and enhancing citizen awareness. The primary goal of the overall project is to create a volume of work that is easily accessible both to research ornithologists and the regional birding community.

In order to accomplish this goal, surveys are being sent to community members, who are knowledgeable birders, and to research experts in ornithology. The goal of my survey is to provide information about what kinds of available data would be best suited for a monograph. The results of my surveys will aid observatory staff and biologists in the creation of a synthetic and effective comprehensive ecological monograph, which will be useful for ornithological research, avian conservation, and public outreach and education. To date, the monograph primarily consists of general species information, primary migration dates, and basic morphological data for a few species; several of my senior colleagues created these species accounts as part of a senior seminar in biology during the fall semester of 2009. These examples are being sent along with my surveys in order to assess readers' responses and ideas about the ecological monograph.

LOOKING FOR AESTHETIC VALUE IN THE AUTOMOBILE

Jonathan Bernbaum

My interest in automobiles is at the forefront of my presentation. For as long as I can remember, cars and specifically racecars have been one of my dearest passions. However, can an automobile be considered art?

My aesthetic course made me realize that the answer to this question involves both philosophical theory and an awareness of the direction dictated by the industry. It is easy to understand the automobile as a tool of transportation. Yet, if we examine the Chinese theories of *Yin* against *Yang*, a more truthful representation comes to fruition. It is the idea of the road becoming the car's canvas. It is an outlet for discovering an ever expanding truth.

My project focuses on the parts which create the whole of the automotive form. When we discuss the high performance racecar, we can see the track and car as playing equals to one another, while drivers, designers, engineers, and mechanics all play an equal role in finding an ultimate truth. When a racecar hits the track, the aim is victory, which includes all the elements that create this unified result. When the parts of the cars find this balance, a truth is realized: victory is attained and something beautiful is created.

RAVENOUS DRAGONS, VIKINGS, AND A MEDIEVAL WEDDING: INTEGRATED EXPERIENTIAL LEARNING

Jonathan Bernbaum

How do we learn and is there only one way of learning? My presentation describes, discusses, and exemplifies a process of individualized learning that includes crafting objects that summarize the themes of three different courses, and demonstrate how a school like Hobart and William Smith can enhance personal strengths, interests, and abilities of students.

My first project presents a medieval Wheel of Fortune that illustrates the events and the philosophical ideas deployed in Geoffrey Chaucer's works, specifically *Troilus and Criseyde*. The second project is a medieval castle in which are depicted the different elements of medieval romance: the tournament, the eternal spring of the garden of pleasure, the maiden's tower, the lone hero facing the ravenous dragon. My last project investigates the techniques of Viking boat construction. All of these projects are hand crafted utilizing wood, as well as a variety of other materials; each includes detailed essay and pictures documenting the construction of these objects as well as the integration of theory and literary understanding. A fourth project, offers an original translation of the medieval English poem, *The Wedding of Sir Gawain*.

Each of these projects has involved intensive and specific research on the subject matter and on the proper construction methods. Each has also allowed me to experiment freely with my own creativity, patience, and intellectual growth. This experience proves that there are many valid ways of learning.

IMPROVING BUSINESS IMPROVEMENT

Jamie Billington, Renee Gehring, Ben Morgan

Our project allows us to work as consultants and explore the effectiveness of the Geneva Business Improvement District (BID) office in terms of membership satisfaction. We sought to understand the ways in which the BID office could better advertise and allocate services to the downtown businesses of Geneva.

This project is a capstone of a four-year sociology degree. It is the practical application of the sociology curriculum, specifically drawing upon the skills gained in Research Methods, Data Analysis and Classical Sociological Theory. The goal of this project is to report the direct response of the business owners to the BID office so they know how to best serve the members of the downtown business district. We hope to give the BID office a better way to allocate state funded resources to help actually improve local businesses to create a larger change.

The combination of research instruments, surveys and interviews will allow us to report our findings and suggest key alterations to the business practices of the BID office.

Research will be reported in both a qualitative and quantitative manner and research is on-going.

TOWARD THE SYNTHESIS OF CYSTEINE-CONTAINING DEPSIPEPTIDE FK228

Travis Blum

The last decade has seen remarkable advances in the understanding of the complex mechanisms behind the development of cancer. The study of cancer has revealed a class of proteins known as histone deacetylases, which have attracted a great deal of interest as potential targets for chemotherapy. When unregulated, members of this group of proteins are recognized as contributors to cancer, as they are partially responsible for controlling the expression of several key genes that act to suppress tumors.

I am investigating the synthesis of a family of compounds that inhibit histone deacetylases. Known as the cysteine-containing depsipeptides, their synthesis is an important step in the study of cancer therapeutics, and will provide a means for modifying their structures to optimize their pharmaceutical activity.

As part of the Miller group at Hobart and William Smith Colleges, I have been investigating the synthesis of the depsipeptidic molecules Spiruchostatin A, FK228, and FR901,375 both in solution and on the solid phase. Recently, we have demonstrated the utility of a synthetic approach to these molecules in the synthesis of Spiruchostatin A using a key chemoselective macrocyclization developed by the Miller lab.

My work with the Miller group has led to a refinement of our synthetic strategy for making a biologically active subunit that is present in all of the cysteine-containing depsipeptides reported to date. I have applied this revised synthetic strategy to the molecule FK228, which is currently in phase II clinical trials for the treatment of several types of cancer. With a solution-phase synthesis in hand, we look to move into the first solid-phase synthesis of FK228, and begin to efficiently produce analogs for study.

TUPO PAMOJA: PROMOTING INTERNATIONAL TRUST AND UNDERSTANDING THROUGH THE USE OF LITERACY IN TANZANIA

Carolyn Pluchino and Franchessca Branlund

Upon receiving a grant from the *Young Memorial Trust* to do research in Mwanza, Tanzania in May 2010, we are working with the Tupo Pamoja Foundation in Tanzania to promote international understanding through instruction and literature. There are three parts to this project. The first part consists of creating an Informal Reading Inventory, both in English and Kiswahili, which we will give to the students to assess their current reading level and their strengths and weaknesses. This inventory will allow us to understand the reading level of Tanzanian students and create activities that directly support their individual needs.

For the second part we will be helping to organize a teacher-training program that is currently established in Mwanza, TZ. We want to provide these teachers with more resources and skills so that they can implement them in their own classrooms and in the community.

In the final piece of the project, a listening project will take place where the members of the Mwanza community can talk freely about their community (both negative and positive aspects). From the listening project, we will be able to narrow down some of the major issues that are either 1) hindering the educational system in Mwanza from providing quality education to Tanzanian children or 2) preventing the children from receiving opportunities for education. Although our time will limit our stay in Mwanza, we hope that the listening project will provide a basic foundation of analysis and understanding for future projects and plans in Mwanza that may (or may not) involve the primary education system.

We believe that our project will foster international trust and understanding by working with the community to build bridges between the current governmental primary schools, the Tupo Pamoja Foundation, and the Mwanza community. By promoting teacher training and youth literacy, we aim to create a conversation in which people are empowered to learn from each other.

PROCESSING THE PROCESS

David Nicholas Butterini

The discipline of architecture is full of imagination, thought, and rigor. When presenting my work in book form, I set out to ensure that my final portfolio not only presented these qualities within each project, but additionally possessed these qualities within its entirety.

For an architectural student, the portfolio is a synopsis detailing important design influences and progressions throughout their education. Often called “process,” these influences and progressions become an entwined story, in which every design traces its origins.

Overall, my work relies on an interplay between simple forms, simple concepts, and complexity. I will present two selections of full-page narrative spread that best represent the progression of a project and ideas. Beginning with imaginative ideas, I translate these concepts onto paper, and conclude with a built 3-dimensional model. Between each stage, not only are thoughts refined, but forms acquire a multiplicity of meanings.

THE KITCHEN KINDERGARTEN

Caitlin Caron

Food is a fundamental way in which humans interact with their world. It is what drives and creates culture, relationships, and landscapes. However, in recent years a division has been created between where, how, and why we eat especially in regards to how children view the answers to these questions. Many young children see food as something purchased in the grocery store or handed to their parents through the drive-thru window at a fast food restaurant. There is a disconnect between food and child.

The purpose of this study is to bridge the gap between food and child by developing a kindergarten level curriculum to which food—specifically, the growing, harvesting, and preparing of seasonal produce—is central. I will explore how an atmosphere that encourages hands-on, experiential learning with gardening and cooking can bring environmental and social sustainability into the kindergarten classroom. Two main questions drive this study:

1. What does experiential learning look like at the kindergarten level?
2. How do you foster an understanding and appreciation of where food comes from in a way that promotes environmental and social well-being?

To begin to answer these questions, I will look at programs like the Edible Schoolyard, where students are actively engaged in cultivating and cooking produce in a student-run garden and kitchen. In addition, I will conduct observations in local public, Montessori, and Waldorf kindergarten classrooms and interview kindergarten teachers in an effort to better understand early childhood development, experiential learning, and the importance of nature in a child's life.

I hope to integrate the Edible Schoolyard's focus on healthy living and environmental sustainability with Montessori and Waldorf educational philosophies into a curriculum for kindergarteners.

DETERMINING LAND QUALITY FOR MIGRATORY BIRDS NEAR THE LAKE ONTARIO SHORELINE

Kailey Chidester

The goal of my research is to determine whether the land around the Braddock Bay Bird Observatory (near Rochester, NY) is a high quality stopover site. Migratory birds expend large amounts of energy during migration, and they must stop during migration to refuel in suitable habitats, known as stopover sites. Conservation of quality stopover habitat is important in order to conserve and protect migratory birds. The quality of stopover sites is often measured by either (1) the presence or abundance of birds or (2) the rate at which migrating birds increase their body mass during stopover, since refueling is extremely important for their survival and continued migration.

In 2007, Dr. David Bonter and colleagues published a study “Daily Mass Changes in Land Birds during Migration Stopover on the South Shore of Lake Ontario,” in which he estimated the rate of mass gain in 34 passerine species during 12 migration periods from 1999 to 2004. Bonter found that more species significantly improved in condition during autumn migration than spring migration, mainly due to differences in food availability. My study will be an update of Bonter’s in order to determine whether Braddock Bay is still useful to migratory birds or whether changes in regional land use has affected migratory stopover behaviors. By repeating his study using bird data from subsequent years (2005 to 2009), I hope to find if stopover quality at Braddock Bay has been altered, possibly affecting migration stopover in the Braddock Bay area.

Implications of this study may help with habitat management and conservation of the Braddock Bay habitat.

David N. Bonter, Therese M. Donovan, Elizabeth W. Brooks, K. A. Hobson (2007). “Daily Mass Changes In Landbirds During Migration Stopover On The South Shore Of Lake Ontario.” *The Auk* 124 (1), 122-133 .

THE VAMPIRES MELT UNDER MY LIGHT

Jessica Cohen

Since my first semester at HWS, I have learned technical theater skills while working at the Bartlett Theater on campus, designing lights or sound for every faculty and student production. During my senior year, I chose to initiate an independent study course to acquire formal training in lighting design. However, the independent study provided limited opportunities to practice what I was learning.

At the invitation of Robert Gross, a co-chair of the theater department and the director of the HWS winter play *The Vampires*, I took on the lighting design for the show. Because my final theoretical project from my independent study and *The Vampires* set had a very similar set design, I would deal with similar issues.

Through the process of putting the theoretic knowledge from my study of lighting design into practice as the lighting designer of *The Vampires*, I learned that it is much easier to design in theory than in practice. Over the course of this project, I developed a personal methodology to apply to my future lighting design efforts.

PROJECT EYE-TO-EYE:
ESTABLISHING A MENTORING ORGANIZATION

Alexandra Connell

In my first year at HWS, I never would have guessed that I would be graduating with a re-directed passion, intent on devoting my life towards enhancing awareness, understanding, and empowerment of people with disabilities in our country.

Toward the end of my first year of college, I had the opportunity to become the founder and coordinator of HWS Chapter of Project Eye-to-Eye (“I2I”). I2I is a national, not-for-profit mentoring organization that matches college (or high school) students with learning disabilities and/or ADD/ADHD with middle school or elementary students with the same or similar learning disability. The Mentors and Mentees participate in projects that address issues of what it means to be an individual with a learning disability and/or ADD/ADHD. These projects promote self-esteem, self-confidence, independence, and self-advocacy skills for these Middle School Students.

Since the day I learned about I2I, I do not believe that I have let a day that go by without either recruiting HWS Mentors or bringing it up in conversation. In addition to our successful campus Chapter, we now have “Club I2I,” hold a summer camp called Camp Vision, and last year had an I2I theme house. I am thrilled to say that with the help of the amazing HWS I2I Mentors we have the ability to see today a movement on our HWS campus, and in the Geneva community, towards creating a better life for individuals with disabilities.

THE RELATIONSHIP BETWEEN THE HOME LITERACY ENVIRONMENT AND LITERACY SKILLS OF INCOMING KINDERGARTENERS IN GENEVA ELEMENTARY SCHOOLS

Stephanie Y. Wells and Alexandra Connell

The home literacy environment has an important influence on children's early literacy skills, which are a key predictor of both short- and long-term academic success^{1,2}. Children from economically disadvantaged homes are at greater risk for academic difficulties because fewer resources, like books, means that the home does not allow adequate print exposure to help foster literacy skills. Lower maternal education level also puts children at risk for lower literacy skills upon entering kindergarten³.

Our project examined associations between the home literacy environment, parental education level and family socioeconomic status, and children's literacy skills at the beginning of kindergarten. A sample of 115 kindergarten students and their parents participated in this study. Parents completed a questionnaire about the home literacy environment and baseline literacy scores were collected from each student's school records.

Results of this study indicated that several aspects of the home literacy environment, like shared parent-child reading, trips to the library, and family demographic characteristics, like parent education level and family income, were associated with children's baseline literacy skills.

This research project grew out of a request from members of the Geneva community for a better understanding of how the literacy levels of incoming kindergarten students relate to home reading habits. These findings confirm the importance of the Geneva Read Initiative and their efforts to educate parents about ways to enrich their home literacy environment to enhance children's literacy skills and future academic success.

¹ Griffin, E.A., & Morrison, F.J. (1997). The unique contribution of home literacy environment to differences in early literacy skills. *Early Child Development and Care*, 127-128, 233-24.

² Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80(4), 437-447.

³ Christian, K., Morrison, F.J., & Bryant, F.B. (1998). Predicting kindergarten academic skills: Interactions among childcare, maternal education, and family literacy environments. *Early Childhood Research Quarterly*, 13(3), 501-521.

THE DO'S AND DON'TS OF TRANSLATION:
A CLOSE READING OF EZRA POUND AND HERBERT GILES

Kristen Cooper

In my Fall 2009 Modernist Experiments course, I explored Ezra Pound's theories on the ways in which poetry should be recreated through translation. Starting the movement in Imagism, Pound's essay "A Few Don'ts" established the rules of translation: special attention to language, rhythm, and rhyme.

Both Pound and Herbert Giles translated the same poem, "Fan-Piece, for her Imperial Lord." My study of their translations suggests that Ezra Pound was successful in creating an English poem that mirrors the mood of the original Chinese, while Giles's mirrors the out-dated Victorian form.

CITY OF GENEVA: LEACHATE REGULATIONS

Jennifer Crupnick

According to the United States Environmental Protection Agency, “Leachate is any liquid including any suspended components in the liquid that has percolated through or drained from hazardous waste.”¹ In Geneva, New York, leachate is produced at two area landfills and then trucked to waste water treatment plants for treatment. After treatment, it is released with other treated waste water into Seneca Lake. The City, under an agreement with the landfill operators, currently accepts leachate, but is interested in exploring thresholds for priority toxicants contained in leachate that are not currently regulated by the State Department of Environmental Conservation based on health and environmental concerns.

For this project, I worked with the Finger Lakes Zero Waste Coalition (a committee of the City Council) to research leachate regulation suggestions for the city of Geneva’s Green Committee. The first step of the research involved cross-referencing lists of chemicals found in the local leachate against the Environmental Protection Agency’s (EPA) list of regulated chemicals from the Clean Water Act, as well as the EPA’S Chemical Candidate List. Of the nine chemicals I found in common, I focused on Arsenic, Benzene, Dichloroethane (1,2), Dinitrophenol (2,4), Tritium and Phthalates. I then examined public health and environmental literature in order to come up with justifiable threshold levels that the Green Committee might recommend to Council.

Research on waste is critical to ensuring the livelihood and sustainability of the Geneva community. Innovative waste management is especially important in the Finger Lakes region due to the existence of high-traffic, high-volume landfills. Waste management plays a major role in the local economy, yet has uncertain human and environmental health impacts that may result from long-term, low-dose exposure to the contaminants in landfill leachate. This project creates the foundation for further policy-relevant research into the potential negative human and environmental health impacts resulting from landfill leachate.

¹ "Managing Leachate and Condensate ." *Ohio EPA - Division of Solid and Infectious Waste* . EPA , 27 Apr. 2005. Web. 25 Nov. 2009. <epa.ohio.gov/portals/34/document/guidance/gd_538.pdf>.

EXPLORATIONS IN ART AND OF THE SELF: NAVIGATING BETWEEN ABSTRACTION AND REALISM

Carly Cummings

My project has become an exploration of who I am as a painter. Although I've always had an interest in Studio Art, it is through my Honors Project that I have been pushed to describe my interests as an artist and to pursue a particular goal—painting portraits. I began with having only the idea of painting portraits in mind; however, after reading through numerous resources, after studying specific artists, and after assessing my own work, I have been able to identify additional criteria pertinent to the creation of my paintings.

This investigation has included me looking extensively at three artists who have predominantly inspired me, and through examining their work I have been able to find what is intrinsic to my own. These three artists are Paul Cézanne, Chuck Close, and Elizabeth Peyton—all who, in their own diverse styles, paint portraits within the realm of realism.

My criteria have come to include particular limitations on my subject choices, what compositions I utilize, as well as what techniques and colors I apply to each painting. My process begins with taking my own photographs and my subjects are limited to friends and family. From there, I create compositions that crop close to the face, though this varies from painting to painting. As my project has developed, color has also become an important element. Although I have been working on realistic portraits, I have simultaneously been exploring how abstraction and the infusion of color positively affect the paintings. As a result, I am still discovering where my work fits between abstraction and realism.

This project is a start to defining who I am as a painter, and it enables me to move forward with certain essential aspects of my work in mind that I can continue to explore beyond graduation.

FORBIDDEN COUPLINGS: *BATTLESTAR GALACTICA* AND EVOLUTION

Erin Cunningham

What are the feminist and revolutionary implications of Darwin's evolutionary theory? How are we connected to other species and the technologies in the unfolding of our own evolution? And what does the dark reimagining of a campy 1970's science fiction television show have anything to with Darwin and dogs?

This project is the culmination of my work in the academic field of Women and Gender Studies, a long standing passion for pop culture and science fiction, and a deep belief that the two can combine in exciting and surprising ways.

Using *Battlestar Galactica* as a text and current feminist theory involving evolution, mainly the work of Elizabeth Grosz and Donna Haraway, I have analyzed the transformative work being done in the field of feminist evolutionary theory, by refocusing Darwin's theory away from the conservative focus on natural selection towards the open ended possibilities of his theories of individual difference, and including Haraway's theories of companion species.

WANTED: NEW PARADIGM

Emma Daley

My Positive Human Development individual major was born out of a number of experiences that helped me understand that our happiness is hugely dependent on choices we make. These choices include not just where to live and work or whether to have a family, but also the very ways we think about the world. We have all been conditioned to abide by certain paradigms from the moments of our births, and so paradigm framework for understanding and interpreting ideas and experiences. These rules for interpreting the world are so inculcated that we often do not realize there are other options. We can choose our paradigms to improve our well-being; my goal is to empower people with this knowledge.

Most of us, especially in the West, operate in a “zero-sum” paradigm that dictates that we must fight for self-preservation and compete for limited resources. This has led to an absurdly militarized world in which billions of people struggle to survive while a few live in enormous luxury. Such a paradigm may have been useful at some point in our evolutionary history, but it is detrimental today. We would create a different world if we began thinking in new ways.

The effects of the dominant paradigm extend not only around the world but also into our personal lives. People are happier on an individual basis when they, themselves are kind to others and feel they can trust them. Everyone’s goal is to be happy, yet we are caught in a paradigm of self-preservation that makes us apt to feel threatened, an experience which evokes further negative emotions. By trading in our outmoded selfish paradigm for one marked by compassion and cooperation, we can alleviate suffering in ourselves and in the world more broadly.

ROOTS AND SHOOTS: AVERTING THE HUMAN/NATURE GAP

Shari Damon and Hannah Weiss

How does Roots and Shoots, Jane Goodall's international organization for youth environmental education, help save today's children from "nature-deficit disorder" *and* create a totemic "culture of enchantment"? What is the role of the community, education, and family in fostering children's interaction with and knowledge about the environment?

Our interest in tackling these questions resulted from our previous coursework, including Environmental Policy, the Solid Earth, and the Fluid Earth. After studying and discussing a host of environmental issues like the federal subsidization of corn, ozone depletion, and increasing carbon emissions, we have noticed a recurring theme: the disconnect between humans and nature. Our participation in Roots and Shoots has allowed us to apply our knowledge so we can actually *do* something to avert the human/nature gap.

Our project is a reflection of our weekly Roots and Shoots sessions with children ages four to seven, and our independent study coursework in which we read, discuss, and analyze both *Last Child in the Woods* by Richard Louv and *A Reenchanted World* by James William Gibson. We agree on a main "theme" for each week, such as hibernation, animal prints, and Jane Goodall. Then, we read a book with the kids about the theme and do a corresponding activity like searching for animal prints and mimicking the hibernation process. It is a pragmatic, interactive approach to establishing a connection with nature at a young age, which also helps prevent pervasive issues like childhood obesity and disregard for our food's origins.

BOYS TO MEN

Dan M. De Nose

I believe that leaders are not always born, but are created with the right atmosphere. Today, we live in a time where young black males are lost in society due to the lack of positive role models. Many of them do not have mentors who they can look up to for guidance because of the environment in which they live. But, what if they were to become positive role models themselves? What if they were given the tools, as well as the right atmosphere to become young leaders of tomorrow?

I received a Cohen Fellowship through the Centennial Center for Leadership at HWS to develop a leadership curriculum for boys ages 15-16 who are considered “at risk” and developed a curriculum based on the book, *The Leadership Challenge*, which addresses the following four components: Model the way, Inspire a shared vision, Challenge the process, and Enable others to Act. I implemented this curriculum at the Lake Delaware Boys Camp in the Catskills in the summer of 2009 over a four-week time period. During this experience twenty boys participated in activities, reflection, and discussion aimed at creating leaders. The success of the curriculum is evidenced in the demonstrated leadership abilities of this group of boys. Given the opportunity, positive role models, and the tools necessary, boys can develop into young men and strong leaders.

This presentation will focus on specific activities of the leadership program and discuss the outcomes through participant voices.

HISTORICAL HEROES: HOW SOCIAL STUDIES AND TEXTBOOKS SHAPE CHILDREN'S VIEWS OF HISTORICAL FIGURES

Abigail DiPalma

“Should children be taught to have heroes from history, even if their heroes have serious flaws?” My project seeks to explore this idea through the analysis of a larger question, “Is history supposed to be a ‘feel-good’ exercise, or do children learn about history even if it is upsetting or against their beliefs about the past?”

These questions were brought about through past coursework framed around “Historical and Philosophical Issues in Education.” My interest in the idea of how children learn history deepened through my student teacher experience in a fourth grade classroom and has manifested itself in a semester long project in conjunction with my position as a Teaching/Research Assistant for the “Debating Historical and Philosophical Issues in Education” course.

While the ideas of James Loewen¹ and Howard Zinn² have provided a foundation for my research, I have chosen to focus on a group of fifth grade students to further explore my fundamental questions. Through a blogging activity, I will use the insight the fifth graders provide me to seek some answers to my questions. My project is designed to examine how children feel about what they learn in Social Studies and more specifically, how they see heroes, not only every day heroes but heroes highlighted in their Social Studies education, whether that be through textbooks or even popular culture. To enhance my analysis, I will also be doing a literature review of other researchers who have looked at this topic, which will allow me to locate my findings within the academic conversation of the research literature.

¹ James Loewen, *Lies My Teacher Told Me*, (New York: The New Press, 2007).

² Howard Zinn, *A People's History of the United States*, (New York: Harper Collins, 2003).

KEN BUGUL: “ONE WHO IS NOT WANTED”

Molly DiStefano

My Honors project explores the work of Francophone Senegalese author, Mariétou Mbaye Biléoma, pseudonym Ken Bugul, which means, in Wolof, “one who is not wanted.” Bugul was required by the publishing house, Les Nouvelles Editions Africaines, to choose a pseudonym for her first work, *Le Baobab Fou* (The Abandoned Baobab), which the publishers considered too scandalous to be linked to the author.

I became interested in Bugul’s work after reading the works of several Senegalese women writers as a student in Saint-Louis, Senegal. Bugul’s work compelled me because of her choice of genre, and the themes she addresses in her novels, particularly as related to women’s experiences.

In my reading of Ken Bugul’s novels, I examine the possibility of feminist consciousness in her work, particularly in her first three autobiographical works, *Le Baobab Fou*, *Cendres et Braises*, and *Riwan ou le Chemin de Sable*. This examination requires an exploration of what feminist consciousness means and manifestations of feminism as evidenced in these autobiographical works.

INTERACTION: SIMPLE TO COMPLEX

Addie Duplissie-Johnson

Creating a portfolio requires a level of analysis and focus on individual projects, and, more importantly, the collection of projects as a whole. Constructing a portfolio presents an opportunity for a great deal of discovery of inherent personal method, process, and development over the course of an architecture student's studies.

Forming my own portfolio enabled me to define aspects and themes in my design process. I try to achieve an underlying logic in my projects and a reason for every component, a dynamic in which every piece plays a necessary role in the whole. This leads to a theme of simplicity to complexity; simple outlines of concepts that take on a complex life while still anchored by inherent order in design.

My projects began as movable and re-buildable, requiring an interaction. In my latest project, I strove to gain a similar changefulness, but in static form. A complex static form with a simple framework behind it asks for an interaction with the object by movement around it, investigating the changefulness.

Functioning as pieces of a whole, pages of a student's portfolio represent only pieces of a story with many parts, and I look forward to sharing this story during my presentation.

GENDER PROMISCUITY AT HWS

Zachery Feasel

My project is based on the concept that resource discrepancy results in a great deal of inter-sex conflict: males have a high reproductive capacity and lowered investment, whereas females face a lowered reproductive capacity and increased investment; as a result, heterosexual men tend to have lower standards for a sexual partner, when compared to heterosexual females (Kendrick, Sadalla, Groth, & Trost, 1990). The purpose of my study is to test the attitudes toward gender promiscuity on a small, liberal arts college campus.

I hypothesized that heterosexual males prefer more sexually selective partners than heterosexual females, both sexes overestimate sexually activity of male students, and that both males and females become more promiscuous after attending college. Forty undergraduate Hobart and William Smith students completed surveys about their sexual preferences and were exposed to a video condition either simulating monogamy or promiscuity.

Results indicate that both males and females viewed sexual promiscuity negatively and overestimated the sexual activity of male students. HWS students were not found to have more college partners than high school partners.

GROUNDWATER RESOURCES OF NEW YORK STATE: CONTAMINATION THREATS AND SURFACE WATER INTERACTIONS

Brittany Flaherty

Despite being by far the largest source of freshwater available to humans,¹ groundwater is often insufficiently protected and human impacts on this resource are overlooked, particularly in the Eastern United States. However, about 25% of New Yorkers rely on groundwater for at least part of their water supply,² and many more may come to do so in the future.

This project focused on the location and use of groundwater in New York State, as well as the major threats and impacts associated with this resource. Local municipalities, the U.S. Geological Survey, and the NYS Department of Environmental Conservation helped me identify contamination and surface water interactions as the primary groundwater concerns in the state.

I then gathered information about the number of municipalities that use groundwater as part or all of their water supply, their level of reliance on this resource, and policies and strategies in place to prevent contamination and groundwater-surface water interactions. Next, using statewide information about the location of agricultural land, landfills, and hazardous waste sites, I identified municipalities with the greatest potential for contamination by applying Geographic Information Systems (GIS) technology.

Without adequate research into groundwater-surface water interactions and contamination sources, it will be difficult to develop effective policies to prevent the destruction of this valuable resource. My work can be applied to other Eastern states and can serve as a basis for comparison to Western and arid states in order to generate a more complete picture of groundwater use and protection policies in the United States.

¹ Cech, Thomas V. "Groundwater Hydrology." *Principles of Water Resources*. 3rd ed. Hoboken: John Wiley & Sons, INC., 2010. 104-33.

² "Groundwater." *New York State Department of Environmental Conservation*. 2010. <<http://www.dec.ny.gov/lands/36064.html>>.

GENDER AND SERVICE: A STUDY OF STUDENT SERVICE AT HWS

Katie Geise

Who participates in community service and why? Traditional gender norms depict women in a mothering role; however, mothering behavior may extend past the family setting and shift into humanitarian efforts. In this study, I explore how family composition, gender, and a parent's service impact an individual's view of service and their degree of service participation. In other words, is philanthropy nothing more than extended mothering?

I expect to see these patterns strengthened throughout childhood and into adulthood. These behaviors are reinforced in young girls and women and suppressed in young boys and men.

DYNAMIC THEOLOGY AND COMUNIDAD: THE ROLE OF THEOLOGICAL PRACTICE IN ONE HISPANIC PENTECOSTAL CHURCH

Elizabeth Greene

Ethnography is a complicated and arduous process, and one which is especially effective for allowing the researcher to fully get in and experience a particular group while exploring its complexities. The purpose of this particular ethnographic study has been to learn about Pentecostalism by means of participant-observation in the Geneva Hispanic Church of God (GHCG).

During the course of the project, several interesting themes have presented themselves, but none so fascinating as the process by which the GHCG Pentecostals reinvent, reinforce, and reaffirm their beliefs through particular actions and behaviors, a process I have called theological praxis. This process is especially apparent when matters of community access and preservation arise: rules governing community access and preservation are produced and organized through theology—or expression about God and, reciprocally, as authority and community are produced and organized, theological ideas or beliefs about God—are solidified.

In this research I analyze ethnographic data to arrive at conclusions about how theological praxis operates and, primarily, how it operates to organize community access and preservation in the Pentecostal Geneva Hispanic Church of God.

A MID-CRETACEOUS ANGIOSPERM-DOMINATED MACROFLORA FROM THE CEDAR MOUNTAIN FORMATION OF UTAH: IMPLICATIONS FOR DIVERSITY AND CLIMATE

Elisha Beth Harris

Paleobotanists use fossil plants to reconstruct the vegetation of ancient ecosystems and past climates. Flowering plants (angiosperms) have been of particular use to these ends by helping estimate mean annual precipitation (MAP) and mean annual temperature (MAT) for regions of the Earth millions of years ago. Angiosperms first appeared in the fossil record during the Early Cretaceous (~140 million years ago) and experienced two bursts of diversification during the mid-Cretaceous. Although these patterns of diversification have become evident to paleobotanists over the past century, few details are known about the taxonomic, geographic, and ecological radiation of early angiosperms since few fossil floras (macrofloras) have been reported.

For my Honors project, I examined an all-angiosperm macroflora preserved in a limy, lacustrine, mudstone deposit from the Cedar Mountain Formation of Emery County, Utah. Volcanic material in similar deposits nearby has been radioisotopically dated to 96.7-98.5 Ma. Specimens were separated into morphotype groups based on differing morphological characteristics of the leaves. Given the age of these specimens, it is surprising to find an all-angiosperm community since angiosperms did not begin to dominate floral associations until the Late Cretaceous.

To determine the climate characteristics of this locality, univariate and multivariate statistical techniques were employed. Both analyses estimated MAT and MAP; however, each produced significantly different results. Given these unexpected findings, I suspect that particular physical characteristics of these leaves may not be comparing well with the modern dataset to which they were compared.

INTUITIVE COMPILER SPECIFICATION

Robert Hendry

Developing a compiler can be challenging and time consuming. The goal of my project is to design and implement a compiler generation system that reduces the cost and difficulty involved in building compilers.

There are many current systems that partially generate compilers, leaving much implementation up to the developer. In the few systems that do generate complete, functional compilers, the specifications are unintuitive and difficult to implement. My project effectively mitigates the cost of compiler design and implementation by partially generating all needed components from a well-known, conventional specification format.

My project also uses common design patterns which lend flexibility and extensibility in the generated compilers.

My system consists of a generation module and a synthesis module. The generation module is an extension of JavaCC¹, a common front-end generator, and JTB², a research system for compiler generation. The synthesis module builds a framework for developers to use as they implement their compiler. This approach balances the complexity of abstract specification and the difficulty involved by implementing compilers from scratch.

¹ JavaCC, <https://javacc.dev.java.net/>

² Java Tree Builder, <http://compilers.cs.ucla.edu/jtb/>

VICTOR GREENHOUSE GAS INVENTORY AND ANALYSIS

Alexander Daly Henry

Rising levels of greenhouse gasses have become a major issue in industrialized nations; the U.S., being a major contributor of these gasses, has a responsibility to reduce its carbon footprint.

Recently, many local towns and cities have been joining the effort to complete this task. In 2009 the town of Victor, NY joined an international organization of local governments to reduce their carbon emissions. A greenhouse gas inventory was put together analyzing major greenhouse gasses (CH₄, CO₂, N₂O, SF₆) by gathering energy consumption information from both government and community sources in the town. Once this inventory was complete, information about the town's impact in relation to surrounding areas was attained.

Using this data, I established a reduction target for reducing Victor's GHG emissions by 20 percent by the year 2020.

R.E.A.L.: RESPONSIBLE FOR EVERY ACTION IN LIFE

Jennifer Hollander and Fredrick Turney

In our project, we are working with the Yates County Family Planning Center (YCFPS) as consultants. We are interested in helping them review their current evaluation process for the R.E.A.L. (Responsible for Every Action in Life) program to meet national health education standards.

We became interested in this project through Professor Harris' Senior Seminar for the sociology major. Our goal is to help the R.E.A.L. program qualify for a grant that will allow the Family Planning Center to continue the educational classes it gives to middle and high school students as well as their parents. They offer classes focusing on sexual education but extend to subjects such as drug awareness, bullying, and alcohol use.¹ The center aims to educate students about risk behaviors and how to make positive decisions about their lives.

We will be looking at other family planning centers along with the requirements set by the National Prevention of Teen Pregnancy.² Through this organization our client will be able to submit an RFA (Request For Application). We believe that our qualifications for this project will be enhanced by a data analysis course both of us have taken as well as a research methods course in which we are both currently enrolled. We will implement these skills to answer the following questions: Is R.E.A.L. effective? If yes, what makes the program effective? Also, how can the evaluation process be enhanced to show its positive impact? In answering these questions, we will be able to help the YCFPS adapt their program to have a more influential role on the education of both youths and adults alike.

¹ Bird, Daisy. 2009. Pregnancy Prevention Program Analysis. *PPOL 450*.

² Kirby, Douglas. 2007. Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases. *The National Campaign to Prevent Teen and Unplanned Pregnancy*.

THE RELATIONSHIP BETWEEN BENEVOLENT SEXIST ATTITUDES AND RECOGNITION OF MALE PRIVILEGE

Morgan Hopkins

Hobart and William Smith Colleges pride themselves on being the only coordinate system in the country; in theory, this structure should actively promote gender equality in all aspects of campus life. In practice, this is often not the case; this discrepancy motivated me to research the attitudes of students about gender equality and whether or not students are learning about both oppression *and* privilege.

Hostile sexism tends to be more overt and is associated with negative stereotypes of women and feminists. Benevolent sexism is associated with positive stereotypic personality traits such as purity, caring, and warmth.¹ This type of sexism is also the hardest to reduce in college students.²

In this experiment, participants complete five measures: levels of hostile and benevolent sexism, male guilt, acknowledgment of male privilege, views on the role of men in society, and identification as male. In the second phase, participants are primed to think of gender inequality as either female disadvantage or male privilege. Following this prime, participants rate their levels of approval for hypothetical institutional changes to HWS; they also rate their levels of perceived discrimination in a hypothetical situation.

I hypothesize that the coordinate system promotes more egalitarian attitudes for William Smith students, but that Hobart students generally maintain traditional gender attitudes. This allows Hobart students to reject the concept of male privilege and then further justify the status quo. Findings from this study may shed light on new ways in which HWS can foster students who learn in a more critically reflective way. In other words, a general lack of acknowledgment of privileged identities by our student body may speak to what should be improved to create a more inclusive campus environment.

¹ Glick, P. & Fiske, S. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512.

² Case, K. A. (2007). Raising male privilege awareness and reducing sexism: An evaluation of diversity courses. *Psychology of Women Quarterly*, 31, 426-435.

STATUS OF OUT OF SCHOOL PROGRAMS IN GENEVA

Rick Horshaw, Alex Keyes, Josh Kahan

In our project, we explored three questions: What programs are out of school providers offering and are they doing what they propose in their mission statement? How are their practices including or excluding certain socio-economic groups (i.e. accessibility, admission fees, etc.) Finally, is there a disconnect between what parents are expecting, and what the services being provided are?

As active sociology students, our studies of society and work with children at camps and community centers sparked our interests in the area of youth development, and the current state of after school programs in Geneva. In the investigative portion of our project, we researched publications about the relationship between out-of-school activities and positive youth development.¹ Similarly, we studied child trends over the last fifteen years, and how out-of-school activities prepare youths for the lives beyond education.²

In creating our research project, we decided that our research will determine what individual out of school providers are offering, what times they are offered, and what the accessibility of their service is. By researching out of school services individually, we plan to determine whether or not providers are meeting their expectations and fulfilling their mission statement goals. Lastly, our research team will learn how each service provider is making their services known to the Geneva community, and how that affects the inclusion or exclusion of certain children.

¹ Morrissey, K. M., et. al., The Relationship Between Out-of-School Activities and Positive Youth Development: an Investigation of the Influences of Communities and Family. *Adolescence* v. 40 (Spring 2005) p. 67-85

² http://www.childtrends.org/Files/Child_Trends-2008_09_15_FR_ReadinessReport.pdf

SHOULD HWS HARVEST THE SUN?

Cassia Horvitz

My Senior Integrative Experience project investigates the potential use of solar energy to heat water in order to offset the use of fossil fuels on the HWS campus, and supplement traditional fossil fuel fired boilers by pre-heating the water that enters the boilers.

In a solar hot water installation, glycol is pumped through solar panels mounted on roof tops, it is warmed by the sun, and the heat is transferred to water in a heat conversion tank. The biggest limitation on my project, so far, has been finding suitable locations on campus. Of concern are not only the campus aesthetics, old growth trees and large open spaces, but also elements of the buildings' construction and design such as slate roofs and the fact that most were designed and constructed long before solar utilization was even an idea. Based on my initial evaluation, the most viable options for these installations are the Bristol Gymnasium and Odell's residences.

At HWS specifically, and for most other consumers generally, a good pay back rate for a project of this nature is 7-10 years. The costs of renewable energy systems can often be offset with financial incentives, so a major part of this project is finding out what (if any) incentives may be available to the Colleges.

In addition to the environmental benefits, solar systems are educational tools that could also be used for classes and would further the community's understanding of renewable energy options.

IMPERFECT STRANGER

Julie Isaacson

Imperfect Stranger is a sociological examination of immigration to the United States and its relationship with crime. I became interested in this subject as a topic for my Honors project after coming across a simple statistic: approximately 27%ⁱ of all federal prisoners are undocumented immigrants. The significance of this statistic was such that I began to formulate questions to further explore the social implications it encompassed. What accounts for such disproportionate representation of a population? What are the sociological causes of this phenomenon? Is this even an accurate evaluation of the immigrant experience? How do history, economics, and politics influence this occurrence?

Throughout this project, I will be researching the impact of immigrants (more specifically, undocumented) on crime in the United States. Because over 75%ⁱⁱ of undocumented immigrants originate from Latin America, I will only be examining this sector of the immigrant population of today (with a special focus on immigrants from Mexico). In this portion of my project I am researching gangs, drug cartels, and human trafficking. Although I will be focusing on immigration from the past twenty years, I will additionally investigate the relationship between immigration and crime throughout the 20th century in order to ascertain a broader foundation for the current situation. In addition to my Honors thesis, I will be producing a short documentary detailing my findings in addition to my written report.

My study relies heavily on interviews and investigative research. It is not my intention to baselessly produce claims about a given culture but simply to explain the reasoning for deviance amongst a certain group from a sociological perspective. Instead, I hope to provide clarity and insight on an issue that is often clouded by passionate political agendas.

ⁱ <http://www.ojp.gov/bjs/crimoff.htm>

ⁱⁱ http://www.cis.org/immigrants_profile_2007

THE IMPACT OF INFORMAL FORMS OF COMMUNICATION ON STUDENT WRITING

Hannah Kallet

Based on my ideas about a sociolinguistic relationship between technological means of communicating and the development of student writing abilities, I am exploring if and how informal means of communication (text messaging, instant messaging, Facebook, email, etc.) have impacted academic writing.

In the research portion of my project, I have concentrated on fifth graders, an age when children are initially exposed to informal means of communicating while learning and developing formal writing skills. Some sources have claimed that informal means of communication “are negatively affecting students’ writing quality on a daily basis, as they bring their abbreviated language into the classroom.”¹ Through analyzing surveys and collecting writing samples, I am determining whether and how writing abilities have developed and changed, given the uses of informal means of communication today. I will be conducting in-depth interviews to grasp a better understanding of how fifth grade students are using text messaging, instant messaging, Facebook, email, etc.

This project will help to raise awareness for educators, and will help students to recognize the differences, and differences in context for appropriate use, between formal and informal languages.

¹ Ross, K. (November 2007). Does Text Messaging Hurt Student Writing Skills?: Teachers say Text Messages R Ruining Kids’ Riting Skills [Electronic Version]. *American Teacher*, vol. 92 no. 3.

FINDING THE “TRUTH”

Sean Kluber

Are history textbooks telling the “truth?” When a student reads about a certain topic, are all aspects of the topic or event being covered? Whose version of historical events is typically presented? In a traditional history classroom, the teacher gives the student a so-called “fact” or “idea” from history, the student accepts this as a fact, and the class moves on. Often in high school students are never able to think critically or use analysis to challenge the “truth” about history.

In James Loewen’s book entitled *Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong*¹, he provides details and parts of history that were omitted from the traditional textbook. In my project I intend interview students in my inquiry group as a teaching colleague in a course using Loewen’s book and focusing on this material. The interviews will include the topics of Helen Keller, Woodrow Wilson, and Christopher Columbus. In the interviews I will see how the students feel after reading the book, and see if this has given them a different perspective on the “truth.”

¹ Loewen, J.W. (2008). *Lies my teacher told me: everything your American history textbook got wrong*. New York, NY: Simon & Schuster.

DEMOCRACY IN HONG KONG

Bernd Kröll

After being a British colony for 150 years, Hong Kong was returned to Chinese control in 1997. The handover and Hong Kong's semi-autonomous status as a special administrative region of the Communist-led system of the mainland creates conflicts of interest and a challenge to the political systems in Hong Kong and the mainland. My project explores the current state and the possible development of democracy in Hong Kong under the "one country, two systems" establishment.

My interest in the subject originated from the combination of prior coursework in Asian Studies, my internship at the Delegation of the European Commission to the People's Republic of China in Beijing, and a term abroad in Hong Kong.

To explore the topic, I research the electoral process of the Hong Kong legislative council and the constituency system of Hong Kong and create a working definition of democracy adjusted to the East Asian context versus the Western liberal sense of democracy. To conclude on the development of democracy in Hong Kong, I analyze Hong Kong and overseas newspaper coverage on the most recent election. This allows me to determine which segments of the society votes for which political camp and test the hypothesis whether Hong Kong Chinese citizens tend to vote for more autonomy and democracy, whereas mainland Chinese tend to vote pro Beijing.

I then interpret the results of the election and the implications for democratic development in Hong Kong through the lens of the history of political participation, past democratic movements and the potential for more democracy in mainland China. A comparison between these results and promises made by the mainland government and British concepts for Hong Kong will help me frame a conclusion for the prospect of democracy in Hong Kong.

POSITIVE MOOD AND SOCIAL ATTENTION

Megan Kuechle

In my research project, I seek to answer the question: Does Positive Mood Increase Social Attention? My interest in this area stems from course work in Positive Psychology, Research in Social Psychology and independent literature reviews. Leading researchers in this field, such as Isen (1970, 1987) suggest that attention is broadened when someone is thinking positively. Fredrickson (1998) provided further evidence that positive emotions can lead to an expansion of attentional focus. This research suggests that positive moods make quite a difference on an individual's social, cognitive, and behavioral processes.

My current project will build upon this literature by looking specifically at the effect of positive mood on social attention, using an experimental design. Participants will be randomly assigned to a positive or neutral mood condition. After they receive a mood induction, they will proceed to viewing videos of college students. They will later be asked to recall information from these videos as a measure of social attention.

I hypothesize that participants in the positive mood condition will be able to retain and recall more information, as compared to those in the neutral mood condition.

Fredrickson, B.L. (1998). What good are positive emotions. *Review of general psychology*, 2, 300-319.

Isen, A.M. (1970). Success, failure, attention, and reaction to others: The warm glow of success. *Journal of Personality and Social Psychology*, 15 (4), 294-301.

Isen, A.M. (1987). Positive affect, cognitive-processes, and social-behavior. *Advances in Experimental Social Psychology*, 20, 203-253.

NORTH AND WEST STREET ELEMENTARY SCHOOL RECONFIGURATION AND THE INTRODUCTION OF LEARNING COHORTS

Kelsey Lagana

The decision to reconfigure Geneva's elementary schools was made during the 2008-2009 school year. Prior to the reconfiguration, North and West Street Elementary Schools ran separate K-5 programs; now, West Street is responsible for all K-2 programs and North Street holds all classes in grades 3-5. The Geneva community needs some assessment of the impact, and I was interested in researching the topic further.

In collaboration with Professor Khuram Hussain, I developed a survey in order to better understand teacher perceptions about the reconfiguration in general, but also about the implementation of learning cohorts to the school system and the possibility of teachers looping (moving between grades with the same class).

THE LATINO PERSPECTIVE: AN ANALYSIS OF THE LATINO COHORT ON A
NATIONAL AND LOCAL LEVEL AND THEIR RELATIONSHIP WITH THE
REPUBLICAN PARTY

Kelsey Lagana

In course of my Political Science major, two themes that often arose were the question of how the Republican Party can regain political control, and the growing role of the Latino population. By the year 2050, Latinos will be one fourth of our population. Gaining a deeper understanding of their political views is essential in taking the Latino cohort seriously as a major voting block in the political future of America. While the Latino population is a diverse and large group, they often vote democratically both nationally and locally, due to ideological differences with Republicans. Analyzing the Latino perspective is a timely issue that needs to be brought to the forefront of politics.

Through research and interviews conducted with political leaders in Monroe County, New York, I gained a deeper perspective about Latinos and their relationship with the Republican Party; I also contextualize these findings through a lens of Latinos nationally.

A STUDY OF PROTEINS INVOLVED IN MOTILITY OF THE BACTERIA CAUSING PIERCE'S DISEASE IN GRAPEVINES

Elisabeth Losito

The bacterium *Xylella fastidiosa* infects and moves through grapevines inducing an economically devastating condition called Pierce's disease.¹ Researchers postulate that *X. fastidiosa* migrates through the grapevine², aggregates, clogs the vessels, and blocks nutrient and water from reaching the infected area.¹ The signaling system that regulates the bacterium's movement is unknown; however, one possibility is a chemical sensing system, known as chemotaxis.³ Analysis of the *X. fastidiosa* genome suggests that it has the proteins that control chemotaxis. The putative *X. fastidiosa* protein that binds the chemical signal is termed PilJ.

My goal is to determine where PilJ is located in the cell in relation to the appendage producing the cell's movement. I will obtain anti-PilJ antibodies, which I will use to visualize the location of the PilJ by scanning electron microscopy. I have completed cloning the gene, expressing the protein and antibodies are currently being produced. I will also create a fluorescent PilJ protein, express it *in vivo*, and visualize the PilJ location by fluorescent microscopy.

Currently this cloning is in progress. By learning more about PilJ and *X. fastidiosa* movement, new avenues for preventing Pierce's disease may be realized.

¹ Chatterjee, S., Almeida, R.P & Lindow, S. (2008). *Annu. Rev. Phytopathol.* **46**, 243–271.

² Meng, Y., Galvani, C.D., Hao, G., Turner, T.J., Burr, T.J., and Hoch, H.C. (2005). *J. Bacteriol.* **187**, 5560-5567.

³ Hazelbauer, G.L., Falk, J.J., and Parkinson, J.S. (2007). *Trends Biochem. Sci.* **33**, 9-19.

ART AND ARCHITECTURAL DESIGN PORTFOLIO

Anne E. Lucid

My portfolio project is a compilation of my artistic and architectural projects completed at Hobart and William Smith. It consists of abstract drawings, architectural modeling, computer-aided-design projects, as well as sketching and photography I did while studying in Copenhagen, Denmark.

My project represents a majority of the works I created and completed during my studies at the colleges as an architectural studies and art history student. It expresses my design accomplishments both in and out of the classroom. I have selected an egg scale and an art gallery that I designed, as well as sketches of a museum addition.

The objective of the egg scale project was to design and build a functional scale to weigh eggs that are small, medium or large in size. The second project that I have chosen to show was an urban infill project in Copenhagen, Denmark, in which we were given an existing site and three works of art to display in an art gallery designed for the particular site. The third of these projects shown is from a series of studies on experiencing space. Here, I studied the Ny Carlsberg Glyptoteket museum in Copenhagen, Denmark and extruded different moments in a person's journey through the addition by architect Henning Larsen.

In the creation of my portfolio as a whole, I was able to develop a timeline of my design projects, which shows my creative artistic and architectural projects.

POST-CONFLICT IN RWANDA: A COMPARATIVE STUDY OF DIFFERENT CHANNELS OF JUSTICE IN RWANDA AND THEIR CONTRIBUTION TO THE PROCESS OF RECONCILIATION

Laura Martin

In 1994, an extremist Hutu militia known as the *Intrahamwe* led a massive killing campaign in order to exterminate their Tutsi political opponent in what has come to be known as the 1994 Rwanda Genocide. The fact of this genocide continues to echo in Rwanda today, increasing the feasibility of future such events.

How is this cycle broken? By what means of reconciliation will Rwanda violence cease to exist? Post-conflict justice is an inherently difficult and crucial phase in reconstructing broken societies.

In my independent study, I examine the three different channels by which justice was offered in post-conflict Rwanda: the International Criminal Tribunal, the National Courts, and the Gacaca Tribunals. I will propose that, while various methods of justice may hold a larger offering of 'choice' in the means by which particular individuals choose to reconcile, there are three specific phases that a nation must go through in order for permanent change to be effective: changes within the government structure are the first phase which will lead to the second phase, enhancement of the public and individual confidence to participate in the third phase of communal restorative justice.

LINKING ENVIRONMENT AND CULTURE: IMPLICATIONS OF GLOBAL POLICIES ON LOCAL POLITICS

Lisa Maticic

I am interested in the effects of the conservation and development policies within non-Western nations, examining the link between environment and culture through case studies of the San of the Kalahari Desert, the Kayapo of the Brazilian Amazon, and the Huaorani of the Ecuadorian Amazon. Through my analysis I have found that each group adaptations to the changing environment results in traditions, rituals, and knowledge distinct to each culture.

I propose that each culture is defined by and dependent upon the local environment and that the survival of each environment is dependent upon human agency, as mediated through local culture. However, most global conservation and development policies founded upon Western ideals of nature adapted from Western environments.

Because unique environments create distinct cultures, disappearing cultures will result in increased local poverty and environmental degradation. I claim that by limiting influence of global policies and encouraging local politics, we can allow varied environments and cultures to adapt, self-sustain, and persist.

BROKEN TEAPOTS AND GERTRUDE STEIN

Jessie Meyers

For my Modernist Experiments course in the fall of 2009, I examined two sections of Gertrude Stein's *Tender Buttons* entitled "Glazed Glitter" and "Careless Water." My goal was to come to terms with a piece of literature which, upon my first reading, left me feeling dizzy and disconcerted.

I eventually made connections between these works and the research of James-Henry Holland, a professor of Asian languages and cultures at HWS, on the practice of reconstructing broken tea ceremony pieces using lacquer that highlighted the breakages in ways that to some might seem ugly or strange, and also discovered that words such as "japanning," "breakages," "glaze," "washing," and "glitter" carried profound etymological significance. I found that in these passages, Stein reveals the forgotten beauty of the English language in new, striking ways, mimicking the ceramic mending process which she describes in these sections.

Stein, Gertrude. "Tender Buttons." *Selected Writings of Gertrude Stein*. Ed. Carl Van Vechten. New York: Vintage Books. 461-470.

EYELESS FLIES: A STUDY OF PROTEIN INTERACTIONS IMPORTANT FOR FRUIT FLY EYE DEVELOPMENT

Brian Monaco

Developmental biology is a field of biology that aims to understand the molecular and cellular basis of embryogenesis. The fruit fly, *Drosophila melanogaster*, is an ideal model organism for studying questions of development. Advantages of this model organism include ease of culturing, fast life cycle, and the ability to easily create mutants, which easily allows the study of complex biological processes. Researchers can use fruit flies to investigate genetic connections between development and human disease, since significant homology exists between fruit flies and mammals.

I am conducting an independent study looking at specific protein interactions that occur during the formation of the fruit fly eye. The gene Sine Oculus (SO) is a critical gene for the development of sensory organs. It is active throughout development and eliminating its function results in the loss of eye tissue¹. SO works in part by binding to other proteins, as a complex SO and its partners influence the activation of genes within cells. One such protein is Sine Oculus Binding Partner (Sobp). Sobp is known to bind to SO and alter its function; however, its exact role is unknown^{2,3}.

In research this semester is examining which portions of the Sobp protein specifically interact with SO protein. SO and Sobp have known homology with human genes thus this work has broader implications. Further understanding of SO and Sobp role in fruit fly development can provide insight into human embryogenesis as well as diseases associated with sensory development.

¹ Cheyette BN, Green PJ, Martin K, Garren H, Hartenstein V, Zipursky SL. The *Drosophila sine oculis* locus encodes a homeodomain-containing protein required for the development of the entire visual system. *Neuron*. 1994 May;12(5):977-96.

² Kenyon KL, Li DJ, Clouser C, Tran S, Pignoni F. Fly SIX-type homeodomain proteins Sine oculis and Optix partner with different cofactors during eye development. *Dev Dyn*. 2005 Nov;234(3):497-504.

³ Kenyon KL, Yang-Zhou D, Cai CQ, Tran S, Clouser C, Decene G, Ranade S, Pignoni F. Partner specificity is essential for proper function of the SIX-type homeodomain proteins Sine oculis and Optix during fly eye development. *Dev Biol*. 2005 Oct 1;286(1):158-68.

THE CRAFT OF FICTION

Kelly Morrell

My project is a reading of a well-polished short story which demonstrates the craft skills that I have learned throughout my college career, and which will allow me to examine the effectiveness of the skills as they appear in my work. The piece will have been created during the Craft of Fiction course, in the Spring 2010 semester.

My writing has most often focused on the effects of removing a person from the ordinary human condition (society) and placing them in a situation in which they must provide for themselves all of the benefits ordinarily gained from social interaction. For this project, I would like to try something new by taking a closer look at those interactions that define a person, to answer the question “How does human interaction change a person?”

This project will allow me to improve upon the formal skills that will be necessary in writing a story focused on human interaction, including the use of dialogue and imagery. I also want to make use of the character study forms of self-reflection and visualization of a goal or purpose for life. I expect that my use of these techniques will make my characters more believable and make my readers more apt to relate to them. I expect to reveal truths about the human condition that even I would have been unaware of prior to completing the story; yet, I expect that those truths will be evident to any reader.

MYTH, SYMBOLISM, AND CULTURAL REVOLUTION IN THE IRANIAN REVOLUTION

Andrew Ockenden

Because of images of nuclear facilities, an aggressive and oppressive president, and riots, Iran within the last thirty years, has come to be understood by many Americans as antithetical to the American way of life and foreign policy. But prior to 1979, however, Iran was a friend of America in the Middle East. What happened to change this?

My project focused on the rapid transition of Iran from a modern and secular nation to the strict theocracy we see now. Analyzing the cultural myths of Shi'a Islam and traditional Persian society, the concept of charisma, and the power mass demonstrations, I sought to understand the nature of Iran's social revolution.

My findings suggest that mass discontent can transform itself into a unified social movement when the present situation is understood through the context of cultural myth and when a leader arises who seems to fulfill this myth; myth and authority are necessary for the creation of a true revolution. When such a movement solidifies, individual reason can disappear and the movement manifests a will of its own.

THE EVOLUTION OF MY ART AND DESIGN

Sarah Palmer

My portfolio is a composition of my work over the course of my four years at Hobart and William Smith Colleges. Because I have taken both architecture and studio art classes, I chose to organize my projects by genre: architecture, sketchbook, painting, and drawing. My design projects are laid out to tell a story about my process throughout the project.

The architecture design and analysis sections include projects from my courses at HWS and DIS in Copenhagen, Denmark. In these projects I focused on design with respect to context, function, abstraction, and meaning. During my time abroad I was introduced to new forms of art, design, construction, and culture. My understanding of art and design was both challenged and expanded in Copenhagen; however, my experience has become an integral part of my work and who I am today. While in my studio projects I focused on adapting the Danish tradition of architecture to my design method, in my architectural analysis projects I focused on observing my surroundings and recording my observations in a coherent layout.

My artwork includes compositions from drawing and painting that were created with a range of media. These pieces focus on space and proportion, color, figure analysis, and composition. Both my design and art are eclectic and possess a simple elegance that is clear, defined, progressive and open.

THE ROLE OF PARENT EXPECTATIONS AND CHILD ANXIETY AS PREDICTORS OF HOMESICKNESS DURING SUMMER CAMP

Kelly Peneston

Approximately 12 million youth attend summer camp programs each year and many children who attend overnight camp experience at least mild levels of homesickness¹. Prior research has identified factors associated with higher levels of homesickness, including younger child age, fewer pre-camp preparations, and limited prior camp experience^{2,3}. The purpose of this study was to examine additional factors that influence homesickness, including parents' worries about sending their children to camp and children's symptoms of separation and social anxiety.

There were 275 total child participants (131 male, 144 female) who ranged in age from 7-14 (mean age = 10.83). Questionnaires were completed by each child participant and his/her caregiver (e.g., mother, father, grandparent).

Results indicated that camper homesickness was associated with parents' anxious expectations and with camper separation and social anxiety at the beginning of the camp week. Camper age and the number of previous years attending overnight camp also predicted homesickness. These findings suggest that camp organizers could provide resources for parents to ease their concerns, thereby maximizing the developmental¹ benefits that children receive from attending overnight camp.

¹ Henderson, K.A., et al. (2007). Summer camp experiences: Parental perceptions of youth development outcomes. *Journal of Family Issues*, 28, 987-1007.

² Thurber, C.A., & Walton, E.A. (2007). Preventing and treating homesickness. *Child and Adolescent Psychiatric Clinics of North America*, 16, 843-858.

³ Thurber, C.A., & Sigman, M.D. (1998). Preliminary models of risk and protective factors for childhood homesickness: Review and empirical synthesis. *Child Development*, 69, 903-934.

NEITHER GLADIATORS NOR GODS: GENTEEL ROMAN MEN IN LATE ANTIQUITY

Emily Sarokin

The opportunity to contribute undergraduate research to the burgeoning field of Men and Masculinity studies, through the lens of Art History, has motivated me to write “Neither Gladiators Nor Gods: Genteel Roman Men in Late Antiquity.” My research explores manifestations of masculinity in consular diptychs, or ivory plates carved in relief and bound together lengthwise, from the mid 4th through 6th centuries. Examining the diptychs illuminates a possible relationship between masculinity, art, Christianity, and the fall of the Western Roman Empire.

The project seeks to answer two major questions: First, can art historians add a theory of gender to existing explanations for the changing representations of the aristocratic male body found in Roman art of late antiquity? And second, can art historians look at early Christian constructions of masculinity as a catalyst for this changing representation?

As very few texts concerning masculinity in art history exist, this project requires research into various primary sources, such as the *Mediations* of Marcus Aurelius¹ and early transcripts of Christian sermons. However, most of my research focuses on a comprehensive understanding of the late antiquity period by exploring prosopography (a study of individuals, their networks, and genealogy), and theories of the fall of the Western Roman Empire, as well as reviewing contemporary studies of the consular diptychs.

A broad goal of this project is to emphasize the importance of masculinity studies to historians. Since recorded western history is a history of men, academics have an obligation to develop the most thorough possible understanding of male behavior and men’s relationship to the powerful force of gender roles.

¹ Aurelius, Marcus. *Meditations*. Mineola: Dover Publications, Inc., 1997.

LAUGHING AT DEATH: THE CLOWN IN *HAMLET* AND *MACBETH*

Patricia Stacey

The popularity of the Clown in Elizabethan comedy was such that Shakespeare's innovative and bold use of the Clown in tragedies demands explanation. The Clown – most likely played by Will Kempe in Shakespeare's early plays and Robert Armin in the later ones – is a character who could steal the show in one short scene, as exemplified with the Porter of Iverness in *Macbeth* and the First Gravedigger in *Hamlet*.

In my project I explore how Shakespeare enhances the dramaturgy of *Macbeth* and *Hamlet* by presenting the Clowns as characters who function as archetypal gatekeepers, and as stand-ins for death, contextualizing this exploration by collecting historical precedents from Elizabethan England.

This particular topic bridges my interest in literature, medieval history, and also in classical and Christian mythology.

GENOTYPIC CHARACTERIZATION OF *PHYTOPHTHORA CAPSICI* POPULATIONS IN NEW YORK STATE

Samantha L. Tandle

Phytophthora capsici is the pathogen responsible for Phytophthora Blight in cucurbit (cucumber, squash, pumpkin, and gourds), legume (snap beans and lima beans), and solanaceous (peppers, eggplant, and tomato) crops worldwide.¹ Due to its large host range and increasing geographical range, *P. capsici* is a growing economic concern for farmers across the U.S., including in New York State. In 2004 there was an estimated \$134 million worth of susceptible crops in the state of Michigan alone, up to 25% of which has been lost in previous years when weather conditions favored *P. capsici* growth.¹

In 2007, I collected over 250 isolates of *P. capsici* from affected fields in three major vegetable growing regions in New York State.² The purpose of my particular research was to lay the groundwork for a larger project which sought to compare the genotypes of populations of *P. capsici* from different fields and regions in order to determine how similar or different from each other they were. My goal was to extract DNA from each of these isolates and to confirm that they were in fact *P. capsici* before they were included in the larger study. This goal was accomplished by conducting PCR on the extracted DNA samples using primers that would only recognize *P. capsici* DNA, and then visualizing the results with gel electrophoresis.

DNA was successfully extracted from confirmed *P. capsici* isolates. In a subsequent study, researchers amplified and then sequenced five highly variable regions (microsatellite loci) of these DNA samples in order to characterize the genotypes of the different 2007 populations. The results of the experiment showed that populations of *P. capsici* in NY exhibit a high level of genetic diversity, both between regions and between particular fields. This suggests that the main agent of *P. capsici* exchange between fields in NY has been human action.

¹ Hausbeck, M. K., and Lamour, K. H. 2004. *Phytophthora capsici* on vegetable crops: Research progress and management challenges. *Plant Disease*, 88 (12): 1292-1303.

² Smart, C.; Fry, B.; McGrath, M.; Dillard, H.; Reiners, S.; and Moffet, P. Developing management practices for *Phytophthora* blight in New² York. *Project Update*, December 2007.

ALL THE STAGE'S A WORLD: THE STAGE AS REALITY IN LUIGI PIRANDELLO'S *SIX CHARACTERS IN SEARCH OF AN AUTHOR*

Sarah Tompkins

My project explores the stage as used and reinvented by Pirandello. I examine the use of the physical space of the theater, as well as the fictional space of the theater.

My interest in this project originates from the English course Modernist Experiments, which opened my eyes to modernist works such as this play, and my ongoing interest in theater.

Throughout this project, I explore the world that Pirandello has created through the lens of the audience, as well as the perspective of the performer and the reader. I utilized other works of modernist literature to examine what Pirandello, as a modernist, hoped to achieve with the creation of this strange and revolutionary work.

My project seeks to better understand what Pirandello hoped to achieve, and to explore his avoidance of the concrete reality and materiality of theater. His use of the stage as not only that which it is naturally - a stage, a place where action and plot unfolds - but as a metaphor for theater, strives to break from the tradition of the theater as a space on which art can imitate life.

RASTAFARIANISM: A MODEL OF HYBRIDITY

Maria R. Trainor

Many American individuals associate a Rastafarian with his colorful clothing, dreadlocks, reggae music, and drugs. After studying abroad in Jamaica during my SEA Semester last spring, I wondered why Americans attached to the religion a cult of individuals who express themselves through stereotypical clothing, trends, and character traits. Why do Americans love the sound of Bob Marley and travel to Jamaica to meet exotic, mystical, Rastafarians, and buy colorful knitted hats and tapestries?

My paper, “Rastafarianism: A Model of Hybridity,” argues the attraction Rastafarians hold for Westerners is part of an orientalist vision—an epistemology, ontology, and discourse that represents a set of practices and hegemonic ideas giving the West power over the East. Just as the occident constructs the orient as primitive, inferior, lazy, static, mystical, and romantic, we understand the Jamaican Rastafarian through a similar lens. While orientalism and polarization theories assert the superiority and dominance of the West, hybridization deconstructs these notions and empowers the distinct and unique cultures of the orient. My project will thus explore and define these theories: orientalism, polarization, and hybridity.

I will argue that Rastafarians unconsciously utilize the process of hybridization through reggae music and religion to proclaim agency, raise consciousness, and protest against racism and oppression. Rastafarianism is not a bounded, static, or primitive culture; instead, we can witness its hybridity through the changing religious aspects and the styles of music.

BLINDED BY THE RIGHT: AN EEG STUDY OF RECOVERY FROM PARTIAL BLINDNESS

Regina L. Triplett

Blindness can be caused by disrupting the visual system at the initial input to the eye, the final interpretation in the brain, and anywhere in between. Partial cortical blindness is a visual deficit caused by damage to one side of the brain region known as the primary visual cortex. This condition was previously considered permanent and beyond hope for rehabilitation. However, recent data demonstrate that partial cortically blind patients can recover sight through visual re-training. This study seeks to validate these results and to elucidate some of the mechanisms by which recovery occurred.

In this study, the team I worked with recorded Electroencephalogram (EEG) in response to moving visual stimuli. The experimental groups included five partially cortically blind patients and ten age-matched controls. We collected EEG recordings once from controls, once from all patients prior to visual re-training, and once from all patients following their successful recovery of sight. I examined the EEG recordings for the N2 peak, a component that occurs 200 ms post-stimulus indicating the medio-temporal (MT) area's processing of moving stimuli. Preliminary experimental goals included determining whether or not region MT is involved in visual recovery, and if so, discovering its function.

Prior to re-training, the N2 peak was present in the good visual field of cortically blind patients but not the bad visual field. However, post-training patient recordings displayed a restored N2 peak in the recovered visual field. Because MT was not active before training, but was activated afterward, these results demonstrate that region MT is involved in the recovery of visual processing. This study validates a rehabilitation technique that was previously considered to be impossible. As a result, it has broader implications for the brain's ability to recover from damage.

- Huxlin, K.R. (2008). Perceptual plasticity in damaged adult visual systems. *Vision Research*, 48, 2154-2166.
- Huxlin, K.R., Riley, M.E., Martin, T., Friedman, D.I., Burgin, W.S., & Hayhow, M. (2009). Perceptual re-learning of complex visual motion after V1 damage in humans. *Journal of Neuroscience*, 29, 3981-3991.
- Kuba, M., Kubova, Z., Kremlacek, J., & Langrova, J. (2007). Motion-onset VEPs: Characteristics, methods, and diagnostic use. *Vision Res*, 47, 189-202.

HOW SMALL CAN YOUR IPOD GET?
SYNTHESIS OF FERROCENE BASED POTENTIAL MOLECULAR WIRE CANDIDATES

Janelle Walkley

Demand for the technological world to advance and push the limits to create the smaller computers, iPods, and cell phones will not be met in the near future because the silicon chip is rapidly approaching its maximum capacity. The silicon chip oxidizes, reduces, and insulates charge transfer, but as the chip continues to be shaved down into smaller layers, it is likely that this reduction will result in charge leakage and loss of conductivity.^{1,2}

In order to address this problem, new “bottom-up” approaches for the generation of small molecules to replace the silicon chip are being sought. My research focused on the synthesis of ferrocene containing molecular wire candidates, small molecules with controllable architectures and properties that have the potential to replace the silicon chip.

My presentation will highlight the synthetic methods used to prepare these small molecules and the spectroscopic techniques used to analyze the new materials and I will present results from nuclear magnetic resonance (NMR), infrared spectroscopy (IR) and electrochemistry.

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1. Ma, J., Bollamnn, M., Menzel, H., Pohle, S., Butenschon, H. *J. Inorg. and Organomet. Polym.*, 2008, 18, 1, 41-50.
 2. Robertson, N., McGowan, Craig. *Chem. Soc. Rev.* 2003, 18, 96-103.

THE HOBART AND WILLIAM SMITH WINTER GREENHOUSE GARDENING PROJECT

Jordan L. Youngmann

A winter greenhouse gardening project was conducted between the months of February and April in 2010 at Hobart and William Smith Colleges as a Senior Integrative Experience for the Environmental Science major. The project attempted to ascertain the productivity of hardy vegetables in the low light and low temperature climate of Geneva, New York with minimal additional energy expenditure. Results from this study may help determine the feasibility of growing produce at the colleges to supply the dining services with student grown, local food.

In order to determine the overall output and efficiency of the greenhouse, growth rate studies were conducted on 6 different types of soil using 6 separate species of vegetables. Additionally, a replication of these soil and plant combinations were sprouted in the growth chambers of the Biology Department as a back-up plan in case of any general failure in the greenhouse. These soil plots were then carefully tended with daily watering, air temperature measurements, and growth rate calculations. Further research was conducted on the standards set by other schools of similar size who had already implemented their own gardens. Additionally, knowledge was gleaned from the many local farms around the Geneva area that used greenhouses to grow vegetables year round.

This research, combined with the potential success of the Hobart and William Smith garden, may open doors so that one day the colleges could see their own produce grown on site.

VOLUNTEER MONITORING OF REGIONAL STREAMS IN THE FINGER LAKES THROUGH THE EFFORTS OF LOCAL MIDDLE AND HIGH SCHOOL STUDENTS

Jordan L. Youngmann

Volunteer monitoring of stream ecosystems has played a vital role in aiding scientists in their understanding of local biotic integrity by providing key data to track environmental degradation. The integration of local schools into the field of volunteer monitoring allows for students to be actively involved in the assessment of their regional streams and facilitates a higher level of environmental awareness in their own lives and in their community.

The Finger Lakes Regional Stream Monitoring Program seeks to train local schoolteachers in conveying to their students the fundamental importance and value in studying local streams as well as teaching the methodology and techniques of stream monitoring as a part of their curriculum. Students will conduct physical observations of channel dynamics and habitat, chemical analysis of the water, as well as macroinvertebrate sampling to determine overall stream health. The goals of this project is to 1) design protocols for stream sampling; 2) develop training materials for the teachers; and 3) conduct preliminary assessments of a select subset of local streams being incorporated into the program. Protocols will combine accepted methodologies from the NY Department of Conservation and Hudson Basin River Watch and the training program will incorporate the education of the teachers and creative methods to fully engage the students in the field. The program uses a two-tiered approach to allow schools to match their desired level of involvement with educational needs of their classroom.

The ultimate goal of this program is to create a database to which all data collected by school groups may be uploaded. Local science teachers and stream ecologists will be able to access this database and use its contents to further their own study and understand potential impacts as well as changes to stream health.

PUMPKINSEED SUNFISH (*LEPOMIS GIBBOSUS*):
AGE DETERMINATION AND POPULATION DYNAMICS AT THE HENRY H. HANLEY
BIOLOGICAL FIELD PRESERVE

Maggie Yovanoff

Age and growth determination is important in understanding the population dynamics found in aquatic environments. Information on age and growth rates also help to assess environmental pressures and conditions including predation, habitat and morphology found among species in the same ecosystem. A study being conducted at HWS's Henry H. Hanley Biological Field Preserve is testing the effects of predator-prey relationships between largemouth bass (*Micropterus salmoides*) and pumpkinseed sunfish (*Lepomis gibbosus*), and its subsequent impact on the plankton community. Differences between two pond ecosystems have resulted in opposite trophic cascades, with the presence of a top predator in only one of the ponds. This has resulted in a shift in the size distribution of pumpkinseed sunfish and the plankton communities present.

Scales were collected from fish captured in these two ponds to analyze age of individual fish and will be aged by identifying and counting the annuli (year mark). Scales will be stained using a 25% ARS solution to better see annuli, which become more prominent with the stain and compared to unstained scales for age verification and photographed for further analysis. The production of annuli results from slow growth during cold winter months and can act as indicators of ecological events.

These data will be used to determine the population structure of pumpkinseed sunfish, specifically the size and age distribution, and discern predation impacts by largemouth bass. The goal of this work is to determine the age of pumpkinseed sunfish and compare these data to data collected on other species captured in the ponds.

Devries, D.R. and R.V. Frie. 1996. Determination of Age and Growth. *Chapter in* Murphy, B.R. and D.W. Willis (eds.) *Fisheries Techniques*, 2nd Ed.: American Fisheries Society Publication, Bethesda, MD.
Nielson, L.A. 1992. Chapter 6. Natural Marks. *Methods of Marking Fish and Shellfish*. American Fish Society, Bethesda, MD.

HABITAT PREFERENCES OF NATIVE AND NON-NATIVE TROUT SPECIES IN A RESTORED COLD-WATER STREAM

Elizabeth Zinsser

Cold Brook (Hammondsport, NY) underwent restoration efforts to increase the amount of habitat available for rainbow trout (*Oncorhynchus mykiss*) in 2007. One component of the restoration effort was the creation of large pools and hydraulic jumps using boulders. Native brook trout (*Salvelinus fontinalis*) compete with stocked rainbow trout for pool habitat in cold-water streams. This study aims to determine the habitat preferences of both species in Cold Brook. It was hypothesized that the rainbow trout prefer the large pools formed by restoration efforts while brook trout will prefer smaller, natural pools.

Unbaited traps were set in control (natural) and restored pools at two sites along Cold Brook's length over a period of six weeks. Pool dimensions and distance between pools were also taken. Two rainbow trout and eleven brook trout were caught total at both sites. All fish ranged between 60 mm and 180 mm. Preliminary analysis shows that rainbow trout prefer pools with a larger volume and also grow to a larger size. Brook trout and rainbow trout were found in the same pools, showing that they do not entirely exclude each other from their environment.

Macroinvertebrates were also collected from Cold Brook because they are an integral part of the trouts' diet. If the restoration effort at Cold Brook were truly successful, the macroinvertebrate community would be healthy. The goal is to analyze macroinvertebrate assemblages upstream and downstream of a restoration site to determine if the restoration had an impact. We hope to show that the macroinvertebrate community was not adversely affected by the restoration efforts and that the species assemblage is suitable prey for the trout species.