Summer Undergraduate Research Experience Presentations

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The SUNY New Paltz Research, Scholarship and Creative Activities program
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Maureen Morrow, RSCA Director

Congratulations to all of the SURE participants!

SUNY New Paltz strives to enhance students' intellectual growth through links to faculty scholarship. One mechanism for encouraging these links is the Summer Undergraduate Research Experience (SURE). This program encourages on-going faculty-student collaboration by enabling students to work full-time on a project over an 8-week summer period. SURE students work on a particular aspect of the faculty's research program under close guidance by the faculty mentors.

The 2011 SURE students are given the opportunity to present the results of their research to the community during the fall semester. It has been my great pleasure to work with these students and their faculty mentors this past summer. Their enthusiasm and dedication are an inspiration. I would like to congratulate these student and faculty SURE alumni for their accomplishments and wish them luck with their continued efforts on these projects. Thank you for participating in this celebration of their achievements.

Maureen Morrow
RSCA Director

Research, Scholarship and Creative Activities Program

Faculty-student collaborators may propose projects for support through the Summer Undergraduate Research Experience (SURE) and Academic Year Funds programs (AYURE). Both of these programs are competitive and are selected for support by a faculty committee. Congratulations to all of this year's award recipients (see pages 12-14).

SURE

The focus of the SURE program is to encourage intensive student participation in an aspect of faculty research. Each student participant is supported with a stipend for the 8-week summer project and is expected to devote at least 35 hours per week to the project. Faculty mentors direct and provide guidance to participating students as they work on a particular aspect of the faculty's research program. As a goal of this program is to encourage ongoing faculty- student collaboration, and thus students are encouraged to continue working on the project during subsequent semesters.

ACADEMIC YEAR FUNDS

This program (AYRUE), like SURE, supports student- faculty collaborations on projects that span the disciplines. Projects that generate new knowledge or works are eligible for support. During the semester, students typically spend approximately 10 hours per week on AYURE projects. Funds for supplies and other support of the research, scholarship or creative activities are provided through this program.

STUDENT CONFERNCE TRAVEL AWARD

The RSCA program supports students to present the results of the collaborative work at professional conferences. Mentors are also supported for travel with the student.

2011 SURE Presentations Schedule

Wednesday, Sept. 7th
9:45a Introductions
10:00a Shaun Ben-Ari, Chemistry, 2012 **(**Frantz Folmer-Andersen, Chemistry)
Using New Macrocycles to Differentiate Enantiomers
10:20a Sheena Henry, Chemistry, 2012 (Megan Ferguson, Chemistry)
Surface Chemistry of P. putida Using AFM
10:40a Thomas Donovan, Mathematics, Physics, 2012 (Spencer Mass, Biology and Richard Halpern, Physics)
Biogenic Electric Fields in Regenerating Planaria
11:00a Nicholas DiPaolo, Chemistry, 2013 **(**Jeffery Reinking, Biology)
Cloning, Purification and Adoption of NRs
11:20a Nathaniel Rigolino, Biology, Chemistry, 2013 **(**David C. Richardson, Biology)
Rock Snot, a Nuisance Algae in Catskills Streams
11:40a Lauren Piven, Anthropology, 2012 (Kenneth Nystrom, Anthropology, Aaron Haselton, Biology)
Paleoparasitological Analysis of Soil Samples
12:00p Kathleen Hanson, Geology, 2012 (Alex Bartholomew, Geology)
The Fauna of the Stony Hollow Member of NYS

Friday, Sept. 9th
11:30a Introductions
11:45a Timothy LaSalle, Graphic Design, 2011 (Amy Papaelias, Art)
PERSONATYPE: Living Type Specimens
12:05p Eli Mann, Psychology, Sociology, 2011 (Melanie Hill, Psychology)
Hooking Up Experiences of Trans Populations
12:25p Denee Francese-Smith, Elementary Ed., History, 2012 (Kate McCoy, Educational Studies)
When History Misbehaves: The Starving Time
12:45p Rebecca Shaw, Psychology, Women's Studies, 2012 (Kathleen Tillman, Psychology)
Exploring the Beliefs of Experts in Counseling
1:05p Laura Johnsen, Theater Arts Design, Psychology, 2012 (Andrea Varga, Theater Arts)
The Stage Designs of Zack Brown
1:25p Ryan Mitten, Philosophy, 2012 (David Appelbaum, Philosophy)
On Nietzsche's Artistic Characterization
In the Dorsky Museum:
2:00p Abigail Duckor, Art History, 2011 (Kerry Dean Carso, Art History)
Hudson Valley Visual Art Consortium Exhibition

USING NEW MACROCYCLES TO DIFFERENTIATE ENANTIOMERS

Shaun Ben-Ari (Chemistry)
Faculty Mentor: Frantz Folmer-Andersen (Chemistry)

Macrocycles are large, ring-shaped molecules that are well known to selectively bind smaller molecules and ions within their interior cavities. In this study, a new highly symmetrical, but chiral macrocycle containing both 1,1-bi-2-naphthol (BINOL) and trans-1,2-diaminocyclohexane (DACH) subunits was synthesized as a single enantiomer in surprisingly high yield. The presence of BINOL and DACH groups in the ring imparts structural rigidity onto the molecule, which limits the available conformations, and is thought to allow the interior cavity of the ring to remain open to facilitate binding. Because the macrocycle is chiral, it is, in principle, capable of preferentially binding one enantiomer of a guest molecule over the other within the interior cavity (i. e. enantioselective binding). This ability was demonstrated towards several chiral carboxylic acids using various types of spectroscopy, which allow the otherwise indistinguishable guest enantiomers to be differentiated. In particular, the fluorescence of the macrocycle is quenched enantioselectively in the presence of dibenzoyl tartaric acid (DBTA), thus giving an optical signal that is dependent on the chirality of the DBTA sample. In the future, we hope to further develop this system in order to photometrically quantify enantiomeric ratios of samples DBTA and other dicarboxylic acids.

SURFACE CHEMISTRY OF P. PUTIDA USING AFM

Sheena Henry (Chemistry)
Faculty Mentor: Megan Ferguson (Chemistry)

Pseudomonas putida is a bacterium studied for its capability to degrade polycyclic aromatic hydrocarbons (PAHs), such as anthracene and naphthalene. This makes P. putida an attractive candidate for applications in bioremediation. In some cases P. putida has been used as a soil inoculant to remedy naphthalene-contaminated soil. The objective of this project is to understand the changes in cell surface chemistry when P. putida adapts to use PAHs as its primary carbon source. Sublimated anthracene slides were used to grow three different strains of P. putida for an extended period of time. These strains were also grown in their respective growth mediums and fixed to polylysine-coated glass slides. Additionally, biofilms were directly grown on glass cover slips and atomic force microscopy was used to take force maps on each sample. The force curve data enabled quantitative analysis of the stiffness and adhesion energy of each set of cells. It was observed that cells grown on anthracene are less stiff than those grown on regular growth medium. Additionally, the sublimated anthracene slides showed significantly less adhesion than cells growing in optimal conditions. Furthermore, biofilm formation seemed to increase cell stiffness. Understanding the cell surface chemistry changes undergone by P. putida will help to optimize systems to have the most efficient biodegradation possible and to predict the efficacy of degradation.

BIOGENIC ELECTRIC FIELDS IN REGENERATING PLANARIA

Thomas Donovan (Physics & Mathematics)
Faculty Mentors: Spencer Mass (Biology) & Richard Halpern (Physics)

All animals generate electric fields that are generally classified as one of two types. The first, which is the better characterized, is involved with excitable tissues such as muscle and nerve. These are generally transient changes in voltage that occur on a time scale of milliseconds. The second, which is the focus of this research, is called the steady state biogenic electrical phenomenon. These are electrical fields that show little change over the time course of seconds to hours and even days. Such currents seem to be associated mainly with processes of cell growth, development, and transport, and may feed back to further polarize and differentiate cells. Importantly, changes in these steady-state currents have been detected in wounded tissues and regenerating structures such as amputated amphibian limbs and human finger tips, corneal and lens tissues and other epithelial wounds, and damaged bone. With the use of an ultra-sensitive vibrating probe system, we can measure extracellular electrical fields at wound sites and regenerating tissues. The intention is to more fully characterize the steady state electric field phenomenon in the planarian and to make a detailed map of the electrical properties of the normal worm, wound site of transected worms, the healing wound, and regenerating tissue. Our experimental system is based on time course regeneration studies involving the correlation of blastema area with electrical phenomena in regenerates.

CLONING, PURIFICATION AND ADOPTION OF NRs

Nicholas DiPaolo (Chemistry)
Faculty Mentor: Dr. Jeffrey L. Reinking (Biology)

The focus of this research is the adoption of orphan nuclear receptors (NR), or in other words, identification of the natural ligands of NR proteins that control the expression of other genes in all animals. We are exploiting recently completed genome-sequencing projecst of several different model organisms allowing identification of genes that are likely to be nuclear receptors based on comparisons to sequences of known nuclear receptors from other species. We have successfully sub-cloned two putative NR ligand binding domains in expression vectors allowing production of desired protein in a bacterial expression system. These and other proteins were purified using immobilized metal ion affinity chromatography and characterized using a variety of biochemical and biophysical techniques.

ROCK SNOT, A NUISANCE ALGAE IN CATSKILLS STREAMS

Nathaniel Rigolino (Biology & Chemistry)
Faculty Mentor: Dr. David C. Richardson (Biology)

Didymosphenia geminata, commonly known as didymo or "rock snot" is an invasive algae species that thrives in streams and rivers during the summer months. It is nicknamed 'rock snot' because didymo forms phlegm-like mats of growth on the bed of streams, appears tan to dark brown in color, and has a wet cotton ball texture. In the past 3 years, didymo has rapidly spread to many streams throughout New York, including Esopus Creek in the Catskills. Within the past month (March 2011), it was found in the Rondout Creek. Didymo appears to be transported by waders (big boots that anglers wear in streams), but no one knows why it grows in some streams and not in others. The goal of this study is to determine why didymo is in certain streams (related to water chemistry, nutrient pollution, climate, and changes in human land use) and what affect didymo has on native stream animals.

PALEOPARASITOLOGICAL ANALYSIS OF SOIL SAMPLES

Lauren Piven (Anthropology)
Faculty Mentors: Dr. Kenneth C. Nystrom (Anthropology) & Dr. Aaron Haselton (Biology)

Paleoparasitology is the study of parasites from archaeological contexts. The presence of parasites in inhumation soil can reveal the status of the health and living conditions of the population. The purpose of this experiment is to determine the presence of parasites in soil samples associated with the pelvis of randomly chosen bodies. We examined soil samples from the pelvic region and from an area outside of the body for each burial. In an attempt to isolate the parasites we rehydrated the soil with a sodium phosphate solution and then separated them from the solution using a centrifuge. We mounted a few drops of the final solution onto slides and examined them for parasites. We were unable to find any parasites in the soil samples, and combined with a DNA analysis of the soil, this suggests that the soil did not contain parasites.

THE FAUNA OF THE STONY HOLLOW MEMBER OF NYS

Kathleen Hanson (Geology)
Faculty Mentor: Dr. Alex Bartholomew (Geology)

It has long been known that the rocks of lower Marcellus age (Early Middle Devonian-Late Eifelian) in eastern North America contain a fauna distinct from the Onondaga Fauna below and the Hamilton Fauna above. Workers as early as the 1930s noted that the fossils seen in the Stony Hollow Member of the Union Springs Formation in eastern New York State (NYS) could be found all across the eastern United States in a very restricted stratigraphic interval. It was later determined that this anomalous fauna represents an incursion of warm-water adapted taxa into the east-central U.S. out of central Canada, recording an interval of global warming during this time. Even though this anomalous fauna was first identified in the NYS area, the full extent of the fauna in the type area has yet to be clearly understood. The goal of this research is to document, as fully as possible, the geographic and stratigraphic extent of the Stony Hollow Fauna in east-central NYS, specifically examining the lower limit of the fauna to determine as precisely as possible when the taxa first arrive in NYS, how abrupt was the transition from the Onondaga Fauna below, and to what degree, if any, is there overlap between the two faunas.

PERSONATYPE: Living Type Specimens

Timothy LaSalle (Graphic Design)
Faculty Mentor: Amy Papaelias (Art)

If a typeface could talk, what would it sound like? If a typeface could move, what would it do? This project aims to demonstrate how meaning can be altered through the visual connotations of on-screen typographic experiences. The final product is a web application that uses digital recording and animation to show each typeface's personified characteristics. Personality types and characteristics used to describe the typefaces are based on a 2005 study, ‘Perception of Fonts: Perceived Personality Traits and Uses’ from the Software Usability Research Laboratory at Wichita State University. Survey participants in this study rated the personality of 20 typefaces using 15 adjective pairs, such as "Happy/Sad", "Feminine/ Masculine", "Polite/Rude", etc. Based on the results from this study, the application pairs typefaces with voices and movements that accentuate these personality traits. By employing new animation features for CSS3 -- cascading style sheets which describe the look and formatting of web pages -- we are able to apply movement functions to web fonts. The application allows users to watch/listen to text speak/move in several sensory ways, making auditory and visible the emotional qualities of that typeface. The project serves as an experimental prototype to improve the typographic experience of web fonts, kinetic typography, screen readers and voice recognition software.

HOOKING UP EXPERIENCES OF TRANS POPULATIONS

Eli Mann (Psychology & Sociology)
Faculty Mentor: Melanie S. Hill (Psychology)

Sex in the context of a hook up or no strings attached encounter has received a lot of attention in recent years, but little research has focused on the experiences of transgender, transsexual, or gender-variant persons. Previous research has shown that for most populations, body image and sexual satisfaction are closely linked, and that characteristics such as sexual assertiveness are related to sexual satisfaction. For trans persons, societal norms regarding sexuality may conflict with how the individual presents physically, which can increase shame around one's body and make trans people both uncomfortable about their bodies and with asserting themselves sexually. The purpose of the current research was to explore the hooking up experiences of trans people with particular attention paid to the participant's gender identity, the gender identity of their partner, and their stage of transition. Transsexual and gender variant individuals participated in the study (N=107). Correlational analyses reveal that, in general, self-esteem and body esteem were related to various sexual constructs. In addition, qualitative analyses exploring participants' positive and negative hook up experiences revealed that factors such as communication, respect for boundaries, and the hook-up partner's familiarity with trans people were related to how positive or negative the hook-up experience was for the participant.

WHEN HISTORY MISBEHAVES: THE STARVING TIME

Denee Francese-Smith (Elementary Education & History)
Faculty Mentor: Dr. Kate McCoy (Educational Studies)

Despite vast amounts of research on the Jamestown colony in Virginia, little is actually known about the Starving Time, the winter of 1609-1610. My faculty mentor and I traveled to Jamestown, VA in search of primary sources to get a dynamic view of interactions between the Powhatan and the colonists during this time. What is known about this event is that hundreds of colonists died. Many and conflicting interpretations are offered as to why, for example, drought, harsh winter, cannibalism, disease, and Native ambushes and sieges. Sources found at museums and cultural resource centers provided textual and visual displays and archaeological artifacts that revealed many discrepancies in the historical record, particularly regarding the role of Powhatan in these matters. I have read primary accounts, as well as secondary, comparing and cross referencing the material trying to make sense of the discrepancies. Using these methods, I was able to deduce that due to the many and conflicting accounts and perspectives on the English side and the lack of documentation on the Natives side, we will never know for certain why so many colonists died during this period of time. This research led me to some interesting questions for future investigation: What can we learn from discrepancies in history by looking at a single event? How do discrepancies influence the nature of history? What does all this mean for teaching history?

EXPLORING THE BELIEFS OF EXPERTS IN COUNSELING

Rebecca Shaw (Psychology & Women's Studies)
Faculty Mentor: Dr. Kathleen Tillman (Psychology)

The primary goal of this study was to determine the personal and professional qualities that mental health counselors need in order to effectively counsel lesbian, gay, and bisexual (LGB) clients. The main study hypothesis was that experts within the field of counseling would report that qualities such as empathy, warmth, and an understanding of homophobia are needed to effectively counsel LGB clients.. The Delphi method, an approach to data collection and analysis that gathers data from experts within a field and uses various techniques to analyze the data in order to come to a consensus among the experts, was used for this study. Results indicate that experts within the field of counseling believe that the following critical factors are needed to effectively counsel LGB clients: basic counseling skills; LGB-specific counseling approaches and skills; training and supervision of work with LGB clients; therapist self-awareness; knowledge of issues that impact the LGB community; knowledge of appropriate resources and referrals; a personal and professional alliance with LGB community; and knowledge of LGB culture.

THE STAGE DESIGNS OF ZACK BROWN

Laura Johnsen (Theatre Arts Design & Psychology)
Faculty Mentor: Andrea Varga (Theatre Arts)

Zack Brown is a multi-award winning costume and scenic designer. Throughout his 150 show career, he has designed a wide variety of productions from grand-scale operas to sophisticated ballets. Mr. Browns work is an excellent representation of how costume and scenic design are just as important in creating a successful production as are the actors and directors. The goal of our project was to analyze and organize Browns vast collection of newspaper articles, personal correspondence, and original costume and set renderings in order to create a book that tells the story of his wonderful career. We have organized and analyzed over thirty of Browns most significant works, scanned and created captions for over 100 images, and have table of contents for the future publication. This book will chronicle Mr. Browns career from his first production, A Midsummer Nights Dream at Yale Repertory in 1976 to his most recent The Nutcracker Ballet at Alberta Ballet in 2008. A comprehensive study of Mr. Browns remarkable career will help to promote a field within theatre that is largely unexplored in theatrical history. We plan to bring the story of his career from behind the scenes to center stage. We hope this book-which focuses more on the technical aspects of a theatrical production-will inspire further research within the field of theatre design history and add to public and academic awareness of the artists behind the scenes who add to the majestic splendor of theatre. .

ON NIETZSCHE'S ARTISTIC CHARACTERIZATION

Ryan Mitten (Philosophy)
Faculty Mentor: Dr. David Appelbaum (Philosophy)

Friedrich Nietzsche inquired extensively asking why humans choose to create, value, and preserve artwork. This paper attempts to articulate Nietzsches conception of the artists creative process. This involves defining his criteria to judge the greatness of an artist. It also involves how artists choose to discipline themselves and utilize their passions in terms of sublimation. My investigation involves both books written by Nietzsche as well as secondary literature by commentators on Nietzsches thinking (examples: Jacques Derrida, Pierre Klossowski, Alexander Nehamas). Comprehension of Nietzsches ideas requires analysis into his elusive style. This investigation will interpret various quotes in order to better define Nietzsches literary presence. This paper reveals the prevalence of music in Nietzsches thinking. My investigation addresses his intellectual and emotional investment in Richard Wagner. Nietzsche articulates how musicians have a profound ability to communicate on a deeply emotional level. Much of his ideas about music, art, Dionysus, creativity, drama, value, German culture, and sickness are rooted in Wagners operas and writings. Nietzsche describes a variety of disciplines used by artists. Art along with music and poetry have significant potential to invigorate human life and overcome communication barriers.

HUDSON VALLEY VISUAL ART CONSORTIUM EXHIBITION

Abigail Duckor (Art History)
Faculty Mentor: Dr. Kerry Dean Carso (Art History)

The Hudson Valley Visual Art Consortium is a group of art institutions in the area that includes SUNY New Paltzs Dorsky Museum, The Center for Photography at Woodstock, Womens Studio Workshop, Woodstock Artist Association and Museum, and the Woodstock Byrdcliffe Guild. The exhibition this fall at the Dorsky Museum entitled Linking Collections, Building Connections: Selected Works from the Hudson Valley Visual Art Consortium Collections, features the overlap in these collections. The collections share connections between similar artists, subjects, patrons, and media. As a researcher for the museum this summer, it was my job to find these connections and to select the art best illustrating them. I visited each institution to view their collections and worked with Brain Wallace and Ariel Shanberg, co-curators of the show, to create a checklist. For the show I also completed an audio tour that highlights 25 works and created an online exhibition. The audio tour is comprised of my own recordings done from research and recordings from artists in the show. The online exhibition shows images of all the pieces in the show and will be a useful tool for students and educators. The completed exhibition is comprised of over 100 works that feature an exclusive look into the consortium collections treasures and showcases the history of art in the Hudson Valley.

2010 SURE Award Recipients

Brendan Oldham Art Education 2011 Mentor: Anat Shiftan, Art
Cone 2 Clay and Glaze Development

Shotaro Nakano Art 2011 Mentor: Emily Puthoff, Art
Arduino Microcontrollers and Interactive Art

Thomas Quinn Biology 2012 Mentor: Frantz Folmer Andersen, Chemistry
New Diamine Macrocycles as Chiral Shift Reagents

Steven Difalco Biology 2013 Mentor: David C. Richardson, Biology
Water Quality of a Human Affected Ecosystem

Michael Marone Biology 2011 Mentor: Megan Ferguson, Chemistry
Pseudomonas putida and Cell Hydrophobicity

Valerie Werder English, Visual Arts 2011 Mentor: Cyrus Mulready, English
"A Sight to Vex": Visual Poetry in Taymor's Titus

Jason N. Greenberg Electrical Engineering/Mathematics 2012
Mentor: Chirakkal V. Easwaran, Computer Science
Semantic Web for Distributed Multimedia Documents

Brianne Johnson International Relations, Business 2011
Mentor: Kate McCoy, Educational Studies
Academic Entitlement and Critical Thinking Skills

Dustin Peone Philosophy 2011 Mentor: Bruce Milem, Philosophy
Maimonides, Heidegger, and The Fallen Man

Corinna Ridgeway Psychology 2012 Mentor: Tabitha R. Holmes, Psychology
Learning to Disagree: Conflict in Emerging Adults

Josh Paugh Physics 2010 Mentor: Stacie Nunes, Physics
Structure and Properties Of Ru(II)Thiocyanate

Kyle Mcdonald Physics 2013 Mentor: Amy Forestell, Physics
The Characterization of Charge Coupled Devices

Claire Papell Women‟s Studies 2010 Mentor: Karl Bryant, Sociology
Advocacy Frames of Childhood Gender Nonconformity

Fall 2010 AYURE Award Recipients

Tasos Neofotistos Adolescence Education 2011 Mentor: Eve Tuck, Educational Studies *The Youth to Youth Guide to the GED*

Miles Marnell Chemistry 2011 Mentors: Preeti Dhar, Aaron Haselton, Chemistry, Biology) *Bioassay development to see the effects of terminalia arjuna extracts on Drosophila melanogastor (fruit fly)*

Jessica Mason Biology 2013 Mentor: Jason Valens, Biology *Microbial Ecology of Anoxic Zones in Coral Reef Live Rock*

Abiola Gittens Biology 2010 Mentor: Jennifer Waldo, Biology *Characterization of the interaction between the Dad1 and Dad3 subunits of the yeast kinetochore Dam1 complex*

Sanjana Reddy Biology 2011 Mentors: Maureen Morrow, Dan Freedman, Biology, Chemistry *Examination of apoptosis in Ru-arene complex treated cells*

Janna Losow Spanish 2011 Mentor: Navin Viswanathan, Psychology *Studying cross-linguistic influences and short-term accent changes in bilingual instructors*

Aaron Reed Biology 2010 Mentor: Jeff Reinking, Biology *Screening a Chemical Library for Nuclear Receptor Interactors*

Spring 2011 AYURE Award Recipients

Gayle Riess Theatre, 2011 Mentor: Ken Goldstein, Theatre *Understanding and Applying Professional Production Management Styles and Practices*

Shannon Honeywell Anthropology 2011 Mentor: Victor C. De Munck, Anthropology *The Fake Orgasm From A Cultural and Evolutionary Perspective*

Aruba Iqbal Biology and Political Science 2011 Mentor: Jennifer T Waldo, Biology *Biochemical Characterization of The Candida Albicans Dam1 Kinetochore Complex*

Colleen Heaney Theatre Arts 2012 Mentor: Andrea Varga, Theatre Arts *Contemporary Fashion and Illustration Techniques In Costume Design for Theatre*

Shotaro Nakano Art/sculpture 2011 Mentor: Emily Puthoff, Fine Art *Data Visualization and Wireless Networking with Processing and the Arduino Microcontroller*

Ester Sherman Biology 2011 Mentor: Thomas G Nolen, Biology *Characterization of the electrophysiological response of crustacean chemoreceptors to components of the defensive ink of Aplysia Californica*

Haifa Mahabir Biology, Political Science 2011 Mentors: Jeff Miller, Political Science and International Relations *The Individual in Society: Islamic Practice and Communitarian Political Theory*

Ross Dardani Political Science 2011 Mentor: Jeff Miller, Political Science and International Relations *A Justification for Positive Liberty*

Mia Costa Political Science 2011 Mentor: Jeff Miller, Political Science and International Relations *Political Obligation, Horizontal Duty, and Disobedience*

Hikari Kawamura Linguistics 2011 Mentor: Oksana Laleko, Linguistics *A Linguistic Study of Intergenerational Language Loss: Structural Properties of Heritage Japanese*

Laurel Okorofsky Biology 2011 Mentor: Hon Ho, Biology *Mycoremediation of Contaminated Soil in the Mid-Hudson Region*

Michelle Petrucci Art Education 2011 Mentor: Margaret Johnson, Art Education Program, Art Department *Interactive Technology Tools to Build 21st Century Skills in Art Education*

2010-11 Student Travel Award Recipients

Hikari Kawamura Linguistics 2011 Grammatical Restructuring in International Language Shift: A Case of Heritage Japanese at the 56th Annual Conference of the International Linguistics Association, New Brunswick, NJ.

Claire Papell Women‟s Studies 2011 Navigating the Tension between Childhood and Adulthood: New Discursive Constructions of Gender Variant and Transgender Children at the Pacific Sociological Association Annual Meeting in Seattle, WA.

Janna Losow Spanish 2011 Short Term Phonetic and Phonological Changes During Spanish Instruction at the 2nd PAN American/Iberian Meeting on Acoustics in Cancun, Mexico.

Valerie Werder English, Visual Arts 2011 "A Sight to Vex": The Visual Poetics of Julie Tyamor's Titus at the Undergraduate Conference in Medieval and Early Modern Studies in Bethlehem, PA.

Dustin Peone Philosophy 2011 The Fallen Man: Maimonides, Heidegger, and the Problem of the "I" at the Continental Drift: Philosophy and Religion Conference in Wilmington, NC. * Best in Panel Award

Michelle Petrucci Art Education 2011 East Coast/West Coast Finale: Technology Tools To Build 21st - Century Skills at the National Art Education National Convention in Seattle, WA.

Michael Wengen Chemistry 2011 Characterizing surface properties of Bdellovibrio bacteriovorus with functionalized AFM probes at the 241st ACS National Meeting and Exposition in Anaheim, CA.

Steven Di Falco Biology 2011 Spatial and temporal variability of water quality in an anthropogenically affected river, Wallkill River and its tributary New Paltz, NY at the North American Benthological Society in Providence, RI.

Annette Storkman Theater Arts 2011 When to Wear Black at the SDHS Dance and Spectacle in Surrey, England.