2011—2012
Senior Project Celebration
2011—2012 Senior Project Celebration
Poster Presentations

Art

**Presenter:** Jacqueline Reynolds  
**Major:** Studio Art  
**Minor:** Psychology & Creative Writing  
**Project Title:** Many Lives Worth Living  
**Project Advisors:** Sue Buck & George Roland

Biochemistry

**Presenter:** Alexander Berry  
**Major:** Biochemistry  
**Minor:** Music  
**Project Title:** Whole Genome Analysis Reveals That Conservation and Duplication Gave Rise to the Current V2R Gene Repertoire in Mammals  
**Project Advisor:** Kristen Webb

**Presenter:** Amanda McClelland  
**Major:** Biochemistry  
**Minors:** French  
**Project Title:** Single Bulge Mutations Affecting the Rate of DNA:RNA Duplexing  
**Project Advisor:** Alice Deckert

Biology

**Presenter:** Cameron Eddy  
**Majors:** Biology & Environmental Science  
**Project Title:** Are Chipmunks Nosy Neighbors?: Eavesdropping on Tamias striatus  
**Project Advisor:** Scott Wissinger

**Presenter:** Jessica Russell  
**Major:** Biology  
**Project Title:** Identification of Sequences Important for UBX Regulation of CG13222 edge CRE  
**Project Advisor:** Lisa Whitenack
Presenter: William Sharpnack  
Major: Biology  
Minors: Philosophy & Religious Studies  
Project Title: Identification of Sequences Important for UBX Regulation of CG13222 edge CRE  
Project Advisor: Bradley Hersh  

Chemistry  

Presenter: Ian Armstrong  
Major: Chemistry  
Minor: Psychology  
Project Title: Nucleophilic Additions to Iron-Diene Complexes Through Boron-Mediated Transfers  
Project Advisor: Phillip Persichini  

Presenter: Michelle Perry  
Major: Chemistry  
Minor: French  
Project Title: Synthesis of Marine Natural Product Analogs for the Development of a Biomimetic Anti-Foulant  
Project Advisor: Shaun Murphree  

Communication Arts  

Presenter: Shannon Reilly  
Major: Theater  
Minor: Psychology  
Project Title: Stage Management: The Art of Communication  
Project Advisor: Michael Mehler  

Computer Science  

Presenter: Molly Mattis  
Major: Computer Science  
Minor: Economics  
Project Title: GA-Connect Four: Towards Evolving an Optimal Computer Opponent  
Project Advisor: Robert Roos
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Presenter: Julie Ropelewski  
Major: English  
Minor: Psychology  
Project Title: The Roles and Representations of Grandparents in Roald Dahl Novels  
Project Advisors: Susan Slote & Terra Caputo

Presenter: Vicki Vargas  
Major: English & Women’s Studies  
Project Title: To Go to Alto Gordo  
Project Advisors: Christopher Bakken & Jennifer Hellwarth

Presenter: Jodi Apps  
Major: Environmental Studies  
Minor: English  
Project Title: Diet Diversification: A Food-based Approach to Combat Micronutrient Deficiencies in Morocco’s Tifnoute River Valley  
Project Advisors: Eric Pallant, Kate Darby, & Laura Reeck

Presenter: Erin Cavagnaro  
Major: Environmental Science  
Minor: Economics  
Project Title: Utilizing Food Waste to Lower the pH of Allegheny College’s Pilot Recirculating Aquaponic System  
Project Advisors: Thomas Eatmon & Eric Pallant

Presenter: Jennifer Lauer  
Major: Environmental Studies  
Minor: Studio Art  
Project Title: Family Style Sustainability: Addressing the Impacts of Climate Change and Domestic Violence Through Food Ritual and Culinary Education  
Project Advisors: Eric Pallant & Kate Darby
Presenter: Pat McLaughlin  
**Major:** Environmental Science & History  
**Project Title:** The Role of Historical Context in the Study of Environmental Science: The Landscape History of Dutch Springs as a Case Study  
**Project Advisors:** Kristin Wilson & Barry Shapiro

Presenter: Courtney Papinchak  
**Major:** Environmental Science  
**Minor:** English  
**Project Title:** Risk Analysis of Sugar Maple Decline in Northwest Pennsylvania Using a GIS  
**Project Advisor:** Terry Bensel

Presenter: Chris Plano  
**Major:** Environmental Science  
**Minor:** Political Science  
**Project Title:** Transit Accessibility to Healthy Food and Employment for Low Income Residents of Baltimore, MD  
**Project Advisors:** Kate Darby & Chris Shaffer

*Geology*

Presenter: Erin Birsic  
**Major:** Geology  
**Minor:** Dance and Movement Studies  
**Project Title:** Evolution of an Early-Late Paleocene Granitic Pluton and Associated Garnet-Bearing Granitic Dikes and Migmatite in a Collisional Terrane Suture Zone, Talkeetna Mountains, South-Central Alaska  
**Project Advisor:** Ronald Cole

*History*

Presenter: Elizabeth Keene  
**Major:** History  
**Minor:** English  
**Project Title:** "Holocausts of Herself": The Life of Varina Howell Davis, First Lady of the Confederacy  
**Project Advisors:** Paula Treckel & Ian Binnington
Presenter: Forrest Smith  
Major: History  
Minor: Religious Studies  
Project Title: Count Stephen of Blois: Victim of History  
Project Advisors: Stephen Lyons & Kenneth Pinnow

Presenter: Alicia Watts  
Major: History & Women’s Studies  
Project Title: From Dresses to Flight Suits: The Story of the Women Airforce Service Pilots of World War II  
Project Advisors: Paula Treckel & Barbara Shaw

International Studies

Presenter: Kathleen Bacon  
Major: International Studies  
Minor: Music Performance & Spanish  
Project Title: Argentina: Radical or Moderate Democracy?  
Project Advisor: Shannan Mattiace

Presenter: Amy Frake  
Major: International Studies & History  
Minor: Chinese  
Project Title: Language Reform is Not a Dinner Party: The Evolution of Language, Literacy, and Identity in China  
Project Advisors: Guo Wu, Sharon Wesoky, & Xiaoling Shi

Presenter: Elise Swanekamp  
Major: International Studies & Environmental Studies  
Minor: Spanish  
Project Title: Uses of Indigenous Identity: Coffee Cooperatives and Fair Trade in Southern Mexico  
Project Advisors: Shannan Mattiace & Terry Bensel
Mathematics

**Presenter:** Meaghan Volek  
**Major:** Mathematics  
**Minor:** Asian Studies  
**Project Title:** Mathematical March Madness  
**Project Advisor:** Rachel Weir

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Modern and Classical Languages

**Presenter:** Kerry Drew  
**Major:** French  
**Minor:** Psychology  
**Project Title:** Secularism in France: A Comparison of the 1905, 2004 and 2010 Laws and Their Affects on French Muslims  
**Project Advisor:** Laura Reeck

**Presenter:** Leah Jaenicke  
**Major:** Spanish  
**Minor:** Political Science  
**Project Title:** Iluminando las sombras del pasado: un estudio de la emigración española a otros países europeos durante el tardofranquismo  
**Project Advisor:** Teresa Herrera

**Presenter:** Jordan Metcalfe  
**Major:** French  
**Minor:** History  
**Project Title:** Les attaques contre le pouvoir dans les représentations des corps pendant la Révolution Française  
**Project Advisor:** Briana Lewis

**Presenter:** Arthur Smith  
**Major:** Spanish  
**Minor:** Political Science  
**Project Title:** Futbol y cuento en Argentina contemponanea: Osvaldo Soriano y Eduardo Sacheri  
**Project Advisor:** Wilfredo Hernandez
Neuroscience

Presenter: Ryan Brindle
Major: Neuroscience & Psychology
Project Title: The Relationship between Depression and Cardiovascular Reactivity to Acute Psychological Stress
Project Advisor: Sarah Conklin

Presenter: Natalie Brzoza
Major: Neuroscience
Minor: English
Project Title: Effects of Prenatal Nicotine Exposure on the Age-related Ventilatory Response to Hypercapnia in Neonatal Mice
Project Advisor: E. Lee Coates

Presenter: Georgia Frost
Major: Neuroscience
Minor: Economics
Project Title: The Effects of C. striatus Venom on the T-Type Calcium Channel Cav3.2
Project Advisors: Lauren French & Jeffrey Hollerman

Philosophy and Religious Studies

Presenter: Bennett Buchanan
Major: Religious Studies & Psychology
Project Title: The Buddhist Doctrine of Not-Self: Implications for Psychological Approaches to Anxiety
Project Advisors: Carl Olson & Elizabeth Ozorak

Physics

Presenter: Samuel Finder
Major: Physics
Minor: Religious Studies
Project Title: The Morphology of Fullerene-Doped Porphyrin Discotic Liquid Crystals and Its Effect on Charge Mobility in the Condensed Phase
Project Advisor: David Statman
Presenter: Samuel Knarr
Major: Physics
Minor: Economics
Project Title: Predicting Phase Transitions Using Degeneracies in Spin Concentrations on an Antiferromagnetic Potts Model
Project Advisors: Shafiqur Rahman & Doros Petasis

Presenter: Caitlyn Neidig
Major: Physics
Minor: English
Project Title: Water on a Hydrophobic Surface: Contact Angle vs. Depletion Layer
Project Advisor: Adele Poynor

Political Science

Presenter: Molly Bucci
Major: Political Science
Minor: Religious Studies
Project Title: The Evolution of the Refugee: From Victim to Perpetrator
Project Advisor: Shanna Kirschner

Presenter: Nathaniel Ehrman
Major: Political Science & History
Minor: Chemistry & Italian Culture and History
Project Title: The Democratization of Post-Fascist Italy: How Allied Policies and Goals during their Occupation of Italy Created the Base for a Democratic Future
Project Advisors: Jacqueline Gehring & Kenneth Pinnow

Presenter: Emma Victorelli
Major: Political Science
Minor: German & English
Project Title: Educational Tracking and its Effect Upon the Academic Experiences and Labor Market Integration of Second-Generation Turkish Immigrants in France and Germany
Project Advisors: Jacqueline Gehring & Shannan Mattiace
Psychology

**Presenter:** Ashley Adamson  
**Major:** Psychology  
**Minor:** Creative Writing  
**Project Title:** The Effects of Social Interaction and Social Isolation and Handling on Male and Female Sprague-Dawley Rats When Learning to Navigate a Multiple T-Maze  
**Project Advisor:** Rodney Clark

**Presenter:** Christian Plourd  
**Major:** Psychology  
**Minor:** Communication Arts  
**Project Title:** Navigation Style and Product Familiarity’s Effect on Banner Blindness  
**Project Advisors:** Aimee Knupsky & Patricia Rutledge

Women's Studies

**Presenter:** Lauren Marosi  
**Major:** Women's Studies  
**Minor:** Art History  
**Project Title:** Reframing Resistance: Feminist Interventions in Understanding the Prison Industrial Complex and Mobilizing a Movement for Social Change  
**Project Advisor:** Barbara Shaw & Jennifer Hellwarth
Special Thanks to:
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