



UNIVERSITY OF
NEW ENGLAND

College of Arts and Sciences

**12th Annual
Research Symposium**

**Sponsored by:
CAS DEAN'S OFFICE**

Friday, May 6, 2011
(light breakfast and lunch provided)

Poster Session – 8:00 a.m. – 10:00 a.m.
Decary Upper Cafeteria

Oral Presentation Session – 10:00 a.m. – 4:00 p.m.
Decary 202, 203, 208, 212

Featuring Honors Thesis Presentations by:

Holly Beaulac (Psychology – Neuroscience)
Lauren Broderick (Marine Biology)
Aaron Mitchell (History and Political Science)
Anda Panaitiu (Psychology and Biology)
Stephanie Podolski (Biological Sciences)
Leonard Choon Huat Tan (Biological Sciences)
Sara Young (Marine Biology)

Elisabeth Ziemba (English and Language Studies, Women's and Gender Studies)

Opening Reception: Voyages and the Great Age of Sail

A special exhibition curated by students in HIS 290: History Hands On
See last page of program for details!

ARTWORK AND POSTER PRESENTATIONS – 8:00 – 10:00 A.M. – DECARY UPPER CAFETERIA

<p>1 - Feathers, Fins, Scales, and Tails Katie Dunbar (Creative and Fine Arts) A collection of animal artwork in a variety of mediums, including watercolor, ceramics, and prints.</p>	<p>16 - Freshwater Mussel Survey Assessment in Minnesota Kylie Bloodsworth (Environmental Studies – GIS) With the majority of freshwater mussel species in North America being listed as Special Concern, Threatened, or Endangered, it becomes especially important to increase conservation and management efforts in order to maintain existing populations. Using a GIS approach, I identified streams with high mussel bed densities, historic presence of Threatened and Endangered species, and high species richness in order to assess the need for surveys or relocation work in Minnesota.</p>	<p>31 - Music's Effect on Perceived Performance Elisabeth LeBlanc, Meghan McCann, Pratik Shah (Psychology) We conducted an experiment concentrating on the effects that different types of music have on perceived performance. We used a survey to measure how positively or negatively the participants felt after participating in an intramural basketball game and compared responses between our three conditions (no music, fast music, and slow music).</p>
<p>2 - Painting With Acrylics by Alexis Wells Alexis Wells (Creative and Fine Arts) Artistic exhibiting including 10-12 original paintings by Alexis Wells, created primarily with acrylic paints.</p>	<p>17 - Sea Level Rise in Coastal Southern Maine Using GIS Modeling Amy Carlson (Environmental Studies – GIS) As part of the GIS 564 Spatial Analysis class, poster will overview models that present hypothetical scenarios of varying changes in sea level and timestamps for areas around the coastal UNE community.</p>	<p>32 - The Effects of Romantic Relationships on College Roommate Satisfaction Tiffany Shahin, Andrea Taatjes, Krystal Sleboda, LiWen Chen, Lyle Vintinner (Psychology) The purpose of this study was to determine if being involved in a romantic relationship puts strain on participants' relationships with roommates. The results showed that being in a relationship did not positively or negatively affect one's roommate relationships.</p>
<p>3 - Seeing the Saco: Photographic Documentation of the Saco Estuary Project Chloe Crettien (Environmental Studies, Art) Photographic representation of the beauty, people, plants, and wildlife of the Saco River during the summer of 2010.</p>	<p>18 - Mousam River Riparian Zone Tristian Rowe (Environmental Studies – GIS) The riparian zone surrounding the Mousam River was mapped. Details are focused on land types and intact or impaired land use.</p>	<p>33 - The Influence of Self-Esteem and Self Perceived Attractiveness on Romantic Partner Selection Sara Winchenbach, Raquel Gutierrez, Ellen Davignon, Cameron LaPlante (Psychology) The present study looked at the influence of self-esteem and self-perceived attractiveness on ideal romantic partner selection. The results showed that self-attractiveness ratings significantly predicted ideal partner selection (i.e., as self-attractiveness ratings increased so did the likelihood that participants wanted an equally attractive partner).</p>
<p>4 -A Cutting Edge Breeding and Growout System for Saddleback Clownfish (<i>Amphibron polymnus</i>) Nathaniel W. Guerette (Aquaculture and Aquarium Sciences) This poster will consist of many different images of the entire system. Explanations will be given as to why the design is ideal for the breeding/growout of clownfish. What makes this particular design suitable for aquarists of all levels and why it will achieve its goal?</p>	<p>19 - The Effect of Land Use on the Saco River Watershed Cassandra Smith (Environmental Studies – GIS) This project is a depiction of how land cover and land use can affect the Saco River Watershed and management of the surrounding areas.</p>	<p>34 - Fear Conditioning in the Klf7 Conditional Knockout Mice Rose Ashner, Lei Lei, Michael Burman (Psychology) Conditional knockout mice were created in which the Klf7 gene, encoding a zinc finger transcription factor, was deleted in projection neurons and astrocytes of the forebrain. We analyzed learning and memory using a fear-conditioning model that allows us to independently assess amygdala-dependent and hippocampus-dependent memory.</p>

<p>5 -Interaction between the Sex Determination Hierarchy and Ecdysone Signaling in <i>Drosophila melanogaster</i> Elizabeth Fisher (Biological Sciences) The sex of <i>D. melanogaster</i> is determined by a series of RNA splicing events, which together comprise the sex determination hierarchy (SDH). Based on the known evidence that both the ecdysone steroid signaling system and the SDH gene fruitless modulate male sexual behavior and that ecdysone signaling and fruitless are anatomically linked, it is hypothesized that ecdysone modulates the expression of fruitless.</p>	<p>20 - Land Use Identification in the Little River Watershed through the Application of GIS Laura B. Williams (Environmental Studies – GIS) The use of GIS to identify and quantify land uses in the Little River watershed of Southern Maine.</p>	<p>35 - Effects of Leading Questions on Witness Testimony Lauryn Barton, Julia Rich, Sarah Heath, Trisha Clegg (Psychology) We studied the effects of leading versus non-leading questions of witnesses responses to a description of an accident.</p>
<p>6 - Foul Play: A Study of Referee Bias Sean Doyle, Chelsey Meszaros, Grant Gosselin, Dave Diskin, Michael Richard (Business and Communications) An analysis of the number of fouls assessed against home and away teams in UNE men’s and women’s basketball games over the past 5 seasons. Data will be collected through a literature review and survey research, followed by a statistical analysis and conclusion.</p>	<p>21 - Utilization of GIS to Determine Habitat Suitability for Two Invasive Crab Species, <i>Carcinus maenas</i> and <i>Hemigrapsus sanguineus</i> Kelly Pennoyer (Environmental Studies – GIS) Geographical Information Systems will be used to determine habitat suitability of two invasive crab species, <i>Carcinus maenas</i> and <i>Hemigrapsus sanguineus</i> in Southern Maine based upon the biology and ecology of these two rocky intertidal organisms.</p>	<p>36 - A Study of the Effect of Self-Esteem and Easy vs. Hard Anagram Tasks on Mood Bruce Breedlove, Keri Feole, Bethany Kay, Ariel Evans, Borah Kim (Psychology) We investigated the effects of self-esteem on mood following an easy or hard anagram condition. We found that low self-esteem participants felt significantly more frustrated in the hard anagram condition compared to high self-esteem participants.</p>
<p>7 - “Place of Origin” Diversity in NCAA Division I, II and III Schools in New England Shannon Nealon, Ryan Bailey, Michaela Franey, Grady Budd, James Deputy (Business and Communications) The purpose of this study was to examine the difference between six Division I, II, and III schools in New England.</p>	<p>22 - The Copepod, <i>Centropages typicus</i>, and the Change of Gene Expression and Protein Concentration at Low Salinity Sabrina Klick (Marine Science) We investigated the response of several genes and enzymes to varying salinities in the copepod <i>Centropages typicus</i>, in the Saco River. Our results indicate a molecular adaptation to altered energy metabolism, in the absence of a typical stress response.</p>	<p>37 - The Effect of Depressed Entitlement Robert Chagnon, Kimberly Hentz, Jackie Adams, Angie Gust (Psychology) This presentation investigates the effect of depressed entitlement on women’s pay. In this study male and female participants completed an easy or difficult anagram task and then reported how much they would pay themselves (between \$0.00 and \$4.00) based on their performance.</p>
<p>8 - NCAA Men’s Lacrosse: Equipment Reliance vs. Athletic Performance Derek Noonis, Griffin Andrews, Nick Wilson, Chad DeLuca (Business and Communications) NCAA Men’s Lacrosse Rules Committee implemented a rule change to make better players by decreasing dependence on equipment and increasing importance on athletic performance. The purpose of this study is to determine whether NCAA men’s lacrosse players feel that there is a significant difference before and after the rule change.</p>	<p>23 – Ontogeny of Fear Conditioning in the Developing Rat Brittany Bolduc, Rose Ashner (Neuroscience) Current literature argues that contextual fear conditioning in rats, a hippocampus-dependent learning task, emerges during the 4th week of life (PD23). Research from our lab separates contextual learning from aversive learning to show evidence of early emergence of hippocampal-dependent learning during the 3rd week of life (PD17). This evidence suggests that associative systems involved in fear conditioning are developing between PD17 and PD23.</p>	<p>38 - Implementation of a Single Subject Self-modified Behavioral Intervention: An Impact on Sleeping Habits Jullian De Melim (Psychology) A student desired to change personal sleeping habits that were not conducive to the individual’s environment and schedule. A functional analysis, regarding the target behavior of sleep, was initially conducted and a behavioral treatment intervention was constructed and implemented.</p>

<p>9 - “Where my wins at?” A Study of Home Court Advantage and Sport Mike Williams, Franco Foti, Matt Thompson, Marcus Winn (Business and Communications) An analysis of UNE’s men’s and women’s basketball win-loss performance at home and away contests.</p>	<p>24 - Creating an Animal Model of Dyspnea Aubrey White (Pharmacology) Dyspnea (a.k.a. shortness of breath) is a common symptom in tertiary care and is the primary sensation associated with cardiopulmonary disease. Little is known about the underlying neural mechanisms of air hunger and currently, there are no effective therapies to relieve air hunger, perhaps due to the lack of an animal model. The study is a first attempt to create a behavioral animal model of air hunger.</p>	<p>39 - Drugs, Society and Behavior: A Tour of the Stevenson Psychopharmacology Laboratory Julio C. Dutra, Brandon Mulligan (Psychology) A brief overview of our drug abuse and pain experiments, and the implications of these data on human and veterinary health.</p>
<p>10 - Computational Investigation of Transition States for Deprotonation and Lithium-Halogen Exchange During the Attempted Formation of 6-Desoxynaltrexone Vernon Chan (Chemistry and Physics) Reaction mechanisms of the synthesis of possible opioid-receptor antagonists were modeled using quantum chemical calculations.</p>	<p>25 - Targeting Novel FAAH Inhibitors for the Treatment of Inflammatory Pain Jordan Faloon (Pharmacology and Neuroscience) Fatty acid amide hydrolase (FAAH) is an enzyme that metabolizes anandamide (AEA), which is a key light of the endocannabinoid systems. Inhibition of FAAH increases signaling of AEA to CB1 receptors where there is active release of the enzyme. This research tests novel 2nd and 3rd generation FAAH inhibitors for the efficacy in treating inflammatory pain.</p>	<p>40 - The Effects of Repeated Winning and Losing Exposure on the Consistent Individual Differences of Male Siamese Fighting Fish Lindsay M. Forrette, Olivia L. Hebert (Psychology) In our lab, we have already established that male Siamese fighting fish exhibit consistent individual differences in behavior when forced to decide between fighting and courting. Here we examined whether males remained consistent in their behavior expressions even after having won and lost repeated contests.</p>
<p>11 - Spectroscopic and Electrochemical Characteristics of a (4-methoxy)phenyl-substituted Silole Katie A. Edwards (Chemistry and Physics) A novel silole derivative, 1, 1-dimethyl-2,3,4,5-tetraanisole silole, was characterized in dioxane and THF solutions. The characterization involved determining absorption, emission, molar absorptivity, and quantum yield in each of the solvents. A study of aggregate-induced emission in dioxane/water and THF/water systems and a determination of electrochemical properties were also completed. The results are compared with those of previous studies of 1,1-dimethyl-2,3,4,5-tetraphenyl silole and 1,1-dimethyl-2,3,4,5-tetrotolyl silole to illustrate the effect of a strongly electron-donating substitute on silole properties.</p>	<p>26 - In Vivo Characterization of Naloxone, an Inverse Agonist in Opioid Dependent Mice Amanda Braithwaite (Pharmacology, College of Osteopathic Medicine) Naloxone is a general opioid receptor antagonist that can rapidly reverse opioid intoxication. However, in an opioid dependant state Naloxone can precipitate withdrawal symptoms. Rodent models of opioid dependence have been extensively characterized in this work.</p>	<p>41 - The Effect of Attire on Perceived Credibility in the Courtroom Lindsay Forrette, Tara Connell, Kylie Galliani, Naomi Bourque (Psychology) The purpose of our study was to determine if a witnesses’ appearance affected how they were perceived by jury members. Specifically, we examined whether perceptions of credibility were influenced by a witness’s attire.</p>
<p>12 - Bias in Nestling Sex Ratios of Declining Grassland Songbirds: New Insights into Population Processes Catherine Dunbar (Environmental Studies) Bobolinks have nestling sex ratios that are male biased; multiple hypotheses were tested to explain this.</p>	<p>27 - Evaluating Opioid Analgesics in a Mouse Model of Acute Pain Lindsay St. Louis (Pharmacology, College of Osteopathic Medicine) Acute and chronic pain are major medical problems that have a negative impact on human health. This work compared clinically available opioid analgesics with a series of novel opioid analgesics in a mouse model of acute pain.</p>	<p>42 - Successful Self-Implementation of a Behavior Modification Plan Relating to Educational Preparedness Michelle Franco (Psychology) Following a self-implemented behavior modification plan to increase reading in preparation for class lectures.</p>
<p>13 - Male Savannah Sparrows Withhold Parental Care in Response to Paternity Loss Lindsay Kelly (Environmental Studies) For songbird species that exhibit extra-pair paternity, males may withhold parental care based on how much paternity they have lost in a brood. This study looks at Savannah Sparrow male parental care relative to the proportion of extra-pair</p>	<p>28 - The Effects of MMP-2200 in an Animal Model of Overactive Bladder Josh Havelin (Pharmacology) The effects of a MMP-2200, a mixed mu/delta opioid agonist were investigated in an animal model of overactive bladder in this study. Thus characterizing the effects of a mixed mu/delta opioid agonist for the first time in an animal model of overactive bladder.</p>	<p>43 - Parental Trust and Psychological Control as Predictors of College Student Resistance to Control Katelyn Kaulback, Nicole Baker, Brett Peterson, Amanda Hare (Psychology) The purpose of this study was to investigate the relationship between the two parenting strategies of parental trust and psychological control, and college first year students’ resistance to control.</p>

<p>young in the nest, to see if males adjust care in response to increasing loss of paternity.</p>		
<p>14 - Impacts of Agricultural Management on Nestling Ratios of Grassland Nesting Songbirds Derek Wright (Environmental Studies) Anthropogenic activity has impacts on the ecology and evolution of species the world over. My study addresses the impact of agricultural activity (hay) on populations of obligate grassland nesting songbird species Savannah Sparrow (<i>Passerculus sandwichensis</i>).</p>	<p>29 - Balance Bracelet: Expectation or Fact? Stacie Antonovich, Garret Barcheski, Miles Hughes, Allison Walsh (Psychology) The current study examined the effects of expectation on balance, while simultaneously determining if the iRenew Energy Bracelet has true physiological effects. The results showed that, regardless of whether the participants were wearing the placebo bracelet or iRenew Bracelet, scores on a balance test were significantly higher if the participants were told that the bracelet “works” as opposed to those participants that were told the bracelet “does not work.”</p>	<p>44 - Recalling Love and Acceptance: Priming Security in Insecure Individuals Bethany Kay, Shelby Peterson, Dr. Julia Longua Peterson (Psychology) The current study investigated how recalling positive romantic relationship interactions can increase feelings of acceptance and commitment in individuals with high attachment anxiety.</p>
<p>15 -Land Cover Within Riparin Zones of the Kennebunk River Emily Baisden (Environmental Studies – GIS) Poster will have a map of the Kennebunk River showing the land cover and land use classes along the river, along with conservation lands and information on the watersheds.</p>	<p>30 - Gender Biases Towards Homosexuals Jesalyn Dvorak, Peter LaTrace, Mary Cronin (Psychology) The current study examined whether GLBT pride pictures influenced acceptance of gay and lesbian individuals here at UNE. Scores on the Attitudes Towards Lesbians and Gay Men Scale (Herek, 1998) revealed that GLBT pride pictures did not significantly influence peoples’ attitudes.</p>	<p>45 - Relational-Interdependence, Life Optimism, and Self-Esteem: The Importance of Feeling Accepted Lyle Vintinner, Heather Tatsak, Dr. Julie Longua Peterson (Psychology) Our study manipulated feelings of acceptance in individuals with high (vs. low) relational-interdependence. We found that individuals who were high in relational-interdependence showed higher levels of self-esteem and life optimism when asked to report on a time when they felt accepted.</p>
		<p>46 - Differential Hypoxia Tolerance and AMPK Activity in Two Color Morphs of the Green Crab, <i>Carcinus maenas</i> Casey Toombs (Biology) Investigated the hypoxia and anoxia tolerance of the two color morphs of <i>Carcinus maenas</i> by looking at whole animal level parameters and cellular parameters such as, AMPK activity and mRNA expression, HSP70 protein levels and mRNA expression, and lactate accumulation.</p>

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212 <i>Marine Science</i>	DECARY 202 <i>Political Science</i>	DECARY 208 <i>Psychology Research Methods</i>	DECARY 203 <i>Methods in Literary and Cultural Criticism</i>
10:00 – 10:20	<p>Feeding Preferences and Habitat Selection of <i>Octopus spp.</i> in Bahia Magdalena Samantha M. Assarian (Marine Biology) This research focuses on the distribution and feeding preferences of octopuses in Magdalena Bay off the coast of Puerto San Carlos, Baja California Sur, with a particular focus on local pollution and economic consequences. Octopuses are generalist feeders that live in crevices, in holes in the substrate, and under rocks that utilize trash such as beer cans and PVC pipes as a central habitat from which to prey on commercially valuable species.</p>	<p>Intimate Partner Violence: Cases from Maine Ashley Bergquist (Political Science) This research looks at the forms of intervention and their effectiveness within the State of Maine focusing specifically on Intimate Partner Violence within the legal and emotional system.</p>	<p>I Know You: Familiarity with an Audience influences Male-Male Interactions in Siamese Fighting Fish, <i>Betta splendens</i> Christina Perazio (Psychology) This study examined the effects that audience familiarity might have on male-male interactions in Siamese fighting fish <i>Betta splendens</i>. By using seven different treatment conditions that varied based on familiarity and sex of the audience, how male aggressive interactions were affected by these two factors was examined.</p>	<p>Harry Potter and the Divided Society: Justice, Truth and Prejudice Maura Trinder, Lindsey Gray, Yu Wang (English and Language Studies) Focused on <i>Harry Potter and the Goblet of Fire</i>, this panel explores the series' growing engagement with social inequalities and questions of justice. Beginning with the novel's depiction of forms of prejudice, it examines the efficacy of formal law (as reflected in the "pensieve") and of magic as a technology of justice.</p>
10:20 – 10:40	<p>Determining the Gestation Period of Spiny Dogfish (<i>Squalus Acanthias</i>) Using Ultrasound and Plasma Hormone Analysis Cassidy Peterson (Marine Science) My project is to monitor the gestation period of live, captive, spiny dogfish (<i>Squalus acanthias</i>) over the course of their entire pregnancy using two non-lethal methods of including ultrasound, and circulating steroid hormone analysis.</p>	<p>The Politics of Parenthood: The Case of Child Abuse in Maine Briana L. White (Political Science) This presentation will examine the politics of child abuse at the point of its declaration in 1963, inceptions into national legislation in 1974, and through its continuing progression to the current state. There exists a line between the government and the family; child abuse blurs this line legitimizing government access to the previously autonomous realm of parenthood. This presentation will explore the landmark legislation that opened the door to a dangerous world, where politics and parents clash over the control of the nation's children.</p>	<p>Food Preference in Herring Gulls Catherine Dunbar (Psychology) An ethological study of food preference of herring gulls at two sites on campus.</p>	<p>Harry Potter and the Divided Society: Justice, Truth and Prejudice (Continued)</p>

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
10:40 – 11:00	<p>Assessing the Age Distribution of Six Shark Species within the Mississippi Sound Nursery ground Daniel Crear (Marine Science) Determining how and why abundance and distribution patterns change on annual and seasonal basis is important in understanding this multispecies shark nursery. Thus, the objective of this study is to describe the age distributions and population structure of six juvenile shark species (Atlantic sharpnose, blacktip, finetooth, spinner blacknose, bonnethead) in the Mississippi Sound.</p>	<p>Lynching and Foucault: The Persistence of the Spectacle in 19th and 20th Century America Brianni Frazier (Political Science) This thesis seeks to answer the following questions: 1. Why was lynching, a form of spectacle torture, still present in the United States when we had already begun the transition to a modern society? 2. What does the persistence of the spectacle in the United States say about the road to modernity?</p>	<p>Food Preference and Selection in the House Sparrow Kathryn Ragone, Jasmine Depoy (Psychology) A study of a native population of house sparrow and their food preference when given four food choices. This was expanded upon by manipulating the color appearance in a separate test.</p>	<p>Scarlet Women, Imps and Dragonslayers: Representations of Justice, Childhood and Gender Brandon Hotham, Constance, Glynn, Elisabeth Ziembra (English and Language Studies) Through readings of Nathaniel Hawthorne's <i>Scarlet Letter</i> and Robin McKinley's contemporary, adolescent novel <i>The Hero and the Crown</i>, this panel focuses on the ways a subject's gender and/or youth affect her response to authority, whether by submitting to, standing apart from, or sometimes reshaping cultural norms.</p>
11:00 – 11:20	<p>Monitoring Seasonal Variability in Composition and Abundance of Crustaceans and Juvenile Fish Species Within the Saco River Estuary Kayla M. Smith (Marine Science) The goals of this project were to determine the estuary's species composition, how it varies on a seasonal basis, and if the Saco River estuary serves as a nursery ground for many marine species within the Gulf of Maine (GOM). Almost all the 28 fish species and three crustacean species collected by beach seines conducted biweekly since the summer of 2008 were observed as juveniles and increased in size over consecutive months suggesting an ecological value for this watershed.</p>	<p>Patriotism v. Nationalism: Examining American Country Music in the Aftermath of September 11, 2001 John Connell (Political Science) My research examines songs and how successful they were based on their nationalist or patriotic message. My research also examines why society turned to American country music in the aftermath of 9/11.</p>	<p>Studying Socialization Techniques for Shelter Cats Lauren Shaw (Psychology) Research was done on socialization techniques for shelter cats. The goal was to learn whether adult cats could increase their confidence around humans and become more adoptable, thus reducing euthanasia rates in shelters.</p>	<p>Scarlet Women, Imps and Dragonslayers: Representations of Justice, Childhood and Gender (Continued)</p>

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
11:20 – 11:40	<p>One Fish, Two Fish, Oiled Fish – Dead Fish (and other marine organisms) Kelsey Thompson, Sara Young, Lauren Stephenson (Marine Science) The effects of oil spills on marine organisms.</p>	<p>Challenging Two Party Hegemony: Lessons From a King Joseph Bussiere (Political Science) My senior thesis focuses on the necessary conditions for an independent candidate in the United States to be successful, drawing from the cases of Angus King and also the 1992 Presidential campaign of Ross Perot. Finally, my paper takes a close look at the likelihood of an independent’s success in the upcoming Presidential election.</p>	<p>Conspecific Communication as a Zeitgeber and its Effect on the Circadian Rhythm of Field Crickets, <i>Gryllus</i> Shelby Yahn (Psychology) Crickets foremost use light/dark cycles as zeitgebers to indicate appropriate times to chirp and attract mates. Crickets in an experimental manipulation were seen to use the communication of conspecifics as a zeitgeber when light/dark cycles were not available.</p>	<p>Experimenting with Frakenstein: Autobiography, Science, and the Sublime Jordyn Graves, Holly Beaulac, Hilary Crusack (English and Language Studies) This panel approaches Mary Shelly’s novel <i>Frakenstein</i> as a meditation on the motives, means and implications of various acts of creation, including the conventions of autobiographical writing, scientific method, and the continuing appeal of the horror genre in contemporary film.</p>
11:40 – 12:00		<p>Politics of Fear: The Muslim Other Justin Davis (Political Science) An analysis of the politics of fear of the Muslim Other as it manifests itself in the cases of banning Sharia Law in Oklahoma and proposed mosques in Tennessee and New York.</p>	<p>Comparative Behavior in the Domestic Dog (<i>Canus familiaris</i>) Kathryn Johnson (Psychology – Animal Behavior) This experiment looked at the behavior of three different dog breeds (specifically the American Pit Bull Terrier, Labrador Retriever, and the Pug) during a modified version of the American Temperament Testing Society’s temperament test for domestic dogs.</p>	<p>Experimenting with Frakenstein: Autobiography, Science, and the Sublime (Continued)</p>
12:00 – 12:20		<p>In the Best Interest of the Child: How the Maine Child Support System is Failing KimberlyAnne Richards (Psychobiology) My presentation will explore commonly referenced statistics to explain how the child support system in the State of Maine is failing to keep single-parent families out of poverty, and overall, is failing to meet the needs of the children it is charged with assisting.</p>		
12:00 – 12:30	LUNCH BREAK			

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
12:20 – 1:00				<p>Free Will and the Budding Classes: Melville's <i>Billy Budd</i> Mike Nataupsky, Nick Jackson (English and Language Studies) This panel situates Herman Melville's novel <i>Billy Budd</i> in the context of late nineteenth century discourses of free will and determinism in order to complicate readings of the novel's central act of judgment and to explain its setting as an historical displacement of class inequalities.</p>
HONORS PRESENTATIONS				
12:30 – 1:00	<p>Activation of AMP-activated Protein Kinase as an Early Indicator for Stress in the Lobster, <i>Homarus americanus</i> Stephanie Podolski (Biological Sciences) Variations in water temperature, salinity, pH, and oxygen concentration are frequent stressors that marine invertebrates face on a daily basis. Each of these physiological stressors creates a large cellular demand for energy. In mammals, energy metabolism is regulated by the enzyme AMP-activated protein kinase (AMPK), which is highly conserved during evolution. This project was designed to test the hypothesis that AMPK is present and activated by temperature, hypoxia, and anoxia stress in the lobster, <i>Homarus americanus</i>.</p>	<p>Role of CD4+ T Lymphocytes in the CD40+ Microglial Response to Injury in a Neuropathic Pain Model Holly Beaulac (Psychology – Neuroscience) An honors thesis investigating whether CD4+ T lymphocytes and CD40, an activation protein expressed by microglia, mediate their effects by affecting spinal cord microglial responses in a rodent model of neuropathic pain.</p>		
1:00 – 1:30	<p>Diet Comparisons of Steller Sea Lions (<i>Eumetopias jubatus</i>) and California Sea Lions (<i>Zalophus californianus</i>): Is Diet a Factor in Steller Sea Lion Decline? Sara Young (Marine Biology) This study compares historical diet data of Steller and California sea lions to examine differences in diet diversity as a possible explanation for the decrease in overlapping habitat ranges of the two species on the southern California coast.</p>	<p>An Investigation of Steroidal Modulation of Nociception in <i>Drosophila melanogaster</i> Anda Panaitiu (Psychology and Biology) Nociception is essentially the set of physiological responses to harmful stimuli (in humans, nociception is often equated to pain). In this presentation, the role of steroid hormones in regulating nociception in the fruit fly <i>Drosophila melanogaster</i> is investigated.</p>	<p>Stonewall: The Discourage of Gay Liberation Aaron Mitchell (History and Political Science) The Stonewall Riots loom large in the history of the Gay Rights movement. Why is this the case, and how have gay rights activists created the meaning of Stonewall.</p>	

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
1:30 – 2:00	<p>Diet Composition of Harbor Seals (<i>Phocavitulina</i>) Residing at Mount Desert Rock, Maine Lauren Broderick (Marine Biology) An investigation into harbor seal diet with a more in-depth look at prey composition, trawl abundance, comparisons, age class preference and changes in diet over the past decade.</p>	<p>An Investigation of Pheromone Expression and Courtship Behavior in <i>Drosophila melanogaster</i> Males that have Altered Steroid Signaling Levels Leonard Choon Huat Tan (Biological Sciences) In the fruit fly <i>Drosophila melanogaster</i>, hydrocarbons on the surface of the cuticle act as pheromones for intraspecific chemical signaling which is important for mate recognition and attraction. In this presentation, an investigation of the roles of steroid hormones in pheromone expression in male fruit flies and the changes in their attractiveness to other male flies is described.</p>	<p>Ann S. Stephens' <i>Malaeska</i>: Reading the First Dime Novel as a Captivity Narrative Elisabeth Ziemba (English and Language Studies, Women's and Gender Studies) The first dime novel, Ann S. Stephens' <i>Malaeska: The Indian Wife of the White Hunter</i> has many aspects of the captivity narrative genre present within its text. This Senior Honors Thesis is interested in reading the dime novel through that lens in order to examine a deeper understanding of the value of the novel to American Literature.</p>	
2:00 – 2:10	AFTERNOON BREAK			
	<i>Research Across the Disciplines</i>	<i>Sociology & Psychology</i>	<i>Psychology Research Methods (cont.)</i>	<i>Recent Advances in Mechanistic Organic Chemistry</i>
2:10 – 2:30	<p>Vernal Pools on UNE's Campus: A Study of Three Impacted, One Restored and Four Reference Pools Janel Harrington, Lauren Ennis, Cassandra Smith and the Wetland Restoration Class (Environmental Studies) Vernal pools on UNE's campus have been impacted by development. Our class studied impacted, restored and preserved pools on campus and offers recommendations for the future of these important natural habitats.</p>	<p>Aftercare Services for Victims of Human Trafficking: Review and Recommendations Veronica Ross (Sociology) My research has been an extremely extensive review of U.S. policy in place for victims of human trafficking. My emphasis is on the efficacy and limits of these services and I focus on suggestions for reform. Because human trafficking is such an important, but devastatingly misunderstood, problem in the U.S., I will also give a brief summary of the entire issue for context.</p>	<p>Do Household Chemicals Promote Antisocial Behaviors in Goldfish Angela Gust, Michelle Franco (Psychobiology) Testing the effects of household chemical pollutants on the shoaling behavior of goldfish.</p>	<p>A Literature Survey of Carbocations in Zeolites Abby Jones, Ashley Moulton (Chemistry and Physics) In this presentation, the effect of differing zeolite environments on the generation and reactivity of carbocations will be presented.</p>

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
2:30 – 2:50	<p>An Investigation of Pedagogical Techniques Appropriate for Educating English Language Learners in the Mathematics Classroom Kylie Bragdon (Mathematics) My presentation is a reflection of my student teaching experience at Portland High School in an ESL mathematics classroom. Throughout the discussion I will discuss culturally and linguistically sensitive pedagogy techniques that I researched, how I implemented them in the classroom, and their overall effectiveness.</p>	<p>The Ontogeny of Fear Conditioning in the Rat: Freezing, and not Contextual Learning, is the Limiting Factor Stephanie Shiers, Michael Burman (Psychology) The purpose of the present experiment was to analyze explicit cue and contextual fear learning in juvenile rats by manipulating the intensity of the aversive stimulus. The data showed that a higher shock may have removed an associative “ceiling” effect, revealing that older animals show stronger conditioning in general.</p>	<p>The Influence of Pheromones on Learning in <i>Betta splendens</i> Paul Ingargiola (Psychobiology) A study of how pheromones, or hormones outside of the body, may influence learning capabilities of the species <i>Betta splendens</i>.</p>	<p>Molecular Keypad Locks Anda Panaitiu, Vernon Chan (Chemistry and Physics) Keypad locks allow an action to take place only when the right password (or sequence of numbers) is entered. This presentation describes how the keypad lock principle can be applied to certain chemical reaction systems and how some molecular systems can be used as molecular logic gates in electronics.</p>
2:50 – 3:10	<p>The Role of Slavery in Advancing American Medicine Gillian Frisch (English and Language Studies) Slaves have played intricate roles in advancing medicine, including forced participation in experimentation, excavation of their graves in order to use their bodies as cadavers, and public lynchings by physicians. Later in history, their attempts in contributing to the medical field are hindered because of the segregation they were forced to endure.</p>	<p>Learning and spatial task ability in the common Goldfish Cameron LaPlante (Psychobiology) Study of how spatial cognition increases due to exposure to spatial tasks.</p>	<p>Water Temperature Effects on Aggression of <i>Betta splendens</i> Aissa Edora, Christina Best (Psychology) Water temperature increases and decreases aggressive behaviors depending on the female presence and time of data collection.</p>	<p>Photodecarboxylation of Photolabile Protecting Groups Katie A. Edwards, Elisabeth Fisher (Chemistry and Physics) A review of two papers studying the efficiency of photodecarboxylation (PDC) reactions for substituents in the use of photolabile protecting groups (PPGs).</p>
3:10 – 3:30	<p>Fixed Points in Time: How Time Travel Narratives Justify Historical Atrocities Nick Jackson (English and Language Studies) This paper explores the different types of time travel narratives and how they make sense of terrible things that have happened in the past in a world where time travel is possible.</p>	<p>The Unattainable Ideal of Motherhood Alicia Healey (Psychology) Motherhood is stressful because American Society has set up an unattainable ideal for the “perfect mother.” This stress is not a personal problem, it is a societal one.</p>	<p>Color Recognition in Guppies, <i>Poecilia reticulata</i> Jennifer Patrick, Stephanie Marshall (Psychology) To determine whether male or female guppies could recognize a specific color and which sex learns the fastest.</p>	<p>Understanding Halo-Carbene Reactions Paul FitzMorris, Edward Frank Roy (Chemistry and Physics) The importance of carbene-substituted pyridine compounds and reactions with those compounds will be discussed by the presenters.</p>
3:30 – 3:50		<p>The Effect of Witness Gender on Credibility in the Courts Melanie Ostrowski, Abby Davis, Michael Wilson (Psychology) This study was conducted to look at the effects of witness gender on perceived credibility in a court room.</p>	<p>Do looks matter? Color and size preference of the female <i>Betta splendens</i> Kalyn Sullivan, Courtney Gill (Psychology) Looked at female mate preference in relation to size (small, medium, and large) and color (red and blue). Behavioral measures included time spent in preference zone, and gill flares directed at male models.</p>	<p>Reactivity of Allene Oxides Rebekka Chenard, Sarah Celia (Chemistry and Physics) The reactivity of simple a-alkyl substituted allene oxides will be discussed.</p>

ORAL PRESENTATIONS –10:00 A.M. – 4:10 P.M. DECARY SECOND FLOOR

TIME	DECARY 212	DECARY 202	DECARY 208	DECARY 203
3:50 – 4:10		<p>The Creation, Medicalization and Pharmecuticalization of Attention Amanda Simmons (Sociology) This presentation analyzes how attention has become an integral part of our society, and how through education, we've cemented the bounds of attention to ensure that we have a disciplined workforce. In doing so, the limits of attention have increasingly become marginalized, those individuals and behaviors that transgress what society defines as attentive, are seen as deviant.</p>	<p>Antipredator Habitat Preference in the European Green Crab, <i>Carcinus maenas</i> Travis Marcoux, Evan Patierno (Psychobiology) An assessment of habitat preference in the invasive crab species, <i>Carcinus maenas</i> in the presence of a predator.</p>	

Opening Reception

Voyages and the Great Age of Sail

A special exhibition curated by students in HIS 290: History Hands On

Friday, May 6 - 5:30 - 7:30 p.m.

Saco Museum
 317 Main Street, Saco

Exhibition Dates: May 6 - Sept. 4, 2011