Table of Contents

Introduction	2
Master Schedule	
Oral Presentations	
Poster Presentations	
Art Performances and Exhibitions	
Concert on the Plaza	
Art in von Liebig Center for Science	15
A festival of Juniata Theatre, Bright Visions, Halbritter Center for the Performing Arts	16

Introduction

Welcome to the third annual Juniata Liberal Arts Symposium.

For many years the students of Tri-Beta, the biology honorary, organized an annual research symposium in the spring semester. As the symposium grew, faculty looked for ways to include more participants and to encourage more faculty and students to see what their colleagues and peers were doing. In the spring of 2005, the faculty Executive Committee received a petition signed by more than forty faculty members asking the faculty to set aside a day in the spring semester to recognize and honor the research and creative efforts of our students. In the fall of 2005, the faculty voted unanimously to cancel classes for one day in the spring of 2006 and to form a committee to organize such a day. After the first Liberal Arts Symposium, the faculty voted to add the day to the list of Juniata traditions.

In addition to the more traditional research, the day is intended to celebrate other student works and achievements that may not necessarily fall into the "traditional" category. The Liberal Arts Symposium can be thought of as a big tent, under which one can see traditional research, artistic productions, and various kinds of problem solving and applied works.

Our students do impressive work. I invite you to take the day to listen to their presentations, ask them questions, and to challenge them with your own ideas.

This year's faculty organizer is Philip Dunwoody (Asst. Professor of Psychology). Phil, Amy Kyle, and Barb Williams have spent a great deal of time in preparation for one of the newest of Juniata traditions. Please join me in thanking them and the rest of the Liberal Arts Symposium Planning Committee.

Jim	Laksc
Pro	vost

Master Schedule

Registration will be in the main lobby of von Liebig Center for Science from 7:30 a.m. to 3:30 p.m.

	ORAL PRESENTATIONS				
Session #:	ı	II	III	IV	V
Room:	VLB Neff	BAC C232	BAC C116	Good 202	VLB Sill
8:15-9:15	Biology	Physics & Math	Communication	Education	Politics
9:30-10:30	Biology	Philosophy	Communication	Education & English	Politics
10:45- 11:45	Chemistry	Philosophy	Communication	English	Politics
		L	UNCH		_
1:15-2:15	Environmental Science	Philosophy	Communication	Information Technology	Politics
2:30-3:30	Environmental Science	PACS & International Studies	History	Accounting, Business, & Economics, Art History	Politics
3:45-4:45	Environmental Science & Geology	World Languages & Cultures	History	Religion	Politics

POSTER PRESENTATIONS			
9:30-11:30	Poster Session I: All disciplines. Location: Ellis Ballroom		
	·		
12:30-2:30	Poster Session II: All disciplines. Location: Ellis Ballroom		
3:00-5:00	Poster Session III: All disciplines. Location: Ellis Ballroom		

	ART PERFORMANCES AND EXHIBITIONS			
11:45-1:15	CONCERT ON THE PLAZA: Featuring the JC jazz ensemble, PVC Pipe percussion ensemble, select saxophone quartet, and performances by members of class MU 210, Musical Improvisation. Location: Plaza facing Kennedy. Rain location: Rosenberger Auditorium stage.			
9:00-5:00	ART IN VON LIEBIG CENTER FOR SCIENCE: Student art exhibit. Location: Main Lobby			
7:30-9:30 p.m.	BRIGHT VISIONS: A festival of theatre performances to be performed nightly, Wednesday through Saturday. Location: Halbritter Center for the Performing Arts			

Oral Presentations

The first author, presentation title, faculty sponsor, and relevant department are listed below. To see the full list of authors with the abstract, please go to http://www.juniata.edu/academics/research/symposium.html

	Session I, VLB Neff, 8::	15-9:15	
Ferlitch, Heather	PYRUVATE-FORTIFIED CARDIOPLEGIA STABILIZES HYPOXIA-INDUCIBLE TRANSCRIPTION FACTOR AND EVOKES NOVEL MYOCARDIAL ERYTHROPOIETIN EXPRESSION IN SWINE UNDERGOING CARDIOPULMONARY BYPASS	Jeff Demarest	Biology
Hull, Travis	A NOVEL INVESTIGATION OF MICROBIAL DEVELOPMENT WITH PHARMACOLOGICAL APPLICATIONS	Jennifer Bennett	Biology
Karkoska, Kristine	CHARACTERIZATION OF A PUTATIVE "SPECIATION GENE" IN THE SEBASTES SPECIES COMPLEX	Vincent Buonaccorsi	Biology
	Session I, VLB Neff, 9:3	0-10:30	
Previte, Dana	BACTERIAL-MEDIATED COAGULATION	Michael Boyle	Biology
Russo, Lisa	CHARACTERIZATION OF IDeE	Michael Boyle	Biology
Tolino, Michael	LOCALIZATION AND EXPRESSION OF TY1 AND RTT105 IN SACCHAROMYCES CEREVISIAE	Jill Keeney	Biology
	Session I, VLB Neff, 10:	45-11:45	
Wagner, Matthew	STUDY OF ASYMMETRIC POLYDENTATE PYRIDINE N-OXIDE SCHIFF BASES AND COMPLEXES	Peter Baran	Chemistry
Vesper, Matthew	SYNTHESIS OF MULTIDENTATE SHIFF BASE LIGANDS AND THEIR COMPLEXES	Peter Baran	Chemistry
	Session I, VLB Neff, 1:	15-2:15	
Fieger, Ashley	DENDROCLIMATOLOGY STUDY AT RAYSTOWN FIELD STATION	Matthew Powell	Environmental Science & Studies
Fischel, Jason	ARSENIC MOBILIZATION IN THE CRITICAL ZONE: OXIDATION BY HYDROUS MANGANESE OXIDE	Dennis Johnson	Environmental Science & Studies
Hashagen, Carlee	EVALUATING INCOMING FRESHMEN ATTITUDES AND BEHAVIORS ON SUSTAINABILITY	Uma Ramakrishnan	Environmental Science & Studies
	Session I, VLB Neff, 2:	30-3:30	
Payne, Ryan	BIODIESEL PRODUCTION AT JUNIATA COLLEGE	Uma Ramakrishnan	Environmental Science & Studies
Masciello, Gina	ANTI-CONVERSION LAWS AS A HINDRANCE TO SUSTAINABLE DEVELOPMENT	Neil Pelkey	Environmental Science & Studies

Musgrove, Ashley	CREATION OF A MULTI-SPECIES RESEARCH CHESTNUT ORCHARD AT	Uma Ramakrishnan	Environmental Science & Studies
	JUNIATA COLLEGE		
	Session I, VLB Neff, 3:4	15-4:45	
Masciello, Gina	WHY DID THE DEER CROSS THE ROAD?:	Uma Ramakrishnan	Environmental Science
	USING DEER MOVEMENT DATA TO		& Studies
	DETERMINE IMPACT OF ROADS		
O'Brien, Joshua	GEOGRAPHIC DISTRIBUTION OF	Matthew Powell	Geology
	APPALACHIAN BOULDER FIELDS AND		
	THEIR RELATION TO CLIMATE		
	Session II, BAC C232, 8:	i	1
Schultz, Justin	BEAM PRODUCTION AND STABILIZATION VIA FREQUENCY UP-CONVERSION IN RUBIDIUM VAPOR	Jamie White	Physics
D'Orazio, Daniel	USING BEAT FREQUENCY LINE SHAPE TO ANALYZE LASER BANDWIDTH	Jamie White	Physics
Schultz, Justin	THE VALUE OF PI ON SURFACES OF REVOLUTION AND SURFACES WITH DENSITY	Cathy Stenson	Math
	Session II, BAC C232, 9:	30-10:30	
Bailey, Matthew	RIGHTS, UTILITY AND MORALS	Xinli Wang	Philosophy
Eger, Caitlin	CAN PHILOSOPHY FULFILL THE FUNCTION OF RELIGION?	Xinli Wang	Philosophy
Hamilton, Ryan	DIGGING FOR THE ABSOLUTE IN KIERKEGAARD'S SUBJECTIVE TRUTH	Xinli Wang	Philosophy
	Session II, BAC C232, 10:	:45-11:45	
Holm, Roy	INWARDNESS' IRONY: "DON'T LISTEN TO	Xinli Wang	Philosophy
	ME", AND THE UNREVEALED CLARITY		
Rea, Bennett	DISPUTATIONS ON DESCARTES' ONTOLOGICAL THEORY	Xinli Wang	Philosophy
Sample, Floyd	THERE'S NO I IN ENLIGHTENMENT	Xinli Wang	Philosophy
	Session II, BAC C232, 1:	15-2:15	
Tembo, Sekani	ON THE UNCERTAINTY OF SCIENCE	Xinli Wang	Philosophy
Thomas, Jeffrey	CONFUCIANISM GRADED LOVE VS. GOLDEN RULE	Xinli Wang	Philosophy
Weller, Jake	KANT ON SUICIDE	Xinli Wang	Philosophy
	Session II, BAC C232, 2:	30-3:30	
Monroe, Hannah	NON-VIOLENT REVOLUTIONS OF 1989-90	Andy Murray	Peace and Conflict
	AND THEIR IMPACT ON SOCIETY: AN		Studies
	EVALUATION OF STATISTICS PRESENTED BY THEOLOGIAN WALTER WINK		
Rattenborg,	IMMIGRATION AND NATIONAL IDENTITY:	Celia Cook-Huffman	Peace and Conflict
Elisabeth	THE CASE OF HAZELTON, PENNSYLVANIA		Studies
Rée, Christopher	THE LIBERALIZATION OF SHOPPING HOURS: TALES FROM BERLIN AND MUNICH	Emil Nagengast	International Studies

Session II, BAC C232, 3:45-4:45					
Baranova, Zuzana	CHARACTERS ON THE RUN IN ERNESTO SÁBATO'S NOVELS	Herlinda James	World Languages & Cultures		
Clarkson, Sarah May	DRAMATIC PRESENTATION OF "RESGUARDO PERSONAL"	Herlinda James	World Languages & Cultures		
	Session III, BAC C116, 8	:15-9:15	•		
Bachinski, Megan	A RHETORICAL ANALYSIS OF THE SHAWSHANK REDEMPTION (1994): THE ACHIEVEMENT OF MORAL COMPLEXITY	Donna Weimer	Communication		
Baer, Dave	THE WESTERN GENRE AND THE EVOLUTION OF THE EASTWOOD COWBOY	Donna Weimer	Communication		
Borade, Hiryan	GUIDE, A JOURNEY FROM JAIL TO SAINTHOOD	Donna Weimer	Communication		
	Session III, BAC C116, 9:	30-10:30			
Borade, Hiryan	INDIVIDUAL@CYBERTERROR.COM	Donna Weimer	Communication		
Campbell, Michelle	NONVERBAL COMMUNICATION DURING FIELD HOCKEY COMPETITIONS	Donna Weimer	Communication		
Couillard, Jean- Denis	KATE BORNSTEIN'S "DANGEROUS DREAMS, DAMNED DESIRES": A NEO- ARISTOTILIAN ANALYSIS	Grace Fala	Communication		
	Session III, BAC C116, 10	:45-11:45			
DeCoursey, Catherine	WHAT HAPPENED TO THE LOST GIRLS OF SUDAN?	Donna Weimer	Communication		
Hileman, Ashley	CONTENT ANALYSIS OF FOCUS GROUP INTERVIEWS BASED ON "REAL WORLD" SYMBOLISM	Donna Weimer	Communication		
Malcolm, Jill	SEEKING THE GODDESS IN CYBERSPACE: NEO-PAGANISM AND THE INTERNET	Donna Weimer	Communication		
	Session III, BAC C116, 1	:15-2:15			
Scacco, Joshua	ROAD TO THE MAJORITY: HOW NEGATIVE POLITICAL ADVERTISING IMPACTED THE 2006 CONGRESSIONAL ELECTIONS IN PENNSYLVANIA	Donna Weimer	Communication		
Stanley, Adam	POLITICAL CORRECTNESS AND RACE: AN EXPLORATION	Donna Weimer	Communication		
White, Megan	A FEMINIST CRITIQUE OF THE JUICY COUTURE AD IN TEEN VOGUE, FEBRUARY, 2007	Donna Weimer	Communication		
	Session III, BAC C116, 2:30-3:30				
Chapuran, Meghan	CHILDREN'S LITERATURE AS PROPAGANDA	Belle Tuten	History		
Crumrine, Troy	RINGSIDE AT NUREMBERG: AN ANALYSIS OF TWO NAZI DEFENSE STRATEGIES	Belle Tuten	History		

	1	1	
Ehnts, Ashleigh	"A LIVING NATION OR THE NATION OF A DEAD PAST?" NOSTALGIC ROMANTICISM IN IRELAND AND THE AMERICAN SOUTH	Jim Tuten	History
	1840-1930		
	Session III, BAC C116, 3	:45-4:45	
Kline, Jessica	AN UGLY MEDIEVAL DIVORCE: A CONTEST BETWEEN SECULAR AND ECCLESIASTICAL AUTHORITY	Belle Tuten	History
Knepp, Jonathan	JOHN BULWER, DOCTOR, ROYALIST, HYSTERIC	Belle Tuten	History
Lovell, Matthew	ROOSEVELT'S USE OF THE FIRESIDE CHATS TO SWAY PUBLIC OPINION FOR THE NEW DEAL	Jim Tuten	History
	Session IV, Good 202, 8	:15-9:15	
Knoll, Seth	URBAN TEACHING SEMINAR	Valerie Park	Education
Mansell, Pamela	CURRENT ATTITUDES IN EDUCATION TOWARD CHANGING TECHNOLOGIES	Donna Weimer	Education
Ruggles, Lindsee	SOCIAL STORIES AS A TRANSITION STRATEGY	Fay Glosenger	Education
	Session IV, Good 202, 9:	30-10:30	
Shotts, Aaron	MODIFICATION OF DNA EXTRACTION LAB TO INCLUDE UV-VIS SPECTROPHOTOMETRIC ANALYSIS	Kathleen Jones	Education
Shughrue, Katie	THE JOURNEY OF ADOPTION	Fay Glosenger	Education
Eastep, Kazia	THE BRICKS OF BABEL: LINGUISTIC TOWERS IN ROTH'S "CALL IT SLEEP"	Judith Katz	English
	Session IV, Good 202, 10	:45-11:45	
Eastep, Kazia	POETRY ABOUT PEOPLE & PLACES I'VE KNOWN	Peter Goldstein	English
Latham, Sarah	BLACK, WHITE, AND GRAY: ALTERNATIVE INTERPRETATIONS OF GOOD AND EVIL IN STEINBECK'S EAST OF EDEN	Carol Peters	English
Popernack, Daniel	THE BULL AND THE LILY: SEXUAL ARCHETYPES AND REPRESSION IN LORCA AND WILLAMS	Peter Goldstein	English
	Session IV, Good 202, 1	:15-2:15	
Carnahan, Kelly	COLLECTION OF DIGITAL EVIDENCE FOR COURTROOM USE	John Wright	Information Technology and Computer Science
Elgabrowny, Taurik	PROOF OF CONCEPT FOR CYBERNETIC ARM, USING A NINTENDO WIIMOTE AND A LEGO MINDSTORMS NXT KIT	John Wright	Information Technology and Computer Science
Wainwright, Nora	THREADED SORTING	John Wright	Information Technology and Computer Science

	Session IV, Good 202, 2	:30-3:30	
Gouldey, Jennifer	OPTIMIZING THE BENEFITS OF LOW CORRELATION	Brad Andrew	Accounting, Business, and Economics
George, Kara	IDENTITY IN CINDY SHERMAN'S PHOTOGRAPHS: DOES THE DRESS MAKE THE WOMAN?	Karen Rosell	Art History
LaPrad, Lindsay	SCULPTURAL INSPIRATION: HOW NEW YORK INFLUENCED THE ART OF LOUISE NEVELSON	Karen Rosell	Art History
	Session IV, Good 202, 3	:45-4:45	
DuBrey, C. Bridget	GODDESS WORSHIP PAST AND PRESENT: THE CASE OF ARCHAEOMYTHOLOGY	Don Braxton	Religious Studies
Borade, Hiryan	THE GODDESS OF SATISFACTION: SANTOSHI MAA	Susan Prill	Religious Studies
	Session V, VLB Sill, 8:1	.5-9:15	•
Hann, Tessa	RATIONAL, IDEOLOGICAL, OR IRRATIONAL VOTER? A STUDY OF COLLEGE AGE VOTERS IN CENTRAL PENNSYLVANIA	James Kim	Politics
Copley, Phillip	ACT 44 OF 2007: THE ILLEGAL TOLLING OF INTERSTATE 80	Emil Nagengast	Politics
DeCoursey, Catherine	IS JON STEWART A CREDITABLE NEWS SOURCE?	Dennis Plane	Politics
	Session V, VLB Sill, 9:3	0-10:30	
Copley, Phillip	YOUSEF TO ATTA: CLUSTER-AGON ANALYSIS OF TERRORISM IN THE NEW YORK TIMES AND WALL STREET JOURNAL, 1993-2001	Dennis Plane	Politics
DeCoursey, Catherine	THE SUCCESS OF LE FRONT NATIONAL IN THE 2002 FRENCH PRESIDENTIAL ELECTION	Emil Nagengast	Politics
DeMauro, Ashley	THE POLITICAL FEASIBILITY OF IMPLEMENTING A COMPREHENSIVE SCHOOL COUNSELING PROGRAM IN PENNSYLVANIA	Emil Nagengast	Politics
	Session V, VLB Sill, 10:4	15-11:45	
Frye, Elicia	THE BUSH ADMINISTRATION AND GUANTANAMO BAY	Emil Nagengast	Politics
Hann, Tessa	ORIGINS OF AMERICAN POLITICAL PARTIES IN THE 1790'S	Emil Nagengast	Politics
Hruska, Courtney	ASSERTION OF RELIGION IN THE POLITICS OF THE HOLOCAUST	Emil Nagengast	Politics
	Session V, VLB Sill, 1:1	.5-2:15	<u> </u>
Laird, Amber	THE GUN CONTROL DEBATE IN THE UNITED STATES	Emil Nagengast	Politics
Rumery, Shawn	SUSTAINABLE DEVELOPMENT IN RURAL AND SMALL TOWN AMERICA	Dennis Plane	Politics

Maier, Krystle	THE INACTIVITY OF CONGRESS REGARDING THE US-CHINA TRADE IMBALANCE	Emil Nagengast	Politics
	Session V, VLB Sill, 2:3	30-3:30	
Tomlinson, Ken	MORE INFORMATION, LESS CONTENT: A COMPARISON OF TELEVISION, NEWSPAPER, AND INTERNET POLITICAL REPORTING	Dennis Plane	Politics
Mokay, Shiloe	WHY HAS FRANCE NEVER COME TO TERMS WITH THE ALGERIAN WAR?	Emil Nagengast	Politics
	Session V, VLB Sill, 3:4	15-4:45	
Tomlinson, Ken	LOCAL ECONOMIC DEVELOPMENT: PROSPERITY OR PAUCITY?	Emil Nagengast	Politics
Patitsas, George	THE NEW PROHIBITION	Emil Nagengast	Politics
Rée, Christopher	THE REALIZATION OF TORTURE IN THE UNITED STATES	Brad Andrew	Politics

Poster Presentations

The first author, presentation title, faculty sponsor, and relevant department are listed below. To see the full list of authors with the abstract, please go to http://www.juniata.edu/academics/research/symposium.html

Session I, Ellis Ballroom, 9:30-11:30				
Baranova, Zuzana	COMPLEXES OF PYRIDINE N-OXIDE	Peter Baran	Chemistry	
	DERIVATIVES WITH THIOPHENES			
Beaver, Joshua	SYNTHESIS OF SEXI (3-ETHYLTHIOPHENE)	Paul Ewbank	Chemistry	
Bloom, Anna	CALCULATING VAN DER WAALS FORCES	Paul Schettler	Chemistry	
Korb, Melinda	MENTOS® MORPHOLOGY: A STUDY OF	Tom Fisher	Chemistry	
	SURFACE STRUCTURE USING AFM			
Beckel, Josh	NATURAL FRACTALS	Kimberly Roth	Mathematics	
Fornadel, Andrew	GEOCHEMICAL ANALYSIS OF SOIL	Ryan Mathur	Geology	
	DEVELOPED ON THE MARCELLUS SHALE			
	IN CENTRAL PENNSYLVANIA			
Haskins, Patrick	FCI- KIOSK DESIGN	Marlene Burkhardt	Information	
			Technology	

Bradley, Brosi	THE RELATIONSHIP BETWEEN ARBUSCULAR MYCORRHIZAL FUNGI AND CENTAUREA MACULOSA IN HUNTINGDON COUNTY, PA: ARE INVASIVE PLANT POPULATIONS LOCALLY ADAPTED TO THEIR OWN SOIL FUNGAL COMMUNITIES?	Norris Muth	Biology
Conoway, Devin	MUTAGENESIS OF <i>RTT105</i> IN SACCHAROMYCES CEREVISIAE BY ERROR- PRONE PCR	Jill Keeney	Biology
Deptola, Travis	EFFECTS OF PREDATION ON THE ONTOGENETIC SCALING OF CELL SIZE AND NUMBER WITH BODY SIZE IN THE FRESHWATER AMPHIPOD GAMMARUS MINUS	Doug Glazier	Biology
Draper, Lindsey	CHARACTERIZATION OF PUTATIVE CHROMOSOME SEGREGATION MUTANTS OF STREPTOMYCES COELICOLOR IDENTIFIED BY A MINI-TRANSPOSON SYSTEM	Jennifer Bennett	Biology
Eisenmann, Kimberly	EFFECTS OF SOIL PH ON CENTAUREA CYANUS/GERMINATION, GROWTH AND SURVIVORSHIP	Norris Muth	Biology
O'Donnell, John	DETERMINING THE EFFECTS OF GENE OVER EXPRESSION IN DNA REPAIR PATHWAY	Jill Keeney	Biology
Anderson, Michael	THE EFFECTS OF WHITE-TAILED DEER (ODOCOILEUS VIRGINIANUS) ON PLANT DISPERSAL AND THE SOIL SEED BANK AT LAKE RAYSTOWN	Norris Muth	Environmental Science
Betancourt, Kristin	INVASIVENESS AND PHENOTYPIC PLASTICITY IN THE GENUS CENTAUREA	Norris Muth	Environmental Science
Broadwell, Amanda	SOARING EAGLES: ASSESSMENT OF JUNIATA WIND ENERGY	Alex Metcalf	Environmental Science
Buckley, Elise	COMBATING NUISANCE ALARMS CAUSED BY THE "SHIP EFFECT" IN 3HE BASED NEUTRON DETECTION RADIATION PORTAL MONITORS	James Borgardt	Physics
Ritchie, Jessie	EFFECTIVE LEARNING IN THE PHYSICS CLASSROOM	Jamie White	Physics
Garlow, Juliet	BIRTH ORDER: ITS EFFECTS ON PERSONALITY AND INTELLIGENCE	Sarah May Clarkson	Psychology
Rinehimer, Jennie	FAILURES OF TIME-PLACE DISCRIMINATIONS IN RATS: LEARNING VERSUS PERFORMANCE FAILURE	David Widman	Psychology
Eatough, Meredith	CLUB WEBSITES: HOW-TO	Carol Peters	English
Piazza, Maria	"SEEING THE POINT IN HOLOCAUST AND GULAG LITERATURE"	James Roney	World Languages & Cultures

Musgrove, Ashley	CASTANEA DENTATA: THE GHOST OF FORESTS PAST?	Norris Muth	Environmental Science
	Session II, Ellis Ballroom,	12:30-2:30	
George, Kara	SYNTHESIS OF GUANINE-N-OXIDES AND THEIR COMPLEXES	Peter Baran	Chemistry
Houck, Joseph	TRANSITION METAL COMPLEXES OF PYRAZOLE N-OXIDES	Peter Baran	Chemistry
Machamer, Natalie	STUDY OF THE BASE-CATALYZED CONDENSATION REACTION OF O- PHTHALDIALDEHYDE WITH MALONIC ACID	Richard Hark	Chemistry
D'Orazio, Daniel	AN INITIAL FRACTAL ANALYSIS OF THE WHIRLPOOL GALAXY	Kimberly Roth	Mathematics
Waters, Laura	DIGITAL MAPPING THE DAMARISCOVE DIKE INTRUSION COMPLEX, MIDCOAST MAINE	Larry Mutti	Geology
Kobeski, Justine	MIGUEL ANGEL ASTURIAS ACADEMY WEBPAGE	Marlene Burkhardt	Information Technology
Evans, Thomas	DO STANDARD HUSBANDRY PRACTICES PROVIDE ZEBRAFISH (<i>DANIO RERIO</i>) OVA WITH IDEAL CONDITIONS DURING DEVELOPMENT?	Vincent Buonaccorsi	Biology
Ewing, Andrew	PENNSYLVANIAN PLANTS WITH ANXIOLYTIC ACTIVITY: AN ETHNOBOTANICAL ANALYSIS OF CENTRAL PENNSYLVANIA FOLK MEDICINE	Norris Muth	Biology
Orlousky, Marian	EYE SIZE AND PREDATOR DETECTION BY THE FRESHWATER AMPHIPOD GAMMARUS MINUS	Doug Glazier	Biology
Kwon, Aggie	GERMS FROM FOOD THAT DO THE BODY GOOD	Debra Kirchhof- Glazier	Biology
Mellott, Lindsey	CHARACTERIZATION OF COAGULATION BY <i>E.COLI</i>	Michael Boyle	Biology
Murray, Christopher	MALE REPRODUCTIVE CYCLE IN AN ENDEMIC SCRUB LIZARD, SCELOPOROUS WOODII	John Matter	Biology
Huston, Genna	THE EFFECT OF SALINITY, PH, NUTRIENTS, AND SOIL ON MANGROVE GROWTH: STUDY OF THREE POTENTIAL MANGROVE GROWTH SITES ALONG THE COROMANDEL COAST	Neil Pelkey	Environmental Science
Todd, Tracy	FORESTLAND ASSESSMENT FOR HUNTINGDON COUNTY, PA	Dennis Johnson	Environmental Science
Campbell, William	THE ENTREPRENEUR	Sarah Worley	Accounting, Business and Economics
Flumerfelt, Eric	EFFECTS OF PULSE PILEUP AND HIGH COUNT RATES IN SODIUM IODIDE SCINTILLATION DETECTORS	James Borgardt	Physics

Arnold, Kate	A LITERATURE REVIEW OF AUTHORITARIANISM: 2000-2008	Phil Dunwoody	Psychology
Hassinger, Heather	A COMPARATIVE STUDY OF PRE- COMPETITION ANXIETY IN COLLEGIATE ATHLETES	Mark McKellop	Psychology
Reveley, Kimberly	THE EFFECTS OF STUDY ABROAD EXPERIENCES ON SOCIAL DOMINANCE ORIENTATION	Dave Drews	Psychology
Mongerson, Rachael	GRAMMATICAL GENDER: AN EXAMINATION OF ASSIGNMENT PRACTICES IN INDO-EUROPEAN LANGUAGES	James Roney	World Languages & Cultures
Sykes, Brian	INVESTIGATION INTO HIGH TEMPERATURE TRANSPOSITION OF YEAST MUTANTS	Jill Keeney	Chemistry
Finan, Kelly	DESIGNING AN ILLUSTRATED FIELD GUIDE TO THE INVASIVE PLANT SPECIES AT RAYSTOWN LAKE	Uma Ramakrishnan	Art
Aumiller, William	INVESTIGATION OF DIMETHYL ETHER AS AN INITIATOR IN THE CONVERSION OF METHANOL TO GASOLINE USING ZEOLITE H-ZSM-5	Paul Schettler	Chemistry
	Session III, Ellis Ballroom	, 3:00-5:00	•
Maxon, Jessica	SYNTHESIS OF BIPYRIDINE N,N'-DIOXIDE AND TERPYRDINE N,N',N''-TRIOXIDE TRANSITION METAL COMPLEXES	Peter Baran	Chemistry
Moyer, Brandon	NEW CATALYSTS FOR ORGANIC REACTIONS	Peter Baran	Chemistry
Wendekier, Daniel	TOWARD THE SYNTHESIS OF 1,5- METHYLENESEMIBULLVALENE	David Reingold	Chemistry
Reish, Matthew	STUDY ON THE EFFECTS OF ZIRCONIUM DOPING ON THE PHOTOPROPERTIES OF NA2TI307 AND TIO2 (B)	Peter Baran	Chemistry
Katz, Matthew	THE MANY TILINGS OF A 2 X N BOARD	Cathy Stenson	Mathematics
Sykes, Brian	CONGENITALLY UNGUARDED ATRIOVENTRICULAR ORIFICES WITH DOUBLE CHAMBERED VENTRICLES	Debra Kirchhof- Glazier	Health Professions
Orr, Andrew	ANALYSIS OF ADVERTISEMENTS: A JOURNEY INTO THE MOTIVATIONAL APPEALS OF OUTDOOR EQUIPMENT	Grace Fala	Communication
Link, Michael	I4I DSI PROJECT	John Wright	Information Technology & Computer Science
Eldredge, Nathaniel	ISOLATION, PURIFICATION, AND CHARACTERIZATION OF AN IgA-BINDING PROTEIN FROM <i>S. PYOGENES</i>	Michael Boyle	Biology
Kochel, Tyler	ISOLATION OF INDIVIDUAL HUMAN SERUM ALBUMIN-BINDING DOMAINS FROM STREPTOCOCCUS G1400 PROTEIN G	Michael Boyle	Biology

Shaw, Christopher	EFFECTS OF FISH PREDATION ON THE BODY-SIZE SCALING OF BEHAVIORAL ACTIVITY IN THE FRESHWATER AMPHIPOD GAMMARUS MINUS	Doug Glazier	Biology
Skoner, Jonathan	CONSTRUCTION OF A MARINER-BASED MINI-TRANSPOSON SYSTEM FOR THE RANDOM MUTAGENESIS OF STREPTOMYCES COELICOLOR	Jennifer Bennett	Biology
Wade, Amy	THE EFFECTS OF INBREEDING ON REPRODUCTIVE SUCCESS OF THE WISCONSIN FAST PLANT, BRASSICA RAPA	Norris Muth	Biology
Bukowski, Daniel	ISOLATION OF NOVEL DEVELOPMENTAL MUTANTS OF STREPTOMYCES COELICOLOR	Jennifer Bennett	Biology
Mextorf, Tracy	IMPACT OF HOMEMADE FERTILIZERS ON THE WISCONSIN FAST PLANT	Norris Muth	Environmental Science
Carney, Elaine	THE AIDS EPIDEMIC IN SOUTH AFRICA	Sarah May Clarkson	Exploratory
Hoover, Jason	ROBOTICS	Tom Fisher	Physics
Gibson, Kelly	EXAMINING DIFFERENCES IN TARGET ARTICLES OF GENDER-SPECIFIC MAGAZINES: AN EXAMINATION OF SEX, HEALTH, WORLD ISSUES, AND OTHER ARTICLES	David Widman	Psychology
Holton, Christopher	DIFFERENTIAL MOTIVATIONS OF RIGHT- WING AUTHORITARIANISM AND SOCIAL DOMINANCE ORIENTATION AND THEIR RELATION TO WAR AND PERCEPTIONS OF THREAT	Phil Dunwoody	Psychology
Jackson, Theresa	THE EFFECTS OF PARTICIPATING IN STRUCTURED RHYMING ACTIVITIES ON PRESCHOOL CHILDREN'S PHONOLOGICAL AWARENESS	Mark McKellop	Psychology
Voland, James	DEAFBLINDNESS: A CASE STUDY IN RESILIENCE	Kathleen Biddle	Education
Dickey, Carlee	A LOOK INSIDE PHARMACEUTICAL ADVERTISEMENTS	Grace Fala	Communication
Milheim, Jessica	CHILDREN'S TOY ADVERTISEMENTS	Grace Fala	Communication

Art Performances and Exhibitions

Concert on the Plaza

11:45-1:15, Location: Plaza facing Kennedy. Rain location: Rosenberger Auditorium stage. Faculty Sponsors: James Latten and Matt Dingo

Jazz ensemble: Tara Fitzsimmons '00 (alto sax), Seabury NeuCollins (alto sax), Logan Barkman (tenor sax), Steve Schmitt (clarinet), Josh Fishel (bari sax), Tyler Kochel (trumpet), Doug Wennick (trumpet), Kenny Goodfellow (trumpet), Aaron Shotts (trumpet), Adam Fehn (trombone), Sara Bean (piano), Aggie Kwon (piano), Dan Popernack (drums), Jordan Campbell (drums and percussion), Sergio Lopez (drums and percussion), Chris Hegland (bass)

PVC pipe percussion: Kelley Stewart, Bridget Hughes, Katy Vanderau, Sergio Lopez, Seabury NeuCollins

Saxophone quartet: Dwight Bard (alto sax), Andy Fornadel (alto sax), Logan Barkman (tenor sax), Josh Fishel (bari sax)

MU210, Music Improvisation: Matt Dingo (guitar), Philip Dunwoody (electric bass), James Latten (drums), Tyler Kochel (trumpet), Jason Hoover (piano), Eric Hoover (guitar), Dan Cook-Huffman (piano), Andy Papale (guitar), Mike Wilson (guitar), with special guest Marci Chamberlain (vocals)

Art in von Liebig Center for Science

9:00-5:00, Lobby. Faculty sponsors: Monika Malewska and Bethany Benson

Painting AR-300: Erin McVicar, Diahann Mosier, Marian Orlousky, Erica Strang, Matthew Wren

Photo AR-308: Hiryan Borade, Ashley DeMauro, Justin Guyer, Cristin Hand, Marian Orlousky, Whitney Rhodes, Christopher Shannon, Neil Perrin, Eric Martin

Design AR-104: Jennifer Farber, Jon Guyer, Kelsey Hoffman, Jeffrey McGoldrick, Lindsey Mellott, Kelly Popernik, Chloe Pott, Anthony Willis

Ceramics: Roy Holm, Jesse Parsons, Kelly Finan, George Drobnock, Jarrad Silver, Zuzana Baranova

Book Arts: Nora Wainwright, Kelly Carnahan, Amelia Hewner, Justin Bell

3-D Foundations: Jake Weller, Yuta Saito, Michael Pearson, Tyler Sasala, Charles (Wylie) Earnhart, Yao (Joy) Li, Jason Leonard

Bright Visions Program

Faculty Sponsor: Andrew Belser

Location:	Movement Studio	Suzanne von Liebig Theatre
7:30 p.m.	The Country Wife - Act IV, Sc.2,	The Proposal - a One Act Play,
	by William Wycherly	by Anton Chekhov
	Directed by Kellyn Miller	Directed by Gerald Prosser
	Performed by: Megan Monahan as	Performed by: Alyssa Erb as Stepan
	Margery Pinchwife; Wylie Earnhart as	Chubukov; Melissa Mellon as Natalia
	Pinchwife	Stepanovna; Adam Vachon as Ivan Lomov
8:00 p.m.	The Tempest - Act II Sc. 2,	The Philadelphia - a One Act Play,
	by William Shakespeare	by David Ives
	Directed by Mandi Yeager	Directed by Tricia Bitetto
	Performed by: Josh Beckel as Caliban;	Performed by: Skye Hatton-Hopkins as
	Aggie Kwon as Stephano; Rachel	Mark; Noah Denton as Al; Rachel Domoff
	Gressick as Trinculo	as the Waitress
8:30 p.m.	<i>Marisol</i> – Act I, Sc. 4,	Sonnets for an Old Century –
	by José Rivera	selected monologues, by José Rivera
	Directed by Andrea Locke	Directed by Megan Monahan
	Performed by: Laura Weber as Marisol;	Performed by: Jordan Long; Skye Hatton-
	Alyssa Erb as The Angel	Hopkins
9:00 p.m.	Baby with the Bathwater – Act II, Sc. 4,	True West - Scene 8,
	by Christopher Durang	by Sam Shepard
	Directed by Danielle Rohar	Directed by Adam Vachon
	Performed by: Josh Beckel as Daisy;	Performed by: Wylie Earnhart as Lee;
	Katie Dickey as Voice	Peter Mike-Mayer as Austin