



At High Point University,
every student receives an extraordinary education in an
inspiring environment with caring people.SM



HIGH POINT UNIVERSITY

833 Montlieu Avenue
High Point, NC 27262 USA
highpoint.edu



PRESENTING THE FIRST

HIGH POINT UNIVERSITY

Research & Creativity Symposium



2012



Welcome from the Director of Undergraduate Research and Creative Works

Welcome to the First High Point University Research and Creativity Symposium (High-PURCS). High Point University is an institution which fosters intellectual and creative scholarship through student engagement and student-faculty collaboration. Our students do significant work and regularly share their intellectual and creative contributions in their disciplines at professional national and regional conferences. However, High-PURCS is an opportunity for students to showcase their work here on campus so HPU students, faculty, and staff can witness our students' professional development and gain a glimpse of tomorrow's future leaders, artists, teachers, and scholars. At this first symposium, we have 58 students from 16 departments showcasing 46 presentations. Their achievement is a reflection of HPU's holistic learning approach and the dedication of caring faculty. Thank you for being a part of our First High Point University Research and Creativity Symposium.

Joanne Altman

Dr. Joanne D. Altman,
Director of Undergraduate Research and Creative Works



Special acknowledgement goes to the Committee of Undergraduate Research and Creative Works for their dedication and hard work on behalf of the Office of Undergraduate Research and Creative Works.

Committee Members

Dr. Jana Spain, Chairperson
Dr. Jeffrey Adams
Mr. David Bryden
Dr. Bill Carpenter
Dr. Deborah Danzis

Dr. Chris Fowler
Dr. Terrell Hayes
Dr. Judy Isaksen
Dr. Dustin Johnson
Dr. Ed Piacentino

Dr. Kimberly Reich
Mr. Roger Shore
Dr. Premalata Sundaram
Dr. Aaron Titus
Dr. John Turner

The First High Point University Research and Creativity Symposium

2012

Schedule of Events

Wednesday, April 25
Phillips Hall

10:00–10:10 AM	Opening Remarks	Phillips 120
10:15–10:30 AM	Performance	Phillips 120
	Oral Presentations, Session I	Phillips 2nd Floor
10:35–10:50 AM	Oral Presentations, Session II	Phillips 2nd Floor
10:55–11:10 AM	Oral Presentations, Session III	Phillips 2nd Floor
11:15 AM–12:00 PM	Posters	Phillips Lobby



Oral Presentations

Phillips Hall, Second Floor

Room							
220	215	216	222	217	218	221	223
Topic							
Human Relations, Sociology, and Nonprofit Studies	Psychology/ Education	Communication/ English	History	Art/ Modern Foreign Language	Political Science/ Economics	Math	Live-streaming Video
Session I 10:15 AM -10:30 AM							
Kelsey Fraser	Nicole Chrysson	Ashlee Branch	Shana Sally	Willem Morin	Taylor Zickefoose	Salvatore Pezzino	Lindsay Sugarman
Session II 10:35 AM - 10:50 AM							
Martin Stern	Alicia Berry	Sterling Lund	Matt Domboski	Allie Dearie & Kayla Buechner	Kelsey Hinchliffe	Allison Thomson & Elizabeth Walburg	Lauren Zimmerman
Session III 10:55 AM- 11:10 AM							
Kevin Trow		Miah Saunders		Kelsey McLaughlin	Dylan McNiff & Nolan Kendrick	Bradley Taylor	Samantha Allen

Performance

Room	Phillips 120
Topic	Theatre
Session I 10:15 AM - 10:30 AM	Courtney Bedgood, Courtney Feiman, Jared Goldenberg, DeAnna Hughes

	Name	Department	Title
1	Robin Fain	Psychology	Eye Remember: Continuing to Improve Episodic Memory
2	Lauren Reese	Psychology	Seeking Connection or Protection in Close Relationships as a Function of Situational and Dispositional Factors
3	John Purcell	Psychology	What Makes a Siren Sultry: Investigating the Attractiveness Stereotype in Vocal Performance
4	Rachel Sniff	Education	The Transition from Elementary to Middle School: Understanding Achievement Loss per Student Transitional Concerns
5	Colleen Ehatt	Criminal Justice	Regional Differences In Sentencing Practices
6	Martin Stern	Political Science	"Development" and Its Failures in Sub-Saharan Africa
7	Zoe Rogers	Interior Design	"When the East Meets the West"
8	Catherine Ruvolo	Interior Design	Design of a Throne Room through the Historical Moroccan Style
9	Briana Perkins	Interior Design	An Asian Inspired Throne Room
10	Kayla Kucerik	Interior Design	A Throne Room with an Antonio Gaudi Twist
11	Anne Beuker, Sarah Hudak, Meghan McCloskey, Ali Kihm, Ali Soicher	Interior Design	Designing a Modern Public Media Center
12	Anne Beuker	Interior Design	Map to a New School of Art and Design
13	Caitlin Margolien	Theatre	"Twelfth Night's" Sir Toby Belch; Costume Design
14	Laura Reese	Math	Newton's Calculus
15	Anthony Abbate	Biology	Parasitic beechdrops (Epifagus virginiana): A possible ant pollinated plant
16	Ashley Galway	Biology	Comparison of two different Malaise traps in Forested Plots within the Green River Basin, North Carolina
17	Amanda Starring	Biology	A Pollination Study of Hymenocallis coronaria in the Catawba River, SC.
18	Amelia Morgan & Zak Kronquist	Biology	MRSA in the Gym: Do common cleaning supplies eliminate MRSA from standard work-out equipment?
19	Paige Coleman	Chemistry/ Physics	Activated Psyllium for use as an Iron Chelating Agent
20	Jennifer Pearson & Miranda Zupp	Chemistry/ Physics	An Experimental Determination of the Diffusion Coefficient of Ammonia in Glassy Polystyrene
21	Natalie Reiersen & Garrett Stewart	Chemistry/ Physics	Apoptosis Inducing Factor: Optimal pH of enzymatic function
22	Ariana Dale & Angela Gimenez	Chemistry/ Physics	Behavior of a Cylinder as it Moves Through Fluids
23	Alek Adkins	Chemistry/ Physics	Sulfonation of Polystyrene: Turning Styrofoam® Waste into a General Acid Catalyst

Oral Presentations 10:15 - 11:10

Human Relations, Sociology, and Nonprofit Studies Phillips 220

10:15 AM

The Millennial Student: The Interaction Between Students and Technology in Higher Education

KELSEY FRASER

Mentor: Dr. Joshua Fisher, Human Relations, Sociology, and Nonprofit Studies

As our world becomes more connected than ever, noticeable changes in college student behavior reflect the influence that technology has on the academic environment. My research looks at the role that technology plays in higher education and the new set of expectations its presence has created which may contribute to common student behaviors.

10:35 AM

Circles of Control: Security as a Public Relations and Safety Mechanism at a Liberal Arts University

MARTIN STERN

Mentor: Dr. Joshua Fisher, Human Relations, Sociology, and Nonprofit Studies

This research project looks at the way in which security is created and operates within a small liberal arts university. Findings suggest that security operates in a way that protects physical safety, while also seeking to protect and enhance the image of the university.

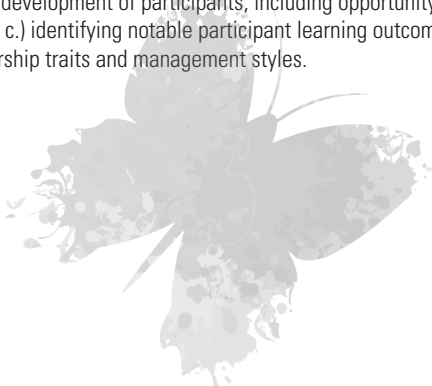
10:55 AM

Exploring the Authentic Process of Outdoor Education: Outcomes of Participation and Traditional Career Success

KEVIN TROW

Mentor: Dr. David Bergen, Human Relations, Sociology, and Nonprofit Studies

This presentation is a literature review on the process and outcomes of outdoor education. We will discuss the process and outcomes in the context of a.) identifying six notable structural characteristics of outdoor education courses, b.) highlighting the importance of deliberate curricular aspects on the development of participants, including opportunity for leadership, and instructor mentoring, and c.) identifying notable participant learning outcomes and linking them to successful personal leadership traits and management styles.



Psychology/ Education Phillips 215

10:15 AM

Perceived Parental Control: Implications for Autonomy and Risk-taking among College Students

NICOLE CHRYSSON

Mentor: Dr. Kirsten Li-Barber, Psychology

Gender differences in parental control in adolescents were examined in 56 college students and no significant difference was found. In addition, a slight but not significant correlation was found between autonomy levels and perceived parental control. Finally, there was no significant correlation between levels of parental control and risk-taking.

10:35 AM

Evaluation of an Innovative Program Utilizing School Psychologists to Train Education Majors on Response to Intervention (Rtl)

ALICIA BERRY

Mentor: Dr. Sarah Vess, Education

This research will explore the efficacy of a program that affords HPU students practical experience in conducting interventions for elementary-age students involved in the Response to Intervention (Rtl) process by pairing them with a local school psychologist. Recommendations based on survey and interview data will be presented.

Communication/ English Phillips Hall 216

10:15 AM

Glamorization of Casual Sex in the Media: The Effects on Gender Roles and Sexual Behavior in Society

ASHLEE BRANCH

Mentor: Dr. Judy Isaksen, Communication

This paper- using cultivation analysis and social learning theories- will do a longitudinal cultural/ critical examination of the glamorization of casual sex in the media and the changing effects that it has on gender roles and sexual behavior in society.

10:35 AM

American Beauty - A Closer Look at the Shallow Realities Behind the Illusions of Happiness

STERLING LUND

Mentor: Dr. Judy Isaksen, Communication

Using aspects of Marxist theory as well as visual pleasure theory, I will explore the issues of hegemony and prevalent ideologies that dominate suburban America, illustrated in the 1999 award-winning film, American Beauty, as well as reveal the problems that arise when people try to hide the truth.

10:55 AM

Ever After

MAIA SAUNDERS

Mentor: Dr. Leah Schweitzer, English

Ever After is a digital story that utilizes text, video effects, images, and dialogue to build narrative. Though Ever After is very much a story about death and dying, at its core, it explores the idea of existence after death through the eyes of a young, terminally ill narrator.

History Phillips Hall 222

10:15 AM

From Furman to Gregg: The Swift Change in Death Penalty Jurisprudence in Georgia

SHANA SALLY

Mentor: Dr. Paul Ringel, History

In 1972, the United States Supreme Court ruled that the death penalty, as applied in Georgia, was unconstitutional under the Eighth and Fourteenth Amendments. Four years later, however, the Supreme Court found Georgia's new statute to be constitutional. This presentation will examine the historical circumstances that led to the rapid changes in death penalty jurisprudence.

10:35 AM

Legal Developments of Free Speech During Times of War: A Study of The Civil War and World War I

MATT DOMBOSKI

Mentor: Dr. Paul Ringel, History

This is a study of The Civil War and World War I's impact on the freedoms of speech in the first amendment. This is a look into how the developments of war and the decisions of the executive branch shaped the interpretations of the freedom of speech clause in the 1st Amendment.

Art Phillips Hall 217

10:15 AM

Fra Angelico: Challenging the Limits of Early Renaissance Painting

WILLEM MORIN

Mentor: Dr. Anna Piperato, Art

Fra Angelico (c. 1395-1455) was an Italian Renaissance artist who manipulated the pictorial elements of his work in order to create diachronic/synchronic incongruities. His distortions of time and space were intended to generate "dialogue" between his audience and his works, in hopes of catalyzing spiritual contemplation in his viewers.

10:35 AM

Is Printmaking Art?

ALLIE DEARIE and KAYLA BUECHNER

Mentor: Dr. Anna Piperato, Art

What do you consider art? This question is intrinsic to the discussion of printmaking. We will examine prints and printmaking techniques throughout history, from an artistic as well as practical viewpoint.

10:55 AM

Isolation, Irony, and American Influence: Towards a New Definition of Italian Neorealism
KELSEY MCLAUGHLIN

Mentor: Mr. David Cane, Modern Foreign Language

Focusing primarily on the early films by directors Roberto Rossellini and Vittorio De Sica, this presentation seeks to identify and examine some of the oft-ignored thematic and aesthetic traits that define Italian neorealist cinema, beyond those superficial elements which are usually mentioned as the staples of the movement.

Political Science/ Economics
Phillips Hall 218

10:15 AM

First in War, First in Peace and First in the American Family: The Role and Influence of First Ladies in Modern American Politics

TAYLOR ZICKEFOOSE

Mentor: Dr. Alixandra Yanus, Political Science

Using the case studies of Hillary Clinton, Laura Bush and Michelle Obama, this paper analyzes the roles of the First Lady, the factors likely to make her popular and how her popularity relates to the popularity of her husband, the President.

10:35 AM

Social Media and Civic Engagement

KELSEY HINCHLIFFE

Mentor: Dr. Alixandra Yanus, Political Science

This study analyzes the impact of social media on traditional political participation as well as its impact on new forms of civic engagement. I hypothesize that social media will not translate into increased traditional participation but may in fact lead to increased civic engagement.

10:55 AM

Sweden: A Well Adapting and Envied Economic Model

DYLAN MCNIFF and NOLAN KENDRICK

Mentor: Dr. Michael McCully, Economics

Sweden has become an envied economic model due to its extensive welfare benefits and high standard of living. This is explainable by its neutrality in WWII and the Cold War, its work ethic, its adaptability in economics and politics, and its refusal to convert to the Euro.

Math Phillips Hall 221

10:15 AM

The Mathematics of Medical Imaging

SALVATORE PEZZINO

Mentor: Dr. Edward Fuselier, Mathematics and Computer Science

We will discuss the mathematics that drives medical imaging, which is used to produce pictures of the inside of a body without having to perform surgery. We will present the mathematical processes behind image recovery from X-ray beam data, and describe techniques to improve the quality of the image.

10:35 AM

Pythagoras of Samos

ALLISON THOMSON and ELIZABETH WALBURG

Mentor: Dr. Karen O'Hara, Mathematics and Computer Science

The life and contributions of the Greek philosopher and mathematician Pythagoras influenced much of modern mathematics. His perspective on the relationship between the natural world and number theory greatly changed the way other intellectuals developed theories. The unique Pythagorean School also played a significant role in Greek Mathematics and inspired future mathematicians.

10:55 AM

Investigating the Golden Section

BRADLEY TAYLOR

Mentor: Dr. Karen O'Hara, Mathematics and Computer Science

The Golden Section defines a ratio between the sum of the parts and the whole. As far back as the Ancient Greeks, mankind has unconsciously been drawn to this ratio in designing art and architecture. This investigation will delve into mankind's uncanny attraction to this ratio.

Live-Stream Session Phillips Hall 223

10:15 AM

The Aesthetic Effect of Florentine Renaissance Statues on Public Audiences

LINDSAY SUGARMAN

Mentor: Dr. Anna Piperato, Art

The effect that Florentine religious statues had upon public audiences during the Renaissance is examined, focusing on audience perception and aesthetic experience. The result shows a secularization of the works that renders them symbolic, representative not only of their biblical origins, but also of their artists, commissioners, and Florence itself.

10:35 AM

Power and Sensitivity: Influences on Work Behavior

LAUREN ZIMMERMAN

Mentor: Dr. Deborah Danzis, Psychology

This study examines the effects of the possession of interpersonal power on accuracy in recognizing facial expressions and sensitivity in interpersonal behaviors. Additionally, the study assesses multiple personality characteristics, including extraversion, dominance, and tolerance, to determine if these variables act as moderators of the power-sensitivity relationship.

10:55 AM

Real Data Fitting with Complex Analysis

SAMANTHA ALLEN

Mentor: Dr. Edward Fuselier, Mathematics & Computer Science

The method of fitting data using radial basis functions can be extremely useful. However, due to limits of the computer's capabilities, in some cases it is impossible to employ this method using traditional means. We avoid this by moving into the complex plane - yielding surprisingly accurate results.

Performance
Phillips Hall, room 120

10:15 AM

American College Theatre Festival Scene Presentations

**COURTNEY BEDGOOD, COURTNEY FEIMAN,
JARED GOLDENBERG, and DEANNA HUGHES**

Mentor: Mr. Jay Putnam, Theatre

Selected students who have been nominated for outstanding performance work in HPU Theatre productions (Thoroughly Modern Mille, True West, Crimes of The Heart, and Urinetown, The Musical) will present scenes with partners (Marisa Brown, Brandon Browning, Justin Beard, and Daniel Harr). These scenes were performed in competition at the American College Theatre Festival in February 2012.

Poster Session
Phillips Hall Lobby
11:15 AM-12:00 PM

1. Eye Remember: Continuing to Improve Episodic Memory

ROBIN FAIN

Mentor: Dr. Kimberly Wear, Psychology

Evidence suggests that eye movements increase communication between hemispheres, increasing retrieval of episodic memories. The current series addressed the lack of systematic investigation of the speed of saccades or the length of time the improvement lasts. The results support saccade induced retrieval enhancement and suggest that retrieval depends in part on saccade rate.

2. Seeking Connection or Protection in Close Relationships as a Function of Situational and Dispositional Factors

LAUREN REESE

Mentor: Dr. Sadie Leder, Psychology

The current work examines when people seek connection vs. prioritize protection in their close relationships. Specifically, this research investigates whether situational variables, like rejection salience, and dispositional variables, like self-esteem, interact to influence when people approach best friends vs. romantic partners.

3. What Makes a Siren Sultry: Investigating the Attractiveness Stereotype in Vocal Performance

JOHN PURCELL

Mentor: Dr. Sadie Leder, Psychology

This study evaluated the impact of facial attractiveness on the perception and evaluation of vocal performance and mate selection. It further investigated the physical attractiveness stereotype in a vocal performance setting while also examining the impact of risk regulation and gender differences.

4. The Transition from Elementary to Middle School: Understanding Achievement Loss per Student Transitional Concerns

RACHEL SNIFF

Mentor: Dr. Shirley Disseler, Education

The information presented serves as an encompassing research study pertaining to the achievement level scores throughout the transition from elementary to middle school. An emphasis on student concerns throughout the transition, and transitional programs is presented so as to provide awareness of the relations between transitional concerns and achievement levels.

5. Regional Differences In Sentencing Practices

Heather Ahn-Redding, COLLEEN EHATT, Ron Lamb and Bonnie Caster

Mentor: Dr. Heather Ahn-Redding, Criminal Justice

This study examines regions of the U.S. for differences in punishment practices and draws upon Borg's idea of "southern subculture of punitiveness" and historically based conceptions that the South is harsher. Results show that regions in the U.S. appear more similar than dissimilar in their use of various sanctions.

6. "Development" and Its Failures in Sub-Saharan Africa

MARTIN STERN

Mentor: Dr. Mark Setzler, Political Science

This research project examines the current state of international development in Sub-Saharan Africa. The study looks at why so little has been achieved over the last fifty years and offers insight as to what can be done to improve the situation.

7. When the East Meets the West

ZOE ROGERS

Mentor: Mr. Jerry Leimenstoll, Home Furnishings and Interior Design

I designed a throne room inspired by ancient India and Britain, entitled "When the East Meets the West." The process consisted of historical and cultural research, taking this information and generating appropriate color schemes, patterns, and spatial concepts. The result was an innovative interior with historical inspiration.

8. Design of a Throne Room through the Historical Moroccan Style

CATHERINE RUVOLO

Mentor: Mr. Jerry Leimenstoll and Mr. John Linn, Home Furnishings and Interior Design

I designed a throne room to reflect rich Moroccan culture which has a deep influence from religion, with the addition of eclecticism. Moroccan elements include glass lanterns, ornate curve windows and doors, and exotic art.

9. An Asian Inspired Throne Room

BRIANA PERKINS

Mentor: Mr. Jerry Leimenstoll, Home Furnishings and Interior Design

Research for this project on historical thrones led to my design of an Asian themed throne room modeled after the Japanese Shinto religion and Indian Culture. The throne room uses the importance of the four elements of the Shinto religion and the importance of color in the Indian Culture.

10. A Throne Room with an Antonio Gaudi Twist

KAYLA KUCERIK

Mentor: Mr. Jerry Leimenstoll, Home Furnishings and Interior Design

The task was to create a unique throne room integrating historical research with personal style. It developed by assessing the design process and asking how to integrate the concepts into one cohesive design. Through my inspiration from architect Antonio Gaudi, I created an exciting, distinct space guided by historical precedents.

11. Designing a Modern Public Media Center

**ANNE BEUKER, SARAH HUDAK, MEGHAN MCCLOSKEY,
ALI KIHM, AND ALLISON SOICHER**

Mentor: Ms. Cathy Nowicki, Home Furnishings and Interior Design

A group of Senior Interior Design Students from High Point University is working with the Forsyth County NC Public Library to create a programming book which will address important new design considerations needed for the construction of a new central library (media center) in Winston-Salem, NC.

12. Map to a New School of Art & Design

ANNE BEUKER

Mentors: Dr. Elizabeth Dull and Mr. Brandon Jones, Home Furnishings and Interior Design

To accommodate the growing Art and Design School at High Point University, the school proposes a new location in downtown High Point. To design a new facility to house the Art and Design School, creative research, including site analysis, historical data gathering, and interviews was necessary to assess the clients' needs.

13. "Twelfth Night's" Sir Toby Belch; Costume Design

CAITLIN MARGOLIEN

Mentor: Ms. Ami Shupe, Theatre

For the High Point University Department of Theatre's spring production season, I explored the process of designing and creating the costume for the character Sir Toby Belch of William Shakespeare's "Twelfth Night." I researched period clothing for men of the twenties and designed for a fun-loving, ale-guzzling, money-mooching uncle who seems to have just rolled out of bed, while still managing to look wealthy.

14. Newton's Calculus

LAURA REESE

Mentor: Dr. Karen O'Hara, Mathematics and Computer Science

"Newton's Calculus" is a research project exploring the life of Isaac Newton, the mathematical advances leading up to calculus, Newton's formulation of calculus, and the Calculus Controversy.

15. Parasitic Beechdrops (*Epifagus virginiana*): A Possible Ant Pollinated Plant

ANTHONY ABBATE

Mentor: Dr. Joshua Campbell, Biology

Beechdrop (*Epifagus virginiana*) is a flowering plant that is parasitic on beech tree roots. We conducted an observational study at the Piedmont Environmental Center (Guilford County, NC) to document possible pollinators of *Epifagus virginiana*. The preliminary results of our study suggest that *Epifagus virginiana* may be dependent on ants for pollination.

16. Comparison of two different Malaise traps in Forested Plots within the Green River Basin, North Carolina

ASHLEY GALWAY

Mentor: Dr. Joshua Campbell, Biology

Numerous studies have used malaise traps to monitor insect abundance for bats. We tested two different malaise traps (canopy and ground). Although the ground malaise trap captured higher abundances of insects, the canopy malaise trap may capture more insects related to bat diets.

17. A Pollination Study of *Hymenocallis coronaria* in the Catawba River, SC.

AMANDA STARRING

Mentors: Dr. Gerald Smith and Joshua W. Campbell, Biology

As a result of human activity, much of the natural habitat of *Hymenocallis coronaria*, the rocky shoals spider-lily, has been lost. Throughout the peak blooming season we observed potential pollinators of *H. coronaria* with camera equipment. Our results indicate that numerous insect species may act as a pollinator for *H. coronaria*.

18. MRSA in the Gym: Do common cleaning supplies eliminate MRSA from standard work-out equipment?

AMELIA MORGAN and ZAK KRONQUIST

Mentor: Dr. Dinene Crater, Biology

Upon sampling and identifying the prevalence of Methicillin Resistant *Staphylococcus aureus* on HPU's campus, the commonalities of the MRSA positive students were reviewed. Most of these students used the Slane Student Center gym facilities; therefore, research was then performed studying the effectiveness of cleaning supplies on gym surfaces.

19. Activated Psyllium for use as an Iron Chelating Agent

PAIGE COLEMAN

Mentor: Dr. Chris Fowler, Chemistry and Physics

Hemochromatosis is a disorder that involves the excess uptake of iron into the body. The objective of this research is to modify the structure of psyllium, a common dietary fiber supplement, by attaching a chelating agent that will bind excess iron, and prevent it from being absorbed into the blood stream.

20. An Experimental Determination of the Diffusion Coefficient of Ammonia in Glassy Polystyrene

JENNIFER PEARSON and MIRANDA ZUPP

Mentor: Dr. B. Gray Bowman, Chemistry and Physics

The diffusion coefficient of ammonia in a thin film of glassy polystyrene containing a small amount of bromophenol blue was determined by spectroscopic measurement. The color change was caused by the reaction between the weakly acidic dye and the diffusant molecule and was used to follow the diffusion phenomenon.

21. Apoptosis Inducing Factor: Optimal pH of enzymatic function

NATALIE REIERSON and GARRETT STEWART

Mentor: Dr. Eric Lewis, Chemistry and Physics

Apoptosis Inducing Factor (AIF) resides in the mitochondria and translocates to the nucleus inducing DNA degradation during an apoptotic event. AIF also has NADH oxidase activity of unknown consequence. We aim to elucidate the optimal pH at which this enzyme functions suggesting cellular location and state during enzymatic activity.

22. Behavior of a Cylinder as it Moves Through Fluids

ARIANA DALE and ANGELA GIMENEZ

Mentor: Dr. Briana Fiser, Chemistry and Physics

This experiment will mimic the behavior of the DNA molecules as they travel through a receptacle filled with different fluids so that a better understanding of how DNA molecules travel can be gained.

23. Sulfonation of Polystyrene: Turning Styrofoam ® Waste into a General Acid Catalyst

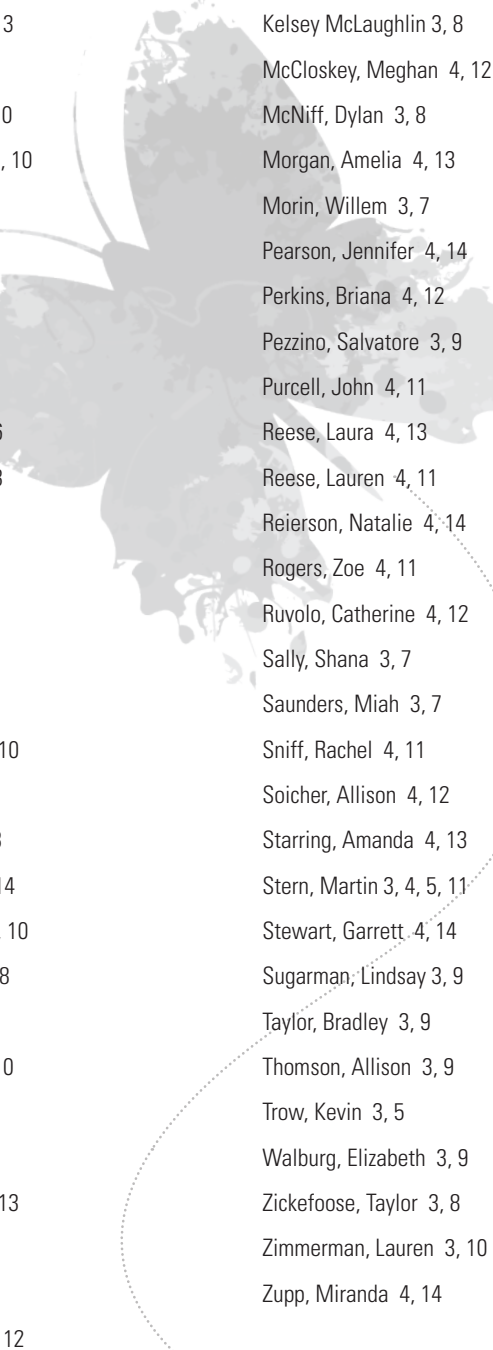
ALEK ADKINS

Mentor: Dr. B. Gray Bowman, Chemistry and Physics

This research concerns the sulfonation of polystyrene waste as a way to produce a useful product from a material typically dumped in a landfill. The sulfonation agent was sulfur trioxide from fuming sulfuric acid. Initial sulfur trioxide levels were varied to control the level of sulfonation.

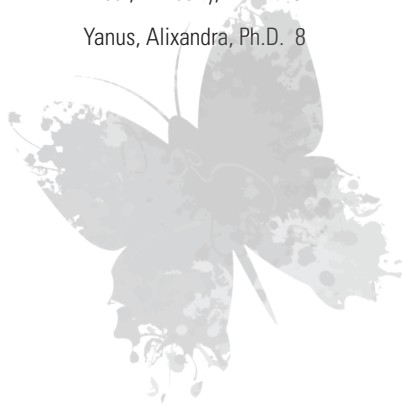


Index of Participants

- 
- Abbate, Anthony 4, 13
Adkins, Alek 4, 14
Allen, Samantha 3, 10
Bedgood, Courtney 3, 10
Berry, Alicia 3, 6
Beuker, Anne 4, 12
Branch, Ashlee 3, 6
Buechner, Kayla 3, 8
Cane, David, M.A. 8
Chrysson, Nicole 3, 6
Coleman, Paige 4, 13
Dale, Ariana 4, 14
Dearie, Allie 3, 8
Domboski, Matt 3, 7
Ehatt, Colleen 4, 11
Fain, Robin 4, 10
Feiman, Courtney 3, 10
Fraser, Kelsey 3, 5
Galway, Ashley 4, 13
Gimenez, Angela 4, 14
Goldenberg, Jared 3, 10
Hinchliffe, Kelsey 3, 8
Hudak, Sarah 4, 12
Hughes, DeAnna 3, 10
Kendrick, Nolan 3, 8
Kihm, Ali 4, 12
Kronquist, Zakary 4, 13
Kucerik, Kayla 4, 12
Lund, Sterling 3, 6
Margolien, Caitlin 4, 12
Kelsey McLaughlin 3, 8
McCloskey, Meghan 4, 12
McNiff, Dylan 3, 8
Morgan, Amelia 4, 13
Morin, Willem 3, 7
Pearson, Jennifer 4, 14
Perkins, Briana 4, 12
Pezzino, Salvatore 3, 9
Purcell, John 4, 11
Reese, Laura 4, 13
Reese, Lauren 4, 11
Reierson, Natalie 4, 14
Rogers, Zoe 4, 11
Ruvolo, Catherine 4, 12
Sally, Shana 3, 7
Saunders, Miah 3, 7
Sniff, Rachel 4, 11
Soicher, Allison 4, 12
Starring, Amanda 4, 13
Stern, Martin 3, 4, 5, 11
Stewart, Garrett 4, 14
Sugarman, Lindsay 3, 9
Taylor, Bradley 3, 9
Thomson, Allison 3, 9
Trow, Kevin 3, 5
Walburg, Elizabeth 3, 9
Zickefoose, Taylor 3, 8
Zimmerman, Lauren 3, 10
Zupp, Miranda 4, 14

Index of Mentors

Ahn-Redding, Heather, Ph.D.	11	Lewis, Eric M., Ph.D.	14
Bergen, David, Ph.D.	5	Li-Barber, Kirsten, Ph.D.	6
Bowman, Gray, Ph.D.	14	Linn, John, M. Arch.	12
Campbell, Joshua, Ph.D.	16	McCully, Michael, Ph.D.	8
Cane, David, M.A.		Nowicki, Cathy, M.S.	12
Crater, Dinene, Ph.D.	13	O'Hara, Karen, Ph.D.	9, 13
Danzis, Deborah, Ph.D.	1, 10	Piperato, Anna, Ph.D.	7, 8, 9
Disseler, Shirley, Ed.D.	11	Putnam, Jay, M.F.A.	10
Dull, Elizabeth, Ph.D.	12	Ringel, Paul, Ph.D.	7
Fiser, Briana, Ph.D.	14	Schweitzer, Leah, Ph.D.	7
Fisher, Joshua, Ph.D.	5	Setzler, Mark, Ph.D.	11
Fowler, Chris, Ph.D.	13	Shupe, Ami, M.F.A.	12
Fuselier, Edward, Ph.D.	9, 10	Smith, Gerald L., Ph.D.	13
Isaksen, Judy, Ph.D.	1, 6	Vess, Sarah, Ph.D.	6
Jones, Brandon, M.S.	12	Wear, Kimberly, Ph.D.	10
Leder, Sadie, Ph.D.	11	Yanus, Alixandra, Ph.D.	8
Leimenstoll, Jerry	11		



We offer deep appreciation to our faculty mentors of student research and creative endeavors. The success of our students depends on the efforts of committed and caring faculty!

