

# *The Honors School Annual Research Conference 2007*

## *Second Annual Honors School Research Conference*

**Bey Hall, H.R. Young Auditorium  
Saturday, April 28, 10:00 a.m. – 3:00 p.m.**

It is with great pleasure that The Honors School presents its  
Second Annual Research Conference

Student presenters include research in the fields of:

Mathematics  
Political Science  
English

Psychology  
Communication  
History

Technology

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### *Order of Events*

10:00 a.m. Welcoming Remarks—Dr. Thomas S. Pearson,  
Provost and Vice President for Academic Affairs

SESSION ONE 10:20–1:00

Meghan Moratelli  
Ann Welsh  
Lauren Korcz  
Alanna Raines  
Josh Hammond  
Catherine Heredia  
Karo-Jae Bryan  
Lauren Ciraulo

SESSION TWO 1:30–3:00

Erinn Deignan  
Dan Duffy  
Stacey Ciprich  
Robert Cornero

BREAK 1:00–1:30

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*Additional students completing Thesis but unable to attend include:*

Alena Competello, Anthony D'Amico, Krystle Hinds, Lindsay Pino,  
Preethi Pirlamarla, and Timothy Swartz

*\*\*Please see last page of program for Thesis titles, Chief Advisors and Second Readers.*

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**MONMOUTH  
UNIVERSITY**

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## PRESENTERS

Karo-Jae Bryan

**Iran's Nuclear Ambitions: Balancing Power for Stability**

**Abstract:** The purpose of this paper is to critically examine the reason behind Iran's desire to pursue nuclear ambitions and obtain nuclear weapons and the validity of the US opposition to it. This requires examining the current status of political realism and its solutions thus far as it pertains to power relations in this section of the world. It is also important to determine whether the implementation of Kantian philosophy, concurrent with deterrence theory, will aid in finding a solution to the current Iranian "dilemma." Finally, the focus will explore the current inclusion/exclusion policy as it concerns Iran and Israel, and to determine whether or not the possession of weapons by Iran is as big a threat as it has been heralded to be or whether the pursuit of all nuclear ambitions by Iran could lead to stability in the country as well as in the Middle Eastern region.

Chief Advisor: Dr. Rekha Datta

Second Reader: Dr. Saliba Sarsar

Stacey Ciprich

**Debunking the Cleavers: Why Americans are Trying to Achieve an Invented Ideal**

**Abstract:** This thesis is based on the belief that people today in America idealize the image of the 1950s family to such an extent that it models modern family behavior even now, fifty years later. This "ideal," through historical analysis, did in fact NOT exist and only by the use of the media and other propaganda techniques, such as the invention of the television, is this belief reified today and allows for the existence of this ideal family to dominate popular familial definitions.

Chief Advisor: Dr. Katherine Parkin

Second Reader: Professor Jean Spears

Lauren Ciraulo

**Elements of Social Consciousness for Urban Poverty through the Evolution of New Journalism**

**Abstract:** With literary journalism as the basis, progressive muckrakers trumped social convention and exposed the widespread devastation of poverty in the bowels of America's most prosperous cities. Nearly 80 years later, after three wars of silence, the New Journalists revitalized journalism's social consciousness by attacking the vastly different city slum life of the 1960's. However, it is only recently that the New New Journalism has taken an intimate stance against urban poverty by borrowing the reporting skills and literary styles of the earlier genres. The purpose of this thesis will be to chronicle and dissect the techniques of muckrakers and New Journalists so as to synthesize their styles with the styles of the New New Journalists. The journalistic tendencies within all three genres are interrelated; all use facts and observations for the foundation for their work but also use creative, literary, and largely fictional approaches in order to make an impact in society. Through a deep analysis of several works all pertaining to urban poverty, it will be documented how these journalists handle this societal issue throughout history, but it will also be predicted how the current trend of the New New Journalists will affect urban poverty in the future. Furthermore, through following the evolution of New Journalism, it might be possible to predict the bleak circumstances of urban poverty which propels the social consciousness of New Journalism and the direction that the genre may take next.

Chief Advisor: Professor John Morano

Second Reader: Professor Aaron Furgason

Robert Cornero

**MU Pulse: An Exploration in Online Information Management**

**Abstract:** This thesis provides and proposes a framework for the dissemination of all events and related information on campus at Monmouth University using a variety of programming languages and products while simultaneously relying heavily on open-source systems to produce a clearly organized, visually appealing, database-driven web portal for both students and faculty. The project was originally brought about by an expansion initiative for the existing online bulletin board system. It quickly grew in both scope and purpose, seeking to become a main channel through which campus information is communicated to both students and faculty. Soon it became apparent that the current means of information dissemination were woefully inadequate and outdated, failing to reach a large portion of the university population. This project was proposed as a pilot to solve this problem. Through the use of an open-source Content Management System (CMS), an easy to use portal was eventually constructed, allowing for the type of media convergence that only online technologies can provide, neatly managed through a relatively simple and intuitive user interface. Should the interface be adopted by the University, it quite literally has the potential to affect thousands of people in Monmouth University and the surrounding community.

Chief Advisor: Dr. Maureen Paparella

Second Reader: Dr. Eugene Simko

Erinn Deignan

**F. Scott Fitzgerald's novel This Side of Paradise**

**Abstract:** One of life's mysteries is the question of the existence of God. The believer cannot prove to the unbeliever that there is a God, and the unbeliever cannot prove to the believer that there is not. Perhaps this is because both proofs rest on the same premise; a belief in the existence of one constant truth. F. Scott Fitzgerald's novel This Side of Paradise explores the existence of this truth and how its absence affects society as a whole through its youth. The novel's main character, Amory, is an amalgamation of the ideas of the characters around him. These ideas can be classified into two seemingly diametrically opposed schools of thought: the traditional ideas of the Roman Catholic Church, and the social values of American youth in the early 1900's (1910-1919). Upon closer examination, the two schools of thought and the characters of which they are composed are more similar than are different not because the morals and values of the Church and society are similar, but because in post-World-War- American society, pure goodness, like pure evil, is hard to find.

Chief Advisor: Dr. Stanley Blair

Second Reader: Dr. Lisa Vetere



## PRESENTERS (cont.)

Dan Duffy

**Nihilism and Existentialism in Chuck Palahniuk's *Fight Club***

**Abstract:** With focus on the works of Friedrich Nietzsche, Fyodor Dostoevsky, and Chuck Palahniuk, this thesis will analyze the links between philosophy and literature and how they are used not only to explain philosophy, but also how philosophy is used as a literary device in the novels. The main works focused on are Nietzsche's *The Gay Science* and *Thus Spoke Zarathustra*, Dostoevsky's *Notes From Underground*, and Palahniuk's *Fight Club*. Also included will be excerpts from works by Soren Kierkegaard and Jean-Paul Sartre. The goal in this thesis is to portray the relevance of the nihilistic and existential philosophy in each of these works, ultimately ending with the most modern work, *Fight Club*. Little academic work has been done on this novel, and it does offer much to the philosophical as well as the literary field. This thesis will show how plot and characters are used to explain existentialism and nihilism, and how these connect with each work. When portraying these philosophical concepts in literature, there are specific unifying themes that tie each work together. These themes, as soon to be described in further detail, are: the role of God in existentialism, how it is possible to be a preacher of existentialism, descending and ascending journeys, and an enemy of existentialism. These roles are characteristic of each of the works discussed. They are universal factors in producing an important piece of literature that reflects heavily on existentialism and nihilism.

Chief Advisor: Dr. David Tietge

Second Reader: Dr. Stuart Dalton

Joshua Hammond

**Running out of Gas: U.S. Energy Policy in the 21<sup>st</sup> Century**

**Abstract:** This thesis is a case study of current U.S. energy policies and an evaluation of those policies in regard to their effect on the environment. More specifically, this thesis assesses whether or not current U.S. policies meet the threat of global warming. A comprehensive review of our energy policies is essential because the energy policies of today will greatly affect the world of tomorrow. All of the branches and divisions of government related to energy policy have been studied, with particular attention paid to legislation passed by the President and Congress. Expert analysis from the scientific community that focuses on the use of energy and its effect on the environment has also been evaluated. During the course of this research it was determined that there is a strong scientific consensus that the effects of global warming are real and the results are palpable. Current policies do not appear to address adequately the threat of global warming, and swift action is needed to reduce carbon emissions and transition to sustainable and environmentally friendly sources of fuel.

Chief Advisor: Dr. Joseph Patten

Second Reader: Professor Michael Thomas

Catherine Heredia

**The Burning Bush: The Separation of Church & State in the Modern Era**

**Abstract:** The United States is a country founded on the principle of religious freedom. The Founding Fathers did not institute a national religion because they wanted to maintain a wall of separation between church and state. Today, critics believe President George W. Bush relies heavily on morality and faith when making many decisions. For instance, he rejected federally funding stem cell research claiming it is against his religious belief. Critics of the President feel that in a nation that prides itself on secularism, President Bush is breaking down the wall that separates church and state. He has even chosen to fund faith-based groups, which clearly have religious affiliations. This paper will first explore whether President Bush's faith-based initiatives violate the principle of secularism. If George W. Bush is in fact violating the separation of church and state, he is essentially doing something unconstitutional. In a secular nation, it is imperative that the President refrains from using religion when making decisions that affect the entire nation. It is also crucial to this paper to understand the goal and purpose of President Bush's faith-based initiative. This initiative was met with a lot of controversy, and it is important to discover why. In addition, this paper will find out whether President Bush told the nation he would fund faith-based groups because he really felt that they are a benefit to the citizens of America who needed intervention, or if he simply promised the evangelicals he would give religious groups money because he needed their votes. Has the faith-driven "burning Bush" kept his promises to evangelicals, or is he simply burning the bridges between him and evangelicals?

Chief Advisor: Dr. Joseph Patten

Second Reader: Dr. Mary Kate Azcuy

Lauren Korcz

**Self Variables as Predictors of Ethnocentrism and Study Abroad Interest**

**Abstract:** Study abroad can be defined as any educational program that takes place outside a specific country of origin (Kitsantas, 2004). Previous research has suggested that studying abroad at a college level can have a positive affect on students' views of the self, as well as views regarding other countries and cultures. The purpose of the present study is to examine several potential predictors of interest in study abroad and ethnocentrism, including personal growth, self-understanding, and previous study abroad experience. In a study of 426 undergraduate students from three universities in New Jersey, participants completed an online survey about their sense of self, interest in and experience with study abroad, and their ethnocentrism. As hypothesized, the number of countries visited ( $r=-.12, p=.01$ ), personal growth ( $r=-.47, p=.00$ ), and self-understanding ( $r=-.19, p=.00$ ), were negatively correlated with ethnocentrism. Further, those who expressed interest in study abroad had lower ethnocentrism ( $p=.04$ ) and higher personal growth ( $p=.00$ ) than those who were not interested. Finally, those who studied abroad in the past had higher personal growth ( $p=.01$ ) and self-understanding ( $p=.05$ ) compared to those who had not studied abroad. Taken together, these results suggest that self variables such as personal growth and self-understanding are related to ethnocentrism and interest in study abroad. Potential implications of these results on undergraduate study abroad programs will be discussed.

Chief Advisor: Dr. Gary Lewandowski

Second Reader: Dr. O.J. Sizemore

***PRESENTERS (cont.)***

Meghan Moratelli

A Mathematical Exploration of Crystallographic Groups and  
Frieze Patterns in Art and Architecture

**Abstract:** In mathematics, one dimensional and two dimensional objects can be classified according to their symmetries. Wallpaper patterns in the plane and frieze, or border, patterns are two such examples and prove to hold a special property of only admitting a finite number of possible symmetry groups. Within the architectural world, wallpaper and frieze patterns are common and have added to the beauty of many famous architectural monuments and buildings throughout the world. The patterns have been carefully studied for their symmetries within these famous architectural structures as well. This thesis provides an explanation and analysis of two dimensional crystallographic groups, or wallpaper patterns, and one dimensional crystallographic groups, or frieze patterns, by means of proving mathematical theorems and including examples of these patterns in Spanish architecture, particularly located in Segovia, Spain, which have been gathered and analyzed during a study abroad trip to Spain.

Chief Advisor: Dr. David Marshall

Second Reader: Dr. Barbara Bodner

Alanna Joy Raines

Writing Strategies to Improve the Self

**Abstract:** The present study examined the possibility that one's self-understanding (the compilation of self-concept clarity, self-esteem, & self-acceptance) can be improved through a writing exercise. Participants were asked to complete either a self-evaluation (evaluating traits/characteristics across situations), progress report (evaluating personal goals/accomplishments in terms of the past, present, and future), or write about an unrelated topic during three 20 minute sessions over the course of a week. As predicted, participants in the self-evaluation condition increased in self-understanding from pre- to post-test, compared to the control group ( $r = .11$ ;  $p = .01$ ). The self-evaluation condition increased in self-understanding compared to the progress report condition ( $r = .15$ ;  $p = .00$ ), yet the progress report condition did not significantly differ from the control ( $p = .14$ ). In contrast, perceived stress decreased pre- to post-test in the progress report condition ( $r = .24$ ;  $p = .00$ ) compared to the control. Overall, increases in self-understanding resulted in decreases in perceived stress ( $r = -.24$ ;  $p = .02$ ). These results suggest that increases in self-understanding can result from completing a self-evaluation, and completing a progress report may be beneficial for reducing stress. These findings have implications for various applied settings, such as cognitive therapy for anxiety, as well as other psychotherapeutic strategies.

Chief Advisor: Dr. Gary Lewandowski

Second Reader: Dr. Michele VanVolkom

Ann Welsh

Who's to blame for bad grades, you or your professor?:

*The effect of classroom atmosphere on test anxiety and performance*

**Abstract:** The present research looked to examine the effect of classroom atmosphere on test anxiety and performance. In regard to this project, the term classroom atmosphere encompassed two ideas, class size, as well as professor effectiveness. Class size was reported by the participant. Professor effectiveness was measured by a student satisfaction scale that considered the congruity between students' needs and the professor's teaching style. Test anxiety was measured using the Test Anxiety Inventory (TAI) and test performance was reported by the participant. The Rosenberg Scale of Self Esteem was also included. Participants were students from both Monmouth and Rutgers Universities. Results will be reported at the Honors Research Conference.

Chief Advisor: Dr. David Payne

Second Reader: Dr. O.J. Sizemore

***Additional Students Completing Thesis***

\*Alena Competello

Trauma and the Narrative: The Italian-American Evacuation and Internment  
During World War II

Chief Advisor: Dr. Lisa Vetere

Second Reader: Professor Susan Douglass

\*Anthony D'Amico

Acquiring Power: The Modern Business World and the Political and Philosophical  
Foundations in the History of Thought

Chief Advisor: Dr. Joseph Mosca

Second Reader: Dr. James Cavazzini

\*Krystle Hinds

The Mathematics of Google

Chief Advisor: Dr. Joseph Coyle

Second Reader: Dr. David Marshall

\*Lindsey Pino

Propaganda In World War I

Chief Advisor: Dr. Fred McKittrick

Second Reader: Dr. Susan Starke

\*Preethi Pirlamarla

Studying HIF-1 in the Rat Testis

Chief Advisor: Dr. Michael Palladino

Second Reader: Dr. Dennis Rhoads

\*Timothy Swartz

The GABAergic Pathway and Protein Quantification in Alcoholic Adolescent Rats

Chief Advisor: Dr. Dennis Rhoads

Second Reader: Dr. Dorothy Hutter