ABOUT THE CAS JUNIOR FACULTY SUMMER RESEARCH AWARD PROGRAM

The College of Arts & Sciences Junior Faculty Summer Research Awards program was initiated in the 2005-2006 academic year to support selected junior faculty as they develop their research and creative projects during their probationary period, a critical time in their careers. The program provides summer salary support to junior faculty for the purpose of advancing their research and creative projects and scholarship. Recipients are selected on a competitive basis.

A total of 80 awards have been made since the program’s inception, with 13, 17, 13, 11, 15 and 11 awards being made in 2006, 2007, 2008, 2009, 2010 and 2011, respectively.

ACKNOWLEDGMENTS

Sincere thanks are due to members of the College Research & Faculty Development Committee for their diligent work in reviewing the applications and selecting the recipients. We are also indebted to Mrs. Dana Kearns and Ms. Roxann Sumner, the Dean’s office staff who worked meticulously in handling the logistics involved in the application review process, award management, and the setting up of the poster presentation session. Last but not least, our gratitude goes to award recipients and all applicants for making the junior faculty summer research program the success that it is.

PROGRAM

Date: November 16, 2011
Location: First Floor Lobby, Roark Building (Refreshments served)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.30 - 3.00 pm</td>
<td>Set up</td>
</tr>
<tr>
<td>3.00 - 3.05 pm</td>
<td>Opening remarks, Dr. John Wade, Dean</td>
</tr>
<tr>
<td>3.05 - 3.40 pm</td>
<td>Poster session</td>
</tr>
<tr>
<td>3.40 - 4.00 pm</td>
<td>Interactions among recipients</td>
</tr>
<tr>
<td>4.00 - 4.30 pm</td>
<td>Clearing</td>
</tr>
</tbody>
</table>

FURTHER INFORMATION

For further information please contact:

Dr. Tom Otieno
Associate Dean for Administrative Affairs & Research

E-mail: tom.otieno@eku.edu
Phone: 622-1393
## PRESENTERS AND TITLES

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Presenter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARTS &amp; HUMANITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Robert D. Johnson</td>
<td>Researching Memory</td>
</tr>
<tr>
<td>2</td>
<td>Kimberly Creech</td>
<td>Pilot Year Outcomes of a Regional Stewardship Project for College &amp; Career Readiness</td>
</tr>
<tr>
<td>3</td>
<td>Bernardo Scarambone</td>
<td>Hidden Treasures of Contemporary Music: The Piano Works of Marlos Nobre</td>
</tr>
<tr>
<td>4</td>
<td>Christopher Jackson</td>
<td>Silence and Voices; Seen, Heard, Remembered: Composing Memory and Time</td>
</tr>
<tr>
<td>5</td>
<td>Matthew Pianalto</td>
<td>Conviction &amp; Humility</td>
</tr>
<tr>
<td><strong>NATURAL &amp; MATHEMATICAL SCIENCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Jennifer Koslow</td>
<td>Determining the Alternate Hosts of the Naturally-Occurring Fungal Rust of Jewelweed, <em>Puccinia Recondita</em></td>
</tr>
<tr>
<td>7</td>
<td>Amy Braccia</td>
<td>Current Studies in Insect Community Ecology at Eastern Kentucky University</td>
</tr>
<tr>
<td><strong>SOCIAL &amp; BEHAVIORAL SCIENCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Donald A. Varakin</td>
<td>Intention, Attention and Visual Memory</td>
</tr>
<tr>
<td>9</td>
<td>Jennifer R. Wies</td>
<td>Vicarious Trauma at the Front-Lines: The Case of Sexual Assault Nurse Examiners</td>
</tr>
<tr>
<td>10</td>
<td>Randall D. Swain</td>
<td>Political Attitudes and Participation among College Students at a Four-Year University in Eastern Kentucky</td>
</tr>
<tr>
<td>11</td>
<td>William Hatcher</td>
<td>Re-Opening a Slightly Old Debate: The Creative Class in Kentucky</td>
</tr>
</tbody>
</table>
ABSTRACTS

1

Researching Memory

Robert D. Johnson
Department of English & Theatre

In composing the first draft of my book-length manuscript, *Poser: A Mostly-True Memoir*, I relied almost entirely on memory. The memoir chronicles my time growing up in Southern California and navigating adolescence and the social complexities particular to that time and place. But in an effort to clarify some details about an encounter with a nun when I was five, I called my mother, who was there, and got a story that approximated my recollection yet contained details that had either escaped my eye or my memory.

Truth in creative nonfiction can seem malleable, especially when we consider that unlike reportage and biography, memoirists can get away with emotional truth. In other words, they are given the latitude to write things as they remember them even if, later, the facts show a degree of inaccuracy in the memory. The purpose of my project is to examine what happens when we actually conduct research into our memory of particular events and people. How much of that new information, that recovered memory, should find its way into a revision of the manuscript? Where does one draw the line and allow approximated memory to take precedent over verifiable facts?

The first half of my project was the actual research I conducted into my own past through interviews and visiting some of the actual locations about which I’d written. The second half of my project was to see how the results of that research informed, changed, and possibly improved the memoir as I revised it. Could inserting recovered memory into a manuscript filled with actual memory still read well? Would it alter the intentions of the work? And in the end, would it make the work more authentic because it’s true to the facts, or less so because it’s not true to my memory?
Pilot Year Outcomes of a Regional Stewardship Project for College & Career Readiness

Kimberly Creech
Department of English & Theatre

Recent national efforts to promote college readiness have resulted in the development of Common Core Standards (http://www.corestandards.org/, 2010). These standards articulate expectations for academic success from kindergarten to the post secondary level. Kentucky has long been a leader in educational reform with the Kentucky Education Reform Act (KERA, 1990) and continues to lead reform efforts as the first state to adopt the National Common Core Standards and the enactment of Senate Bill 1 (2009), calling for a statewide reduction in college remediation among colleges and universities.

In January 2010, four English Department faculty from Eastern Kentucky University began collaborations with targeted schools to design a high school English Transition Course (ETC) that implements college and career readiness standards for language arts. The ETC regional stewardship initiative employs a Professional Learning Community (PLC) model, meeting monthly to develop curriculum and inform literacy instruction.

This study, which uses a single group pre-test post-test design, examines the academic achievement of high school seniors (N=179) enrolled in an English Transition course at four schools, participating in the first year of a three-year pilot project. These pilot schools implemented an English Transition course fall 2010 for students who did not meet ACT benchmarks in reading and writing. Students who passed this course and met college readiness indicators on post examinations bypassed the need for college level remediation. Instruments used to measure student achievement include University approved writing prompts for on-demand essays and the Nelson Denney Reading Test (Brown, Fischco & Hanna, 1993 edition), a widely accepted, standardized exam for reading comprehension. First year paired t-test results indicate significant gains in both reading (t=-8.68, p-value <.05) and writing (t=-14.14, p-value <.05).

Hidden Treasures of Contemporary Music: The Piano Works of Marlos Nobre

Bernardo Scarambone
Department of Music

Marlos Nobre is the leading Brazilian composer of his generation, considered by many to be the successor of Villa Lobos. This project consists of writing a book focusing on the piano works by Nobre. The book "Hidden Treasures of Contemporary Music: The Piano Works of Marlos Nobre" details every work for piano by Nobre. Through the book, the reader will learn about his interesting life, compositional style and a little history behind each of his piano pieces. With many musical examples and a foreword written especially for this book by the composer, "Hidden Treasures of Contemporary Music" is the most complete guide to the piano works by Marlos Nobre to date.
4

Silence and Voices; Seen, Heard, Remembered: Composing Memory and Time

Christopher Jackson
Department Art & Design

My primary objective is to advance my research in the field of visual communication, specifically focusing on video and sound production. Using new media, I am looking at the ways in which movement, space, and time compound to relay different visual experiences. I am interested in memory, both true and false, perceived and real. I am intrigued with the way memory shapes our current and future existences. So often, the events we remember are embellished, leaving us to ponder the significance of each occurrence.

I am composing a dialogue between visual and audio sequences, constructing a memory of the impression that a specific person left on me. At the core of the project, this piece is a collection of feelings, referring directly to space and time. I am exploring the ways in which we remember the past, constructing it with our own desires for one outcome or another. The summer I refer to throughout this project was a starting point. Most exciting and interesting to me is the way in which I’ve chosen to construct this document. I believe wholeheartedly in sketching and the storyboard process, yet this piece is a collection of disparate parts I am attempting to fold into one.

My research continues to develop as planned. Over the summer and recent months I’ve worked to compose the visual and audio components of the project. I am currently in the process of completing the audio recordings and will move on to mastering the tracks in the coming weeks. The video pieces are developing, as I’ve recently returned to my childhood home to document elements of my past that I was otherwise unwilling to explore. I’ve worked to collage elements specific to each moment in time, enhancing my knowledge of the various programs associated with video work and recording.

5

Conviction & Humility

Matthew Pianalto
Department of Philosophy & Religion

Humility involves acknowledging one’s position as one among many, and one’s limitations and fallibility as a perceiver and knower. On controversial matters, the humble person would, it seems, be disinclined to treat her own beliefs about those matters as more likely to be correct than the beliefs of her epistemic peers. But then it would seem that a humble person would be disinclined to have strong convictions about controversial moral matters—controversial in the sense that epistemic peers are inclined to hold different and conflicting positions about those issues. I suggest that things are not as they seem, and that a person can maintain humility even while holding to those convictions with which she most deeply identifies and to which she is strongly committed. A humble person recognizes the limitations of his or her own perspective, and so is open to dialogue with others with whom he or she disagrees. However, since people also have to make practical and personal decisions despite moral disagreements, there will be practical contexts in which it shows no lack of humility for a person to stand by and act in accordance with his or her convictions, even if they are controversial.
Determining the Alternate Hosts of the Naturally-Occurring Fungal Rust of Jewelweed, *Puccinia Recondita*

**Jennifer Koslow**  
Department of Biological Sciences

Infectious disease is generally thought of as something to be avoided, and certainly with respect to any given individual, avoidance is a good plan. Infectious disease occurs within the context of a broader ecological community however. Infection of some community members may favor the growth of unaffected species. Understanding the broader context is particularly important in the case of pathogens that can infect or even require more than one host species to complete their lifecycles. One such pathogen is the fungal rust, *Puccinia recondita*, which occurs for part of its lifecycle on the common understory plant, spotted jewelweed (*Impatiens capensis*). Based on comparison with similar species of rust, jewelweed rust infects woodland grass species during other parts of its lifecycle. As such, this group of species represents an excellent model system for understanding the broader context of infectious diseases in natural systems. In order for me to incorporate community dynamics into my research, I first need to be able to identify community members that are directly affected by the infection. I also need to be able to experimentally manipulate infections of host species. It was my goal to determine the local host species of the rust *Puccinia recondita* in eastern Kentucky during the summer of 2011.

This summer, I selected and established greenhouse populations of four native grasses that were likely to be hosts of the jewelweed rust. In order to find rust spores for inoculation trials, I first needed to find infected jewelweed plants in the field. Of the 13 local populations I surveyed, four populations were infected with rust. I tried two different methods of experimental inoculations, neither of which caused infections in any of my experimental plants. I therefore do not know if my inoculation methods were ineffective or if the species I identified were not susceptible to the infection (or both). Next season I will continue finding new field sites for research. In addition, I will more carefully survey co-occurring grasses at these sites for evidence of rust infection. I will repeat my inoculation methods in the greenhouse with a larger suite of established candidate host species. I will also bring some of these plants out to field sites where I have found rust to see if they will get infected under field conditions.
Current Studies in Insect Community Ecology at Eastern Kentucky University

Amy Braccia
Department of Biological Sciences

My research program involves the ecology of insects and the management and conservation of freshwater habitats, especially streams, rivers, and wetlands. Current projects in my lab follow three lines of applied ecology: (1) insect community responses to human-induced changes to freshwater habitats; (2) conservation and restoration of freshwater habitats; and (3) the development of techniques for the biological assessment of water quality. I also have research interests in other aspects of entomology, including the natural history and ecology of semi-aquatic and terrestrial insects. During my first year at EKU, I began several projects that involve collaboration with EKU faculty, students, and personnel from state agencies. The first project, which has been my primary focus, involves aquatic insect responses to a stream restoration that will occur on Elm Fork of the Lower Kentucky River Basin (Owen Co., KY). Findings from this study will provide insight into the succession of insect communities in newly restored stream channels and help us determine if stream restoration is a success. My second project involves the analysis of insect communities to determine the biological integrity of Tates Creek (Madison Co., KY). Preliminary results from field samples that were collected during June 2011 will be used to design future studies that will explore the effects of land use on biological integrity in the Tates Creek watershed. My third project involves dung beetles. There have been no thorough surveys of the dung beetles in eastern Kentucky, so the purpose of this project is to begin preliminary surveys of the local dung beetle fauna. Dung beetles were trapped at EKU’s Meadowbrook Farm from early June to mid-August and taxonomic identifications are ongoing. Findings from this preliminary survey will be used to generate a preliminary taxa list and to improve survey methods for summer 2012.
Intention, Attention and Visual Memory

Donald A. Varakin
Department of Psychology

The current experiment addressed the question of whether intending to remember object appearance affects memory encoding over and above the effects of attention. Past research on memory for object appearance unambiguously supports the idea that attending to an object (i.e. looking at and processing the object) has positive effects on subsequent memory performance. However, evidence that intending to remember object appearance is equivocal. Some experiments have found differences in memory performance between participants who were told to remember object appearance and those who were not. However, in these experiments, the to-be-remembered objects were not always relevant to the task that observers performed during encoding. Therefore, participants who were not informed about the memory test might not have paid any attention to the objects that would eventually appear on the test. If participants who were not told about the memory test did not attend to the relevant objects, then any differences in memory performance might be due to differential attention, not to intention per se.

The current experiment attempted to address this issue by manipulating the task that observers performed (which serves as a manipulation of attention), and whether or not the memory test was expected or not (which serves as a manipulation of intention). All participants viewed several pictures, and then completed a recognition memory test for the appearance of some of the objects. All participants also completed one of two cover tasks: one task required discriminating amongst objects and empty spaces, and the other required no such discrimination. In each group, some participants were also told to remember what the objects looked like for a subsequent memory test, and other participants were not told about the memory test. The key feature of this design is that attention to objects is not confounded with intention to remember objects. Data collection efforts are still underway, but preliminary analysis (based on N = 80) suggests that intention has little or no effect on memory for object appearance. Participants who were informed about the memory test performed numerically better than participants who were not informed ($M = 65\%$, $SD = 19\%$ vs. $M = 60\%$, $SD = 18\%$), but the difference is not statistically significant ($F(1, 76) = 1.12, p = .28$, partial $\eta^2 = .02$).
Vicarious Trauma at the Front-Lines: The Case of Sexual Assault Nurse Examiners

Jennifer R. Wies
Department of Anthropology, Sociology & Social Work

Those who work at the front-lines of gender-based violence are positioned as cultural mediators between victims and society. Sexual Assault Nurse Examiners (SANEs) are now commonplace in the continuum of care for victims of sexual violence in the United States. The presence of SANE programs has increased precision in rape kits, improved patient care, and increased the effectiveness of expert court testimony. However, SANEs are exposed to a working environment that demands a professional response to devastating acts of trauma and violence perpetrated towards adults and children. This article presents the demographic characteristics a SANE population in the United States and their educational preparedness and job satisfaction. Secondly, this article presents the rates of vicarious trauma found among the SANE sample as reported through the 17-item Secondary Traumatic Stress Scale. In discussing the stress experienced by these front-line workers, this paper contextualizes their reported experiences within a larger political economy of responses to gender-based violence.

Political Attitudes and Participation among College Students at a Four-Year University in Eastern Kentucky

Randall D. Swain
Department of Government

In many ways, the 2010 mid-term elections support the findings of previous research regarding political participation among younger voters, but in other ways, may deviate from the findings of previous research regarding the preferences of youthful voters. If it can be determined, however, that the most recent entrants into the political electorate voted for Rand Paul, what would this say about previous research that posits the idealism and overall progressiveness of younger cohorts in the American electorate? This study seeks to answer these questions by surveying students at Eastern Kentucky University about their political activism and voter preferences the 2010 mid-term election and their views on social issues and policy issues. While research has shown that political participation and political engagement are affected by age, it remains to be seen whether the political behavior and preferences of college age students at Eastern Kentucky are consistent with the findings of previous research which holds that younger voters are more idealistic than older participants in the American electorate and more inclined to hold liberal views and prefer liberal candidates.
Re-Opening a Slightly Old Debate: The Creative Class in Kentucky

William Hatcher
Department of Government

Richard Florida’s creative class theory of economic development holds that urban economies are driven by individuals involved in creative pursuits. Successful cities are able to foster their creative classes and attract new creative professionals based on an environment of talent, tolerance, and technology. Cities throughout the United States have implemented economic development programs based on the ideas of Florida. These programs often include physical design improvements, grants for artisan organizations, and funding for promotional activities. This research seeks to describe the work of local economic development officials in the state of Kentucky. We renew a slightly old debate concerning Florida’s creative class theory by examining the opinion of economic developers in a state with primarily a working class and service class labor force. The exploratory research’s design examined opinion of the creative class and other development practices by administering a web-based survey to the heads of economic development agencies representing the state’s 120 counties. We hypothesized that Kentucky officials, especially the ones from the rural areas of the state, will be skeptical of the creative class theory of economic development. We found that our sample was evenly divided regarding the effectiveness of the creative class for their communities, and rural areas were just as likely as urban ones to have developers supportive of the creative class theory. Along with this, we found heterogeneous opinion among the sampled developer regarding the efficacy of other development policies. Based on analysis of open-ended comments of the respondents, we hold that some contexts in Kentucky are not appropriate for the general creative class theory. However, a recent focus in the literature on the use of outdoor amenities coupled with creative class policies may be beneficial to many communities in the state.