# Foundation to Promote Scholarship and Teaching 2010-2011 Awards Abstracts

Yannie Bai, Assistant Professor of Computer Science
"Authorship Mining and Data Fingerprinting for Digital Forensics"

Funding: \$4,588

Course Release:
Fall 2010 or Spring 2011

Computer forensics investigators are experiencing an increase in both the number and complexity of cases that require their attention. Evidence (data) made available to computer forensics investigators vary in range and scale. Of particular interest to this project are two dominating problems in digital forensics: Authorship Mining and Data Fingerprinting. The data fingerprinting serves as a tool to quickly and efficiently screen data that involves terabyte-scale data set and the study of authorship mining aims at identifying author attribution from anonymous texts using structural and stylistic cues. The two problems are related in terms of incident response time. This study will provide forensics investigators better acquisition and analysis tools.

James Beitler, Assistant Professor of Writing Studies Course Release: Spring 2011 "Coming to Terms with the Past: The Rhetoric of Desmond Tutu & the South African Truth and Reconciliation Commission"

There is broad consensus among researchers regarding the extent of Desmond Tutu's influence on the field of transitional justice; however, given that most scholars rely on underdeveloped commonplaces when describing what this influence consists of, there is need for more analytical work interrogating how, exactly, Tutu's rhetorical activity has defined the field. Through detailed rhetorical analyses of texts produced during the operation of the South African Truth & Reconciliation Commission, this project aims to provide a more robust understanding of Tutu's influence, while contributing to rhetorical theory by offering, in Michael Leff's terms, "a theoretical understanding of the particular case" (547).

Sara Butler, Associate Professor of Art & Architectural History
"A Curious Revolutionary: Millard Sheets' Early
Civil Rights Art, 1936-1948"
Course Release: Spring 2011

A course release from the Foundation to Promote Scholarship and Teaching will provide the opportunity to write a draft of the third article of a planned trilogy of studies of arts, described as "early civil rights art" for New Deal Washington, D.C. Drawing on archival research funded by a January 2010 grant from the Smithsonian Institution, this study examines Millard Sheets' 1936-1948 The Negro's Contribution in the Social and Cultural Development of America," a four-panel mural series for the Interior Building in the federal city. Complementing the work of historians who have recently situated the roots of the Civil Rights Movements in the activities of a group of black and white advocates working in the 1930s and 1940s, this study directs the focus of the growing literature on the movement into the realm of the visual.

#### Jennifer Campbell **Funding:** \$1,100 Associate Professor of Writing Studies, Rhetoric & Composition Course Release: Fall 2010 "Faculty Seminar: Writing to Learn in a Transdisciplinary Environment

The shift to a transdisciplinary outcome-based curriculum requires faculty be provided time and resources to read, think, talk, and write together in ways that will allow us to build coherent learning environments for students. My project is the creation of an interdisciplinary faculty seminar that explores the way that generative writing can be used to enhance our transdisciplinary classrooms to strengthen student learning and faculty satisfaction. Already approved as my sabbatical project, the faculty seminar would model possibilities for integrating conversation and writing-to-learn activities in classrooms that engage multiple perspectives in order to achieve a common outcome.

#### Jeremy Campbell, Assistant Professor of Anthropology/Sociology **Funding:** \$2,244 "Climate Change Policy in Brazil: The View from Course Release: Fall 2010 Rural Amazonia"

With the Copenhagen talks failing to produce a global consensus on climate change, the world's emerging economies have begun implementing their own carbon mitigation policies. In Brazil, the focus has been on reducing emissions through reduced deforestation and stabilization of fragile property rights regimes in the Amazon rainforest. This ethnographic research tracks the status of Brazil's nascent climate change policies as they are made concrete for Amazonian colonists, government officials, and ecological scientists. Crucially, I am interested in showing how longstanding colonialist projections of the Amazon as "resource frontier" contrast with new global imaginaries that cast the region's value in terms of climatic protection.

#### Margaret Case, Assistant Professor of English Course Release: Fall 2010 "Trans-Disciplinary Learning and Team Teaching"

This two-phase project would supplement the nascent (but growing) scholarship on teamteaching by documenting strategies for facilitating trans-disciplinary learning in crossdisciplinary faculty teams. Phase one involves team-teaching the introductory seminar for

**Spring 2011** 

RWU's new Asian Studies minor to generate data for the study. Phase two involves processing and disseminating the data.

Bilge Gokhan Celik, Assistant Professor of Construction Management Funding: \$3,100 "Development of a Green Building Workshop for Course Release: Fall 2010 or LEED-GA Exam Training" Spring 2011

Sustainability has become an important factor impacting on how building industry functions. Many companies and agencies in this industry are demanding from their future employees to present certain knowledge of green building technologies and strategies. This study proposes to develop an introductory educational workshop for Roger Williams University students in the area of sustainability and its application in the building industry. It is also the intention of the proposed workshop to help its participants pass the Leadership in Energy and Environmental Design (LEED) Green Associate Examination, the initial step of professional accreditation offered by the United States Green Building Council (USGBC).

Sean Colin, Associate Professor of Environmental Science
"Developmental Changes in the Feeding Mechanics of the Lobate Ctenophore Mnemiopsis Leidyi"

Course Release: Fall 2010 or Spring 2011

The ctenophore *Mnemiopsis leidyi* is a voracious predator known to impact and restructure zooplankton populations. While it is endemic to the waters surrounding Woods Hole, it is invasive to other ecosystems and its potential impact is of grave concern. In order to understand and predict its potential impact on different ecosystems we need to understand the mechanics of how it feeds. As part of my sabbatical I have been investigating how adult *M. leidyi* interact with their surrounding fluids and I plan to examine how the predator-prey interactions and the prey capture mechanisms of *M. leidyi* change throughout its development. Changes in feeding will be examined by quantifying changes in fluid interactions using digital partical image velocimetry (DPIV) and by quantifying changes in predatory-prey interactions using high-speed and high-definition video techniques. These observations will ultimately be used to develop a mechanistically-based feeding model to predict the prey selection and feeding impact of different stages of *M. leidyi*. This work is related to an NSF proposal that I plan to submit in February. Funding primarily will affect my summer research, equipment acquisition and student support.

Jacquline Cottle, Assistant Professor of Psychology Course Release: Fall 2010 or "Behavioral Effects of Infrahumanization in Response to Torture" Spring 2011

Infrahumanization involves denying that members of out groups feel the same emotions as our in-group, and as such is viewed as a form of prejudice. Previous studies conducted in my lab at RWU have found that infrahumanization informs perceptions of torture such that perceptions of torturous acts differed depending on whether they were directed towards an in-

group or out-group member. Follow up studies are proposed to determine why this occurs and through what mechanism, for which the foundation grant is being sought. Two studies are proposed below, one for each semester of requested course release.

Edward Delaney, Professor of Communications and Creative Writing Funding: \$4,000 "Documentary Film: Tradition of Narrative" Course Release: Fall 2010 or Spring 2011

A documentary film is planned that examines literature, particularly in terms of "narratives of experience." While the foundation development will be mainly through research, it will also involve some element of memory and retelling of stories that have significant impact on the teller. The film will involve interviews with people who are considered experts in the disciplines that examine such narratives, and people who have found ways to articulate their experiences in varying forms.

An application is being made for financial support to employ two students on the production, providing them with valuable experience. My own work on these film projects is fully funded from outside grants and income, but the financial request here would be to engage students for whom the process may be illuminating and professionally beneficial. The funding would include potential travel to shooting locations at the approved salary rate of \$10/hour.

Sargon Donabed, Assistant Professor of History
"Documenting the Aramaic Fable of Qatine Gabbara:
Translation, Analysis, and Transmission of an Iraqi Epic"

Course Release: Fall 2010 or
Spring 2011

The research project will record the last transmitters of the Iraqi oral epic of Qatine Gabbara, a heroic epic that exists exclusively in dialects of modern Aramaic, an endangered language in the Middle East, and examines its importance in marking continuity in culture, traditions and language. As the last surviving transmitters of the epic pass on, this maybe the final opportunity to record an oral epic which may indeed find its origins in the continuous retelling of the world's oldest heroic epic, the Epic of Gilgamesh.

Kelly Donnell, Assistant Professor of Education Course Release: Fall 2010 or "Urban Teaching in America: Theory, Research, and Practice Spring 2011 in K-12 Classrooms"

The purpose of this book is to provide undergraduate and graduate students in education with an overview of urban teaching. Our goal for the book is to synthesize the work of urban education theorists, researchers, and practitioners into one place. Organized around eight authentic questions, the book offers faculty and students opportunities for critical reflection and problem-posing not often seen in comparable course texts. This text supports faculty who are

looking for increasingly creative approaches in exploring key educational issues with their students.

**Funding:** 

\$2,000

### Robert Engvall, Professor of Criminal Justice "Social Justice Through Movies"

This project centers upon the use of movies as a primary means of teaching "social justice." Specifically, I am hoping to bring a topic, which many students view as a rather esoteric, impractical, and theoretical course without practical application to their lives. Through the use of movies and the interjection of popular culture into the teaching of this subject, I hope to create a template for use by others in the teaching of a subject which is becoming more "mainstream" in college curriculum decisions. The goal is to produce a book proposal from this project.

## Gail Fenske, Professor of Architecture Course Release: Fall 2010 "Cass Gilbert's Skyscraper Style" for book, "Skyscraper Gothic"

"Cass Gilbert's Skyscraper Style" will be a key chapter in the edited scholarly book, *Skyscraper Gothic*, to be published by the University of Pennsylvania Press. The book will illuminate the importance of "skyscraper Gothic" as a national phenomenon. In doing so, it will illustrate the tremendous influence of the Woolworth Building – the subject of my recent book, *The Skyscraper and the City* (2008)- on the skyscrapers built in major American cities during the 1920s. My essay will emphasize the ideological component of "Skyscraper Gothic" as well as its inflections within the vigorous and competitive commercial environment of early 20<sup>th</sup> century New York.

## Matt Gregg, Assistant Professor of Economics Funding: \$2,050 "The Role of Collectivism on Productivity: Lessons from the Eastern Band of Cherokees, 1894-1906"

The empirical literature on economic growth has increasingly shown that countries with more secure property rights will invest more in human and physical capital, thus achieving greater productivity. This view has received support in the American Indian economic development literature from evidence of contemporary cross-reservation correlations between measures of property rights and American Indian economic growth. These cross-section analyses, however, have not taken the endogeneity of property rights institutions seriously. We adopt a unique micro-level panel data set on turn-of-the-twentieth century farm output on the Eastern Band of Cherokees, who lived on non-contiguous sections with land ownership ranging from common to private. We exploit exogenous differences in land tenure arrangements to estimate the effect of collective rights on the productivity of American Indian farmers.

## Ram Gupta, Professor of Engineering Funding: \$3,500 "Assessing the Small Hydropower Potential in Rhode Island" Course Release: Fall 2010

With the environmental concerns and uncertainties associated with non-renewable energy from coal, oil and natural gas, clean energy is a promise of the future. Hydropower is an important and dependable source of renewable energy. The negative points attributed to hydropower projects are the environmental consequences of the big dams, non-availability of suitable sites, and the high costs of the projects. However, these objections are eliminated if we consider small hydropower from the existing dams that abundantly exist in Rhode Island. Small hydropower is one of the options that has near, mid-term and long-term potential. The research proposes to assess the potential that the State possesses to develop energy from the existing dams.

#### Anthony Hollingsworth Professor of Modern Languages, Philosophy and Classics "Paeanius Commentary"

As stated for this project last year, few classical scholars recognize the name Paeanius; even fewer have read his history of Rome. There is good reason for Paeanius' obscurity. His history is simply a translation into Greek of a Latin history of Rome. Pedagogical interest, on the other hand, is great. For years, Paeanius was the only textbook on Roman history written in Greek. With young adults in mind, the vocabulary and syntax are simple. Last year, funding was received to digitize this Greek text (no digital version exists; the most recent publication dates to 1879) for publishing a reader, and for use in intermediate Greek courses. Four students were funded in this project. The result is a 78 page digital text that can now be edited and searched. Currently, funding is sought to begin the editing/collation/commentary portion of the project. 1. Annotation for variant reading needs to be noted. 2. Collation includes the creation of a concordance and wordlist. 3. Commentary will initially be grammatical in nature. Many aspects of this project can be performed by supervised undergraduate students as an educational experience in preparing classical texts and in discovering relevant information in ancient texts. Several classic majors will be employed specifically to teach them about marking variant readings, creating concordances, and isolating worthwhile grammatical observations.

### France Hunter, Assistant Professor of Dance "Destination Dance – The New York Experience"

This grant would support the creation of a 3-credit intercession course for Dance and Performance Studies majors, minors and core concentrators designed around a multicultural experience of dance and culture in New York City. This discipline-specific, field-based course would first be delivered in January of 2011 and would be a regular course offered every 2 or 3 years, depending on the interest. The grant would support expenses for four scheduled trips to

**Funding: \$3,300** 

**Funding: \$2,062** 

New York between June and December, 2010 to explore residence, class, performance and other options that will be incorporated into the course content.

#### France Hunter, Assistant Professor of Dance "Bewilderness: An Inter-Media Journey"

This inter-media project incorporating dance, music and video projection, each serving as integral aspects of the live performance experience, will explore the evolution of society from one living in harmony with nature to one in which nature has been marginalized in favor of technology. Using textures as a common denominator, visual, sound and movement textures will gradually make the transition from one extreme to the other providing a visceral experience of how far we have come from our source. Using three non-verbal media, this piece is intended to address an important aspect of our humanity and culture in an intuitive rather than intellectual way.

#### Jason Jacobs, Assistant Professor of Foreign Languages Course Release: Fall 2010 "I'm Your Man: Aesthetics and Erotics of Feudal Politics"

Recent historiography of post-Carolingian "feudal" politics argues against any monolithic system of feudo-vassalic relations. Instead, revisionist readings of the historical evidence increasingly stress lordship and loyalty: local, contingent practices that are as heterogeneous as they are personal and affective. This project examines the role played by the Old French epic in representing and structuring these relationships. Specifically, the project explores the possibility that the discourse of courtly love, which emerged at the turn of the 12<sup>th</sup> century alongside the epic, provided a set of ideological structures which aestheticized the willing-and loving?submission of an aristocratic subject to his lord.

#### Jeff Jenkins, Associate Professor of Criminal Justice **Course Release: Spring 2011** "Perceptions of Gender Equity by Independent School Faculty"

This study examines gender differences in independent school faculty in the United States and Canada. The focus of this study is the extent to which male and female faculty differ in their views of independent schools in terms of characteristics of the school environment and relationships with others, such as comfort, equity, stress, and respect. Using a sample of nearly 6,000 responses from faculty at 39 independent schools, this study explores trends in gender equity among boarding school faculty over the last 10 years.

Tadeusz Kugler, Assistant Professor of Political Sciences **Funding:** "Foundation of Nations: Political Capacity and Course Release: Fall 2010 or **Policy of Provinces**" **Spring 2011** 

\$3,000

**Funding: \$9,341** 

This project will attempt to generalize research on the movements of money (FDI) and people (migrations) between societies by looking at the structures and systems that are created by the differing political structures within nations. Nations are not uniform and it is the policies, capacities, and freedoms within the provinces that are the push/pull factors that led to the attraction both of money and people. To gain a better understanding of the rising nations of India and China we must understand the choices being made not simply at the national level but within the provinces (sub-national). This study will empirically measure the effects of differing capacity and freedoms primarily within China and India. The provinces within these nations are critical to understanding and evaluating the future of the nations as a whole.

## Yulong Li, Assistant Professor of Operations Management Funding: \$2,000 "A Pilot Study on Student Global Awareness"

The purpose of this pilot study is to design and test the effectiveness of a systematic training procedure for raising student global awareness. Thirty RWU students will be selected and paired with equal numbers of partners from a renowned Chinese university. Each pair will engage in a semester long online collaboration to work on an international business related research project. Each student will be tested pre and post the project using a global awareness instrument to be developed. Statistical analysis will then be made to evaluate the training effectiveness and the impact of virtual communications. The study is expected to provide some valuable insights on how to systematically improve student global awareness.

Bruce Marlowe, Professor of Education
Rachel McCormack, Associate Professor of Literacy
"Investigating a Writing Workshop Model for Deaf and Hard-of-Hearing Children"

Funding: \$4,600
Course Release: Marlowe FA10
McCormack SP11

Deaf and hard-of-hearing (DHH) students typically graduate from high school reading and writing between the 3<sup>rd</sup> and 4<sup>th</sup> grade level. Despite these statistics, DHH students are required to participate in mandated "high stakes" state assessments. In Massachusetts, success on these assessments is particularly high stakes, as success is a condition for graduation. Performance is measured, in great part, through the students' ability to write effectively. DHH students have a great disadvantage because their written language does not mirror their "oral" language: ASL. This study will evaluate the efficacy of an innovative writing program which consists of three different interventions employed in concert with a Writing Workshop approach: Framing Your Thoughts; Cast-A-Spell; and Manipulative Visual Language (MVL). It will explore various models for teaching deaf and hard-of-hearing students' narrative in ASL, written expression, and spoken English. Participants will participate in and learn about writer's workshops and how to set up writer's workshops in their classrooms. Included will be several methods for teaching basic strategies and skills within the context of writer's workshops. Data analysis will consist of pre and post testing and comparison of year-end aggregate reading scores to national Deaf norms.

#### Murray McMillan, Assistant Professor of Art "Video Installation Exhibition at the Axiom Center"

This proposal funds the creation of a new solo video and photo installation exhibition at the Axiom Center for New and Experimental Media in Boston, for six weeks in September and October, 2010. The project consists of three elements: 1) an installation built in the Boston gallery, 2) a video, and 3) a photograph presented as a large 40" x 86" custom light-box powered by LED lights. The video and photograph will be exhibited in the Boston gallery with a site-specific installation. The set for the video and photograph will feature a secondary installation and performance fabricated and filmed in my Providence studio with partial production assistance provided by interested RWU student volunteers.

Marilyn Mair, Professor of Music "Creating a Method for Performing Brazilian Choro on Bandolim"

Grant support is requested to support a return to Rio de Janeiro to complete the CD recording that will accompany the bilingual book, "Brazilian Bandolim, A Method in the Choro Tradition," that is being co-written with Dr. Paulo Sá, a professor at the Conservatório Brasileiro de Música in Rio and world-renown bandolimist. Working on the manuscript has been the focus for the past year with the need to now record examples for the illustrative CD that will accompany the book. A course release is being requested for Fall 2010 to catalogue the historic choro I have collected from archives in the Biblioteca Nacional and other collections since 1999. The bandolimist, Joel Nasciment, will continue to be documented while in Rio.

Clifford Murphy, Assistant Professor of Chemistry
"Towards Rapid, Cheap Synthesis of PhotoVoltaic Materials via Microwave Chemistry"

Funding: \$3,768
Course Release: Fall 2010

This project focuses on developing cheaper synthetic pathways by applying microwave chemistry reactions to the production of the light-harvesting electrode in photovoltaic cells. Requested funds are for students' salaries for the 2010 summer term. This project is currently being submitted for funding through the NSF but if successful, would not be expected to begin funding until November 2010. The course release in the fall will be used to parlay initial results of this project into additional grant applications through ACS Petroleum Research Fund and the RI STAC Grant. Student work on this project will be presented at the national meeting of the ACS in the spring of 2011.

Koray Ozer, Assistant Professor of Mathematics Course Release: Spring 2011 "Rational Best-Approximations of the Exponential Function"

**Funding: \$6,946** 

\$2,000

**Fall 2010** 

**Funding:** 

**Course Release:** 

The main focus of this research is on the construction of an original way to approximate exponential function with rational functions. In comparison to Padé or Restricted Padé approximations, this novel method, we call it rational best-approximations, demands more efficient computational/numerical implementation, while providing 'best' approximation results. This research study starts off with the investigation of an alternative way to approximate  $t = e^{tz}$ for Rez  $\leq 0$  with rational functions  $r(z) = \frac{p(z)}{Q(z)}$ . Subsequently, we shall try to show that approximation results remain valid if z is replaced by a linear operation A generating a bounded, strongly continuous semigroup  $T(t) = e^{tA}$  on a Banach space. Finally, we shall explore rational best approximations of the exponential function  $t \to e^{tz}$  assuming that z is in the complement of a sector  $\Sigma_{\theta}$  with  $\theta > \pi/2$ , this will correspond to the case when A generates a bounded analytic semigroup.

Jason Patch, Assistant Professor of Sociology **Funding:** \$1,500 "The Journal for Undergraduate Ethnography (JUE)" Course Release: Spring 2011

The Journal for Undergraduate Ethnography (JUE) will be an online publication for showcasing student research. Ethnography cuts across disciplinary boundaries by examining human behavior in a range of natural settings both public and private. Our goal is to encourage students to polish their work and present it to the academic world. Research derived from curricular demands is especially promising; a senior thesis, an honors paper, or a final paper for a methods course. JUE will seek submissions nationally, perhaps internationally. The editorial board will consist of trained RWU students and faculty drawn from multiple academic institutions.

**Judith Platania, Associate Professor of Psychology** "Comparative Arguments and Mitigation Evidence Course Release: Spring 2011 on Sentencing"

In the past two decades, comparative value arguments have emerged as one of the ways in which prosecutors use victim impact evidence; i.e., evidence presented to inform jurors of the harm caused by the crime (Humphries v. Ozmint, 2004; Logan, 1999). Comparative life arguments encourage jurors to impose a death sentence on the grounds that the victim led a better life compared to the defendant and the victim (McCampbell, 2006). The proposed research examines the differential influence of comparative value arguments and mitigation evidence in capital sentencing trials and whether the presence of permissible victim evidence moderates this effect in order to preserve reliability in sentencing.

**Lauren Rossi, Assistant Professor of Chemistry** "Organic Chemistry Laboratory Revision"

Organic chemistry is the study of carbon containing compounds – compounds that are all around you and are the basis of life. As a physical science, the undergraduate organic chemistry

**Funding: \$1,500** 

Course Release: Spring 2011

\$9,000

**Funding:** 

course relies upon lecture and hands-on laboratory experimentation for concept introduction and application. The micro-scale approach to organic chemistry experimentation offers a variety of reactions with the use of less chemical material/reagents and the concomitant decrease in hazardous waste generation. As proposed, the current organic chemistry laboratory manuals will be revised so as to incorporate additional experiments and to modify current experiments to utilize the micro-scale approach.

# Lauren Rossi, Assistant Professor of Chemistry "Synthesis of an 8-C-Glycosyl Flavone Isolated from Cucumis Sativus"

Plant extracts have been used in traditional medicine to treat a variety of ailments. Amongst the bioactive constituents, flavones have been shown to possess pharmaceutically relevant properties. Synthetic methodologies can be applied toward the synthesis of the antifungal *C-glycosyl* flavones cucumerin A, isolated from the *Cucumis sativus* plant. This proposal seeks to initiate synthetic efforts toward cucumerin A. The bioactivity of the synthesized *C-glycosyl* flavones may be examined in future studies to further understand the role of such compounds in Nature.

### Yolanda Scott, Associate Professor of Criminal Justice Funding: \$6,070 "Dynamic Reactions: Readings on International Police Stress & Coping"

The demands placed on police officers, post 9/11, have increased as have depictions of their struggles on popular TV "cop" dramas. What prevails is a widely held view of a universal experience and reaction to stress within the "brotherhood" of policing that crosses international borders. A dynamic perspective emphasizing the science behind police stress, however, is exceedingly less well known. Hence the purposes of this proposed edited volume is to take readers on an international, cross-cultural, and comparative journey through law enforcement stress and coping that examines factors such as perceptual influences, organizational culture, and ultimately, stress management policy recommendations.

## Amiee Shelton, Assistant Professor of Communications "Individual Resistance to Nazi Hegemony in Books and Film" Course Release: Fall 2010 or Spring 2011

This study examines subtle non-conformist, dissenting strands of opinion and "unorganized" individual resistance efforts to Nazism undertaken by individual ethnic Germans as portrayed in books and films. This study is a necessary component to revealing current metanarratives concerning Nazi Germany and the average German citizen during the years 1933-1945. Since direct observation is limited to a small percentage of the population, most of society knows what they do from the mediated reality of books and films. Books and films greatly influence cognition and values underpinning society. As a result, any portrayals of German individual resistance during the Nazi period found within these narratives weigh heavily in our

**Funding: \$7,968** 

**Course Release: Spring 2011** 

collective consciousness and color our view of those Germans that lived under Nazism. This study seeks to determine what people know about actual German life during the Nazi years.

#### Jessica Skolnikoff, Associate Professor of Anthropology "Language and Culture" Course Release: Spring 2011

The field of Anthropology has five subfields: Cultural, Archeology, Biological/Developmental, Applied and Linguistics. As a joint Anthropology/Sociology program we focus on Cultural Anthropology. It is clear that our students need a separate course on Language and culture focusing on sociolinguistics. This course release will enable the development of a course that provides a firmer understanding of language, languages use and the connection between language and culture central to understanding culture more deeply and broadly. The research involved in developing this course would also provide a resource for my colleagues to integrate a component about narrative /language/text analysis into other courses as appropriate.

### Becky Spritz, Associate Professor of Psychology "Bridging the Gap: Work and Family Life in Low-Income Families" \$6,000

Within the past 50 years, there have been dramatic changes in work and family roles in middle-class families, but few studies of role strain in low-income households. The proposed study will examine the realities and expectations of work and family life in low-income families with preschool-age children. The proposed study consists of two parts: 1) a survey of 200 low-income families, and 2) qualitative interviews comparing 20 low-income and 20 middle-class families. It is anticipated that low-income families will experience qualitative different role-strain which significantly influences parental stress and well-being. Positive aspects of work for families will also be assessed.

# Jennifer Stevens, Assistant Professor of American Studies/US History "Consuming the Past: Television & the Popular American Historical Consciousness" Course Release: Fall 2010 or Spring 2011

This manuscript explores the shape and content of the American popular historical consciousness and how Americans think about history and the past, and the meaning and use that it has for them. The main subject of inquiry is the mediated versions of history that are disseminated through television, but this inquiry takes place within a larger consideration of the popular historical cultural environment in the United States today. This study will also include an exploration of terms and concepts connected to understanding popular conceptions of history, including nostalgia, heritage and tradition. It will also suggest new terminology to facilitate an understanding of how Americans outside the academy think of and use American history.

## James Tackach, Professor of English Course Release: Fall 2010 "Frederick Douglass's 1841 Speaking Tour of Rhode Island"

During the summer of 1841, Frederick Douglass, a refugee slave living in New Bedford, attended an antislavery convention on Nantucket. From his escape from slavery in 1838 until the Nantucket convention, Douglass, in fear of being identified as a runaway and returned to bondage, kept a low profile, reticent to discuss his slave experiences in public forums. For the first time at the Nantucket convention, Douglass spoke publicly about his life in bondage. So moving was his commentary that William Lloyd Garrison, the president of the American Anti-Slavery Society and the editor of *The Liberator*, the most famous abolitionist newspaper, recruited Douglass to do a speaking tour of Rhode Island and carry the abolitionist message to that state. The project will include research and writing about this speaking tour, which took place during the autumn of 1841.

Anne Tait, Associate Professor of Visual Arts "Art in Indigenous Marbles: The Industrialization of the Headstone Industry in the 19<sup>th</sup> Century"

This grant will assist in the completion of my writing on the growth of the domestic marble industry which grew with the Late-Industrial period and was spurred on by the mass deaths of the Civil War. My scholarship follows this blossoming of demand for domestic marble, but requires further information to contextualize the business and technology of monument production n the late 19<sup>th</sup> century. Necessary archives that need to be visited include: The Vermont Historical Society, Barre/Montpelier; The Veterans Administration, Washington, DC; the design materials/prints at the Cooper-Hewett, and the cemetery records of Columbia University, New York.

David Taylor, Assistant Professor of Biology
"Fate of Mercury Contaminants in Narragansett Bay, RI"

Course Release: Fall 2010 or
Spring 2011

Mercury is a toxic environmental contaminant that adversely affects human health, and human exposure occurring mainly through dietary uptake of contaminated fish. This investigation will examine the mechanistic and spatiotemporal factors underlying mercury bioaccumulation in marine fish collected from the Narragansett Bay, as determined by food web structure (stable isotope analysis) and fish residence time in the estuary (otolith microchemistry analysis). The fish targeted for this study (i.e., bluefish, striped bass, tautog, summer flounder, and winter flounder) account for >80% of the total recreational fish harvest in Rhode Island waters. As such, understanding the causative factors leading to mercury contamination in these particular species will assist in refining state-specific consumption advisories.

Peter Thompson Course Release: Fall 2010 Associate Professor of Modern Languages, Philosophy & Classics

**Funding:** 

\$3,400

#### "A Translation of Tchicaya u Tam'si's Le Ventre (book, 1964)"

The project is a book-length translation: Tchicaya's *Le Ventre* (never translated)-an interlocking series of poems linked to the Belgian Congo and Patrice Lumumba's life and death. The book-a French text almost unknown in the English-speaking world-is a keystone in post-colonial discourse. The latter discourse-in primary sources and in journalism and criticism-is, in turn, at the center of what we teach in modern languages and literature at RWU. Understanding recent history in other nations (example: the problematic, multilingual legacy of the European presence in Africa) is central to the University's mission of intellectual "bridging."

#### Evgenia Tsankova, Associate Professor of Education Funding: \$6,550 "Standard-Based Math Education in US and Bulgaria in Gr. 1-4"

The main purpose of this research study is to look closely and compare the mathematics standards and rigor of the mathematical topics identified as priorities in Grades 1 through 4 in Bulgaria and the United States. There are several goals of the study: 1) to compare the scope, sequence, and depth of mathematical ideas in each grade level and across grades, 2) to compare the level of alignment of the standards to the curricula used, 3) to compare the level of expectations of the yearly students' assessments, 4) to identify strategies for teaching deemed as best practices in both countries, 5) to compare the practice of looping vs. teaching a single grade, and 6) to compare the attitudes and beliefs of both groups of teachers towards standards-based education, developmentally appropriate level of expectations and rigor in each grade level, and areas of improvement on mathematics education practices, and 7) to identify strategies or practices to be transferred from United States to Bulgaria and vice versa.

# Sean Varano, Assistant Professor of Criminal Justice "Nature of Gang Involvement and Institutional Behavior: Evidence from an Incarcerated Sample" Course Release: Fall 2010

Research on the causes and consequences of gang involvement is one of the oldest areas of inquiry in criminological research. In fact, many contemporary criminological theories can be traced to concern early about youthful street gangs during the early 20<sup>th</sup> century. In more recent years, a well-developed body of evidence has begun to emerge about the actual meaning of gang membership in the life-course of adolescents. One of the most salient findings to date is that gang membership truly does represent a substantively important risk factor during early-to-mid-adolescence [CITE]. Much of this body of research, however, has been limited to adolescent samples and in most cases, non-incarcerated samples. The proposed project intends to fill the gap in this literature by considering the prevalence and dynamics of gang membership among a sample of youthful adult incarcerated felons. The study will use secondary data collected as part of a larger research effort in the State of Michigan in the summer of 1996. This project will not only consider the prevalence of gang membership but explore the impacts of different types of gang membership both on self-reported delinquency but also on institutional misconduct.

Kerri Warren, Associate Professor of Biology Andrew Rhyne, Visiting Assistant Professor of Biology "Molecular Signatures of Environmental Stress"

Methods are being developed to assay fish for acute exposure to environmental stressors, using zebrafish as the model organism. Of particular interest are differentially expressed genes and proteins that specifically and reliably report on the exposure. Our preliminary DNA Microarray analysis indicates stress-induced regulation of known and novel genes. Confirmation of stress-specific expression of these genes will be accomplished in this study. We also propose to more fully profile the stress response with a proteomics approach to identify stress signature proteins. Once candidate proteins are identified, the differential regulation of genes encoding these proteins will be characterized.

Don Whitworth, Professor of Psychology
"The Importance of Danger and Cognitive Theory in Analyzing Race
and Other Data from Police Traffic Stops"

Cognitive theory is a useful framework for understanding police traffic stop decisions. More specifically, we propose a cognitive model in which officers represent knowledge of vehicle stops in memory as a cognitive structure that is a program for dealing with potential dangers (e.g., Brewin, Dalgleish, & Joseph, 1996; Clark & Beck, 2010; Ehlers & Clark, 2000; Foa & Rothbaum, 1998; Gallo & Collyer, 2008; Hembree & Foa, 2004). The cognitive structure of a vehicle stop includes representations of dangerous stimuli (e.g., weapon), meanings associated with the stimuli (e.g., weapons are dangerous), and responses (e.g., arrest the person) for effective actions to the stimuli. This modeling approach will extend the literature on cognitive theory to analyzing race and other data from a sample of Rhode Island State Police vehicle stops. In addition, we will identify correlates of police decisions to stop vehicles and sometimes search them and other research questions developed in group discussions with Rhode Island State Police Administrators. This research project will also help address some of the problems surrounding the measurement of racially biased policing and the perceptions of its practice by the Rhode Island State Police discussed in previous studies (Carroll, Gonzalez, & Hakmook, 2007; Farrell, McDevitt, Cronin, & Pierce, 2003).

### Brian Wysor, Assistant Professor of Biology "Molecular Assessment of Turf Algal Diversity"

A Fall, 2010 course release is sought to continue research on the biodiversity of Panamanian seaweeds. This work builds on the results of Foundation awards made in 2007 and 2008, and contributes to the activities of a continuing National Science Foundation grant. The release will support molecular characterization of turf algal cultures isolated from previous field expeditions, and the training of 1-2 RWU undergraduate researchers.

**Funding: \$8,000** 

**Funding: \$2,500** 

Course Release: Fall 2010

Course Release: Fall 2010

Li-Ling Yang, Assistant Professor of Education

"A Comparative Study of Science Education Standards,
Elementary Science Curricula, and Elementary School
Teachers' Use of Inquiry-Based Teaching Practices in the US and Taiwan"

Funding: \$6,000
Spring 2011

The overarching goal of this ongoing study is to compare teacher participants' views and practices of inquiry-based teaching before and after an inquiry workshop, to examine what is considered most important regarding the depth, breadth and content of science concepts as reflected in current national science education standards and science curricula, and to explore how these science standards and curricula impact teachers' science teaching in Taiwan and the U.S. During the current academic year, the major scholarly work accomplished or to be achieved will include a workshop implementation in Taiwan and the US; pre- and post-workshop surveys; interviews with teacher participants; and submission of a paper on preliminary curriculum analysis to the journal *Spectrum*. Building on this previous curriculum analysis experience, the project in the next year will focus on the comparative analysis of one commonly used elementary science curriculum from Taiwan and from the US, taking into consideration the science education standards in both countries.

Min Zhou, Assistant Professor of Foreign Languages
"Giving Voice to Those on the Margins. A Study of Anna Seghers' Female Characters"

Funding: \$750

Course Release: Fall 2010

The research proposal centers on Anna Seghers (1900-1983), one of the best and most important German authors of the 20<sup>th</sup> century. Due to the Cold War and divided German history in the post-1945 period, however, Seghers was and still is one of the least read and most misunderstood German authors. This research will contribute to the efforts to reevaluate Segher's literary achievements and awaken interest in her literature in the reader and scholarship both in and beyond Germany.