

Contact: Diana Gonzalez

**PROFESSIONAL DEVELOPMENT ASSIGNMENT REQUESTS FOR FY 2011**

**Action Requested:** Consider approval of the requests by the Regent universities for professional development assignments for FY 2011.

**Executive Summary:** Each year, the Board of Regents is asked to approve faculty professional development assignments as specified in the Board Policy Manual §4.09. The universities request approval of 107 faculty professional development assignments for FY 2011. This represents a decrease of 36 (-25.2%) proposed professional development assignments from the prior year and the second consecutive decrease. A brief description of each proposed assignment is available in Attachment A (page 6). This report addresses the Board of Regents Strategic Plan priority (2.0) to “discover new knowledge through research, scholarship, and creative activities.”

**Background:**

- ◇ Institutional policies. Each university has academic policies that describe the process and requirements for professional development assignments.
  - ☑ *University of Iowa.* Full-time faculty members with 9-month appointments who completed a minimum of 10 semesters of full-time academic service are eligible for an initial one-semester professional development assignment. Flexible load assignments may or may not be included in the 10 required semesters at the discretion of the college. Part-time faculty members with 9-month appointments become eligible for a professional development assignment at the level of their appointment upon completion of a minimum of 10 semesters of part-time service. Part-time faculty members are eligible for a ‘regular’ professional development assignment when their portions of service equal the minimum requirement of full-time service.
  - ☑ *Iowa State University.* All members of the faculty employed half-time or more are eligible to apply for a professional development assignment. There is no restriction on length of service to qualify for a professional development assignment. However, priority may be given to tenured faculty over adjunct and non-tenured faculty and to persons who have not received a professional development assignment in the past five years.
  - ☑ *University of Northern Iowa.* Faculty members must be full-time and tenured at the time of application. A recipient of a professional development assignment is ineligible for a subsequent assignment during the three years following the assignment.
  
- ◇ Review process. Each university reports that a rigorous review process was conducted for each proposed professional development assignment. Faculty recipients were selected on the basis of peer review and recommendation at the department and college levels at each university and final approval by the provost.

- ◇ Proposed activities. Faculty members engage in a variety of productive activities during their professional development assignments. For example, faculty members have the opportunity to engage in intensive research, write scholarly books and articles, create new works of art and composition, present papers, work in industry, develop modeling systems, and develop grant proposals, software, course materials, and multimedia resources for their disciplines. Professional development assignments enrich the educational environment of the universities and are considered essential to the academic vitality of the universities. Educational excellence results from a vital faculty which actively pursues new developments in knowledge and teaching.
- ◇ Length of assignments. Professional development assignments are usually for one semester, although they may be granted for up to a year. For professional development assignments that are two semesters in length, compensation is limited to the amount of compensation a faculty member would receive during a semester-long assignment.
- ◇ Obligation to institution. Iowa Code §262.9(13) requires that a faculty member return to the institution for twice the length of time of their professional development assignment or to repay the costs associated with the professional development assignment if the faculty member does not return to the institution. Following their professional development assignments, faculty members are responsible for reporting the results of their assignments as specified by Board Policy §4.09E and their institutional guidelines.
- ◇ Average number requested. During the last five years, an average of 142 professional development assignments (PDAs) per year has been requested.

**NUMBER OF PDA RECIPIENTS AND PERCENT OF ELIGIBLE FACULTY  
FY 2007 – FY 2011**

	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
SUI	96 (7.6%)	74 (4.8%)	100 (6.5%)	82 (5.2%)	52 (3.3%)
ISU	33 (2.3%)	49 (3.7%)	48 (3.7%)	41 (3.1%)	37 (2.2%)
UNI	22 (6.1%)	18 (4.5%)	19 (4.8%)	20 (3.7%)	18 (3.4%)
<b>REGENT TOTAL</b>	<b>151 (4.8%)</b>	<b>141 (4.4%)</b>	<b>167 (5.1%)</b>	<b>143 (4.2%)</b>	<b>107 (2.8%)</b>

- ◇ Faculty replacement costs. ISU and SUI identified estimates of the replacement costs for faculty members who are on professional development assignment. UNI adjusts the schedules of existing faculty members as appropriate to cover the teaching assignments of faculty members who have professional development assignments. The Faculty and Global Scholars programs at the University of Iowa, which also provide support for research expenses, are budgeted at \$88,000 for FY 2011.

- The primary method of reducing costs at the University of Iowa for FY 2011 is a reduction in the total number of new awards; there are fewer career development awards and no new faculty or global scholar awards recommended. For the recommended awards, costs will be reduced, where possible, by having colleagues cover courses or deferring non-required courses to a later time.
- At Iowa State University, professional development assignments that do not require an allocation from the college are funded by the department of the faculty member in one of two ways – salary savings generated from the faculty members on assignment are used for the replacement costs; or through a reassignment of course load among current faculty. Only 2.2% of the eligible faculty members were proposed for a PDA in FY 2011.

**BUDGETED REPLACEMENT COSTS  
FY 2007 – FY 2011**

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
SUI	\$154,743	\$123,485	\$342,436	\$201,800	\$148,700
ISU	\$165,246	\$159,762	\$167,348	\$68,569	\$107,747
UNI	\$0	\$0	\$0	\$0	\$0
<b>REGENT TOTAL</b>	<b>\$319,989</b>	<b>\$283,247</b>	<b>\$509,784</b>	<b>\$270,369</b>	<b>\$256,447</b>

◇ Proposed professional development assignment recipients by gender.

- There are 64 proposed professional development assignments for men; this represents 59.8% of the total proposed PDAs. Men represent 66.3% of the total number of eligible faculty.
- There are 43 proposed professional development assignments for women; this represents 40.2% of the total proposed PDAs. Women represent 33.7% of the total number of eligible faculty.

◇ Proposed professional development assignment recipients by race/ethnicity.

- There are 18 proposed professional development assignments for racial/ethnic minorities; this represents 16.8% of the total proposed PDAs. Racial/ethnic minorities represent 14.3% of the total number of eligible faculty.
- There are 89 proposed professional development assignments for non-minorities; this represents 83.2% of the total proposed PDAs. Non-minorities represent 82.7% of the total number of eligible faculty.
- There was one professional development assignment for a nonresident alien/international faculty member; this represents 0.9% of the total proposed PDAs. Nonresident alien/international faculty members represent 1.9% of the total number of eligible faculty.

FY 2011 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY<sup>1</sup>  
UNIVERSITY OF IOWA

	TOTAL NUMBER OF FACULTY		NUMBER ELIGIBLE FOR AWARD		NUMBER WHO APPLIED		NUMBER PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
White	1,114	596	934	396	45	38	27	17
African-Am.	24	27	16	15	2	3	0	1
Hispanic-Am	38	24	20	14	2	1	1	0
Asian-Am.	163	43	103	21	9	3	4	2
Native Am.	3	5	3	4	0	0	0	0
Native Hawaiian/ Pacific Islander	NA	NA	NA	NA	NA	NA	NA	NA
Two/more races	NA	NA	NA	NA	NA	NA	NA	NA
Unknown R/E	94	59	30	14	0	0	0	0
Nonres. Alien/Intl.	NA	NA	NA	NA	NA	NA	NA	NA
<b>REGENT TOTAL</b>	<b>1,436</b>	<b>754</b>	<b>1,106</b>	<b>464</b>	<b>58</b>	<b>45</b>	<b>32</b>	<b>20</b>

FY 2011 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY<sup>1</sup>  
IOWA STATE UNIVERSITY

	TOTAL NUMBER OF FACULTY		NUMBER ELIGIBLE FOR AWARD		NUMBER WHO APPLIED		NUMBER PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
White	883	503	855	472	24	16	15	11
African-Am.	17	15	15	13	1	0	0	0
Hispanic-Am	19	19	19	18	0	1	0	1
Asian-Am.	159	48	158	47	8	2	7	2
Native Am.	5	2	5	2	0	0	0	0
Native Hawaiian/ Pacific Islander	0	0	0	0	0	0	0	0
Two/more races	1	1	1	1	0	0	0	0
Unknown R/E	0	0	0	0	0	0	0	0
Nonres. Alien/Intl.	49	25	48	24	1	0	1	0
<b>REGENT TOTAL</b>	<b>1,133</b>	<b>613</b>	<b>1,101</b>	<b>577</b>	<b>34</b>	<b>19</b>	<b>23</b>	<b>14</b>

<sup>1</sup> The new race/ethnicity categories defined by the U.S. Department of Education apply to ISU and UNI. SUI will begin using the new categories in 2010.

FY 2011 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY<sup>1</sup>  
UNIVERSITY OF NORTHERN IOWA

	TOTAL NUMBER OF FACULTY		NUMBER ELIGIBLE FOR AWARD		NUMBER WHO APPLIED		NUMBER PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
White	292	226	262	209	14	17	9	9
African-Am.	8	4	7	4	0	0	0	0
Hispanic-Am	9	6	8	5	0	0	0	0
Asian-Am.	27	13	22	13	1	0	0	0
Native Am.	0	1	0	1	0	0	0	0
Native Hawaiian/ Pacific Islander	1	0	1	0	0	0	0	0
Two/more races	4	2	3	2	0	0	0	0
Unknown R/E	0	0	0	0	0	0	0	0
Nonres. Alien/Intl.	0	0	0	0	0	0	0	0
<b>REGENT TOTAL</b>	<b>341</b>	<b>252</b>	<b>303</b>	<b>233</b>	<b>15</b>	<b>17</b>	<b>9</b>	<b>9</b>

FY 2011 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY<sup>1</sup>  
REGENT TOTAL

	TOTAL NUMBER OF FACULTY		NUMBER ELIGIBLE FOR AWARD		NUMBER WHO APPLIED		NUMBER PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
White	2,289	1,325	2,051	1,077	80	71	51	37
African-Am.	49	46	38	32	3	3	0	1
Hispanic-Am	66	49	47	37	2	2	1	1
Asian-Am.	349	104	283	81	17	5	11	4
Native Am.	8	8	8	7	0	0	0	0
Native Hawaiian/ Pacific Islander	1	0	1	0	0	0	0	0
Two/more races	5	3	4	3	0	0	0	0
Unknown R/E	94	59	30	14	0	0	0	0
Nonres. Alien/Intl.	49	25	48	24	1	0	1	0
<b>REGENT TOTAL</b>	<b>2,910</b>	<b>1,619</b>	<b>2,510</b>	<b>1,275</b>	<b>103</b>	<b>81</b>	<b>64</b>	<b>43</b>

- ◇ Average length of service. The average length of service for the proposed professional development assignment recipients is 11.0 years at SUI; 12.6 years at ISU; and 13.5 years at UNI.
- ◇ Proposed professional development assignments by rank. There are 46 (43.0%) proposed professional development assignments for professors; 59 (55.2%) for associate professors; one (0.9%) for an assistant professor; and one (0.9%) for an instructor.

<sup>1</sup> The new race/ethnicity categories defined by the U.S. Department of Education apply to ISU and UNI. SUI will begin using the new categories in 2010.

**UNIVERSITY OF IOWA (\*denotes Faculty Scholar; +denotes Global Scholar)**

**ABDEL-MALEK, KARIM, PROFESSOR, BIOMEDICAL ENGINEERING, 15 YEARS OF SERVICE, FALL SEMESTER**

The impact of a rigorous book on the field of Human Modeling and Simulation will be significant, not only strengthening Iowa as the premiere institution for conducting leading research in this area, but also simply being only the second rigorous book in the field (one was written at Purdue last year). With over 40 researchers in Professor Abdel-Malek's group, Iowa now has become *de facto* the largest and strongest research program in Human Modeling and Simulation. While there are a number of books that have treated the subject matter from a rules of thumb and experimental perspective, this will be the only book that will present a mathematical treatment of the subject, the same reason that has catapulted this group to securing the most grants/contracts in this field. In addition to having a scholarly impact, publishing this book will also aid teaching regular courses of kinesiology, digital human modeling, computational biomechanics, and others.

**\*BOEHMKE, FREDERICK J., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, 9 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor Boehmke will study how organized interests influence bureaucratic policy outputs. This research will focus on the interaction between the legislative and administrative branches and how organized interests choose their lobbying targets. He will gather and analyze multiple sources of data, including a new data set with information on each of 16,000 nursing homes in the U.S. as well as information about the characteristics of their state representatives, allowing him to study the nexus of legislative and bureaucratic representation. The research will provide information and results for discussion in Boehmke's regularly taught undergraduate Interest Groups class, will allow him to acquire new skills in spatial analysis for use in his graduate statistics courses, and will involve significant collaboration in all aspects with at least one graduate student in the Department of Political Science. The research will have policy consequences for oversight of the nursing home industry.

**BOWDEN, NED B., ASSOCIATE PROFESSOR, CHEMISTRY, 7 YEARS OF SERVICE, SPRING SEMESTER**

Professor Bowden will expand his research into the field of biomedicine by utilizing his expertise in synthetic polymer chemistry and organic chemistry to build collaborations with others who are strong in medicinal research but limited in the types of polymers they can synthesize. In his first seven years at the University of Iowa, he has built a strong and well funded research effort to use polymers in organic chemistry that will translate into developing polymers for real applications in medical devices and drug delivery. This work is exciting because combining Bowden's synthetic expertise with that of his collaborators in biomedical fields will allow new materials to be synthesized for critical applications in medicine that will, it is hoped, benefit the state of Iowa and the University of Iowa by developing new medical therapies and establishing a strong synthetic polymer component to biomedical research.

**BROCHU, CHRISTOPHER A., ASSOCIATE PROFESSOR, GEOSCIENCE, 9 YEARS OF SERVICE, SPRING SEMESTER**

Professor Brochu's research for the past 15 years has focused on the evolutionary relationships and taxonomy of Crocodylia. This is now expanding to include their closest extinct relatives, which with crocodylians form a group called neosuchia. Neosuchians are central to studies of global tectonics, paleoclimate, mass extinction, evolutionary developmental biology, and many other disciplines, but without a clear understanding of neosuchian evolutionary history, their utility is limited. Professor Brochu will assemble the first comprehensive revision for this group since the early 1970s based on work currently under way in his lab. This research will benefit Professor Brochu's teaching.

**CANIN, ETHAN A., PROFESSOR, CREATIVE WRITING, 11 YEARS OF SERVICE, SPRING SEMESTER**

Professor Canin will use his Professional Development Assignment to continue work on a collection of short stories that is under contract with Random House. All of his previous books have been translated worldwide, and several have been nominated for or have won important awards. His short stories have appeared in the country's leading magazines, including *The New Yorker*, *The Atlantic Monthly*, and *Esquire*, and have been widely anthologized. His fiction deals with characters of every age and circumstance: among the narrators of these stories will be an American soldier lost in the forest during the 1944 Ardennes Offensive, a young man in 1972 watching the fall of a president, and an old woman in 2009 witnessing the courage of her husband as he faces decline. The Writers' Workshop is arguably the pre-eminent program at the University of Iowa; high-profile publication by its faculty is a crucial factor in recruiting high quality students and in maintaining its national prominence.

**CARRASCO, ENRIQUE R., PROFESSOR, LAW, 19 YEARS OF SERVICE, FALL SEMESTER**

Professor Carrasco will use the Professional Development Assignment to work on a book that explores the challenges relating to global governance of international finance and development after the worst economic and financial crisis the world has witnessed since the Great Depression. The book will examine, among other things, (i) the weaknesses of the global regulatory order that gave rise to the crisis; (ii) how international financial institutions can improve the substance and coordination of the standards that govern international finance; and (iii) governance changes of international financial organizations that must occur to give emerging/developing economies a greater voice in the global framework of international finance and development. Professor Carrasco's continued scholarship, including the publication of the proposed book, will further enhance the University's reputation in the area of international finance and development and bring greater depth to Professor Carrasco's teaching.

**CIOCHON, RUSSELL L., PROFESSOR, ANTHROPOLOGY, 22 YEARS OF SERVICE, FALL SEMESTER**

In the early 20th century, the geological Survey of Netherlands Indies excavated the site of Ngandong in Java, Indonesia, yielding 14 *Homo erectus* fossils—one of the largest collections found at a single site. Ngandong is significant as the latest occurrence of *Homo erectus*; isolation on an island may have allowed these groups to survive long enough to become contemporaneous with *Homo sapiens*. However, later excavations have failed to relocate the original site. In 2008, Professor Ciochon reidentified the site using a 3D model. During the period of his award, he will reanalyze the discovery beds in order to: 1) model how the site formed; 2) understand how the humans became fossilized; and 3) develop a predictive framework for locating other fossiliferous deposits in this area. The results will refine the geological age of the site in order to assess the significance of these fossils in understanding human evolution. This research will inform Professor Ciochon's teaching.

**\*CLUBB, DARE, ASSOCIATE PROFESSOR, THEATRE ARTS, 10 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

Professor Clubb's work begins in New Delhi where he will research Indian theatrical and theoretical forms while in residence at the School of Art and Aesthetics at Jawaharlal Nehru University. Professor Clubb will explore the relation of dramatic form to dramatic logic, an issue that has interested dramatic theorists for more than 2,000 years. Back in Iowa City, building on his research in India, he will study recent developments in theatrical sound production techniques and begin work on the basic structures of a new full-length play. In the third year of his fellowship, Professor Clubb will complete his full-length play and show his work in a presentation at the University of Iowa and at the Bread Loaf School of English in Vermont. Professor Clubb's research will enhance the work of

every course he currently teaches—including Dramas of the Spirit, Dramatic Theory, and the Iowa Playwrights Workshop—and will lead to the development of three new courses.

**COMERON, JOSEP M., ASSOCIATE PROFESSOR, BIOLOGY, 8 YEARS OF SERVICE, FALL SEMESTER**

Recombination is an essential biological process and Associate Professor Comeron will investigate its evolutionary consequences. His previous studies have focused on the role of recombination in genome evolution and population genetic models to infer natural selection. Current models of recombination assume that all individuals within a species share the same rate of recombination; this assumption, we know now, is incorrect. Building on his earlier studies and using a combination of theoretical and computer simulation approaches, Professor Comeron will provide new insight into the influence of variable recombination rates on population studies. The results of this project will be a crucial component of a grant proposal to be submitted to the National Institutes of Health and will be published in peer-reviewed journals. The novel models and methodologies developed during this project will be directly incorporated into his two undergraduate courses "Population Genetics and Molecular Evolution" and "Evolution."

**CREMER, JAMES F., PROFESSOR, COMPUTER SCIENCE, 17 YEARS OF SERVICE, FULL YEAR**

The two components of Professor Cremer's work are: 1) intensive research on perception and behavior in virtual environments (VEs), and 2) course development in virtual environments and informatics. Prior research using the bicycling simulator has investigated, for example, children's decision-making at intersections and the influences of a virtual peer on cycling behavior. Other work has compared distance estimation in real and virtual environments. The Professional Development Assignment will allow him to extend his prior work, focusing on determining what factors and cues matter most for distance perception, judgment of travel distance, and maintenance of spatial orientation in VEs as compared with the real world. The work will enhance the university's visibility as a leading VE research center. It will also enhance student education and training in vital, exciting areas, especially the growing field of informatics.

**D'AGATA, JOHN-PHILIP, ASSOCIATE PROFESSOR<sup>2</sup>, ENGLISH, 4 YEARS OF SERVICE<sup>2</sup>, FALL SEMESTER**

Professor D'Agata will spend the period of his Professional Development Assignment editing the third and final anthology in a three-volume series of anthologies on the history of the literary essay. Emphasizing the various forms that this genre has assumed through history, Professor D'Agata's project explores the artful nature of the essay, drawing comparisons to other genres, noting what distinguishes this one, and investigating the ambiguous and often misunderstood terrain that exists at the edge of the literary essay, thus bringing the genre finally into a modern discussion about what "essaying" really means. Having recently published two volumes in this series—*The Lost Origins of the Essay* and *The Next American Essay*—Professor D'Agata will now complete *The Foundations of the American Essay*, which will track the development of the essay in American literature from 1680 through 1975. This work will inform Professor D'Agata's teaching.

**+DAVIES, WILLIAM D., PROFESSOR, LINGUISTICS, 23 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

The project will record, transcribe, digitize, and deliver via the internet a collection of videos and texts of folk tales and historical narratives of the Madurese, the third largest ethnic group in Indonesia, a country of growing importance to the United States in the current global environment. The archive will make accessible primary cultural and linguistic information not widely available

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<sup>2</sup> Will have met the 10 semester requirement prior to taking the leave; approved per SUI policy.



about the Madurese, a group under-studied by scholars. The innovative multi-media, multilingual collection, housed in the University of Iowa Digital Library, will be the first of its kind in the world and will include video performances and transcripts of narratives covering such themes as creation stories, the growth of Islam, and exploits of cultural heroes. Each Madurese video will run for 12-25 minutes with associated texts in Madurese, English, Indonesian, and a linguistically-rich transcription designed for presenting language data.

**\*DURHAM, MEENAKSHI G., ASSOCIATE PROFESSOR, JOURNALISM & MASS COMMUNICATION, 9 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

The media play a central role in shaping social relationships, including women's relationships with their bodies—which can result in body anxieties and eating disorders. Following the 2008 publication of Professor Durham's nationally recognized book on a related topic, *The Lolita Effect* (Overlook Press), this Professional Development Assignment will support research for a new book addressing the complexities of women's body image as influenced by media ideals. To investigate women's relationships with their bodies in a media-saturated environment, Professor Durham will conduct in-depth interviews with diverse women addressing cultural pressures to conform to idealized body characteristics. Linking media theory and real-world data from women's narratives, this book project will develop effective interventions into, and remediations for, recognized problems, by analyzing and interpreting the dynamic interplay of emotional processes and social factors in women's lives.

**+ESTIN, ANN L., PROFESSOR, LAW, 11 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

In our globalized world, families form, dissolve and extend across international borders. When disputes arise within these global families, judges and lawyers in all parts of the country are increasingly called upon to resolve new and difficult legal issues. Building on her previous scholarship and teaching on international family law, Professor Estin will research and write a treatise to assist judges and lawyers in handling these complex cases. The book will address international treaties that have been signed or ratified by the United States on international adoption, child abduction, and child support enforcement, as well as other legal rules applied in the United States to international marriage, divorce, and custody disputes. Beyond writing this handbook, she will also utilize this research in her teaching and participate in judicial training seminars and continuing legal education classes in Iowa and around the country.

**\*FILIOS, DENISE K., ASSOCIATE PROFESSOR, SPANISH & PORTUGUESE, 10 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor Filios will write a book entitled *Living History: The Muslim Conquest of Spain in Spanish and Moroccan Foundational Narratives*. This book will study the treatment of the Muslim conquest (711 C.E.) in the earliest Muslim-Arabic and Christian-Latin/Spanish chronicles, which provide very different versions of events. These varying accounts reflect the medieval writers' attempt to make political, ideological, and religious sense of the conquest in ways that served the needs of their immediate audience and the writers' own interests. Such conflicting medieval chronicles underlie modern Spanish and Moroccan national legends that reflect their very different views of the past and present. Filios will argue that modern legends based on medieval chronicles perpetuate relations of inequality between Morocco and Spain and impede the integration of Moroccan immigrants into Spanish society. This work will enrich Professor Filios's courses.

**\*FRIESTAD, GREGORY K., ASSOCIATE PROFESSOR, CHEMISTRY, 5 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

Professor Friestad's organic chemistry research involves development of new synthetic methods for application in drug discovery and total synthesis of biologically active natural products. While ongoing funded projects in synthesis of nitrogen-containing compounds will continue, the Faculty Scholar Award will support building an entirely new independent research program in asymmetric synthesis of biologically active oxygen-containing compounds. Three new synthetic methods will be introduced, and their potential for diverse application will be demonstrated through application to synthesis of tetrafibricin (cardiovascular disease), marinomycin (cancer, drug-resistant infections), and muricapentocin (colon cancer). This work will further strengthen organic synthesis, a core competency required in health sciences research at the University of Iowa, and will train highly talented chemists who can support biotechnology entrepreneurial efforts in the state of Iowa.

**\*GIBSON, CRAIG A., ASSOCIATE PROFESSOR, CLASSICS, 10 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor Gibson's interdisciplinary project examines the role of compositional instruction in the mental and moral development of young men in Greece during the Roman Empire. The six resulting articles will explore the role of the lives of famous statesmen in national and personal identity formation, medical ethics in the classroom, popular views of public art and artists, the role of true and false myths in ancient education, and education's claims to make students better people and prepare them for the world after graduation. This research will benefit the University of Iowa and its students by enriching Professor Gibson's understanding of these topics, many of which have direct classroom application.

**GLANVILLE, JENNIFER, ASSOCIATE PROFESSOR, SOCIOLOGY, 8 YEARS OF SERVICE, FALL SEMESTER**

Professor Glanville will study generosity, arguing that a fuller understanding of the sources of generosity requires connecting individual orientations, the immediate situation, and the wider context. One component of the project will predict generosity *orientations* and their change with both the characteristics of individuals and their societies. The second component will investigate generous *behavior* in a series of parallel survey and experimental analyses that assess how generosity orientations, situation/context, and their interaction predict generous behavior. Together, these analyses will produce a better understanding of the causal mechanisms that underlie generosity. The Professional Development Assignment will allow Professor Glanville to conduct direct data collection for two of the experiments and devote time to writing of both articles and book. This work will inform Professor Glanville's teaching.

**\*GLASS, LOREN D., ASSOCIATE PROFESSOR, ENGLISH, 5 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

Professor Glass will examine the relationship between modernism and obscenity in the 20<sup>th</sup> century United States. Focusing on the crucial post-WW II period when the censorship of literature, and literary modernism itself, came to an end, Professor Glass will argue that the two concepts must be understood in terms of their specific historical convergence. This major chapter in American history has been neglected by literary scholars, and Glass's project promises to remedy this neglect. Glass will visit three major archives during the course of his research: The Kinsey Institute for Research in Sex, Gender, and Reproduction; The Harry Ransom Research Center at the University of Texas at Austin; and the Library of Congress. Glass has already signed a contract for publication of this project with Duke University Press. Its publication will enhance the standing of the English department as well as the University of Iowa's reputation as a premiere writing university.

**\*GOBAT, MICHEL, ASSOCIATE PROFESSOR, HISTORY, 10 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor Gobat's study examines the forgotten history of the United States' first overseas empire. This empire was built in Central America during the 1850s by William Walker and his band of nearly 10,000 colonists. Walker's empire triggered Latin America's largest and most successful anti-U.S. campaign ever. Contrary to conventional wisdom, however, many other Central Americans supported Walker, because they deemed his "empire of liberty" a seemingly more democratic polity than their own nation-state. By analyzing Central Americans' contradictory responses to Walker's empire, this study elucidates a critical moment in the history of pro- and anti-Americanism, a moment with profound implications for the meaning of those sentiments today. The study is based on largely untapped sources written in English, Spanish, German, and French, that are held in U.S., Latin American, and European archives. The main results will be a scholarly book and a document reader for use in college courses.

**HAZELTINE, RICHARD E., ASSOCIATE PROFESSOR, PSYCHOLOGY, 6 YEARS OF SERVICE, SPRING SEMESTER**

Cognitive psychology has long sought to understand how humans are able to rapidly change task goals to match the demands of a new situation or set of instructions. The goal of Professor Hazeltine's project is to design a model of task representation that can link recent developments in the new area of psychology called "embodied cognition" with more traditional information-processing accounts of human performance. The new approach focuses on how humans encode task representations that can efficiently guide behavior in novel as well as practiced situations. With this model, Professor Hazeltine aims to provide an explanation for some long-standing questions in cognitive psychology relating to the flexibility and efficiency of human behavior as well as some new findings emerging from his lab relating to boundary conditions of implicit learning and cognitive control. This work will enhance Professor Hazeltine's teaching.

**HERMAN, TED, PROFESSOR, COMPUTER SCIENCE, 16 YEARS OF SERVICE, SPRING SEMESTER**

Wireless sensor networks are useful in many contexts, but software development for these networks is difficult due to their small size and their limited computing, storage, and bandwidth resource. This project will adapt a research programming language to educational and application needs, for teaching and for use in collaboration with a computational epidemiology group at the University of Iowa. The educational goal is to simplify programming and enable students with little engineering experience to create interesting experiments using sensor networks. The technical, application-focused goals of the project relate to power conservation and timing control in battery-powered, portable sensors, which will be used to monitor hand-hygiene and social network situations in hospitals and clinics.

**KOWAL, REBEKAH J., ASSOCIATE PROFESSOR, DANCE, 9 YEARS OF SERVICE, SPRING SEMESTER**

The designated home of the United Nations, which materialized Western hopes for multilateralism after World War II, postwar New York City was also the prime international venue for the performance of world—or what was then called "ethnologic"—dance. Recent scholarship has focused on the significance of American cultural exportation during the Cold War, specifically U.S. government-sponsored international tours of American artists, including dancers. Drawing on this research, Professor Kowal's project sheds light instead on the domestic politics of foreign cultural importation, concentrating on the reception and performance of international dance forms in postwar New York City. She will consider these politics not only with respect to the formation of modern dance but also in relation to American foreign relations, immigration, and trade policies. During the

period of her Professional Development Assignment, Professor Kowal plans to draft two chapters of a book and journal articles, and this work will enhance her teaching.

**LAWRENCE, ERIKA, ASSOCIATE PROFESSOR, PSYCHOLOGY, 8 YEARS OF SERVICE, FALL SEMESTER**

Converging evidence indicates that the factors that lead to the onset and maintenance of intimate partner violence are multi-faceted and multi-systemic (individual, family, community, and societal factors). However, most state-mandated batterer treatment programs are narrow in scope and ineffective at preventing future violence. Professor Lawrence's goal with this project is to transition the state of Iowa to a novel, empirically based violence intervention program. Specifically, the Professional Development Assignment period will be used to: (1) complete the treatment manual, (2) write a grant to conduct a statewide clinical trial, (3) write three manuscripts presenting the new treatment program to clinical scientists, and (4) conduct workshops to facilitate nationwide dissemination. The publication and national dissemination of this work is expected to yield the first empirically supported treatment for intimate partner violence in the nation, placing Iowa in the national spotlight.

**LECUONA, RENE J., PROFESSOR, MUSIC, 19 YEARS OF SERVICE, FALL SEMESTER**

The primary purpose of Professor Lecuona's proposed assignment is to present solo piano recitals and piano master classes in South America and Mexico. Since joining the faculty in 1990, Professor Lecuona has recruited nine graduate students from Columbia and Brazil. The proposed tours will enhance her international visibility as a solo pianist and teacher and will enable her to continue to attract first-rate international students to the University of Iowa. The proposed piano program will encompass two distinct artistic areas: masterpieces from the standard solo piano repertoire and piano pieces written for her by distinguished composers Erin Gee (Guggenheim Fellow) and James Correa (Fulbright Fellow). She will also teach piano master classes at each venue. The two pieces composed for Professor Lecuona will become part of the curriculum for her graduate piano course in contemporary music Piano Literature II.

**LIN, CHING-LONG, PROFESSOR, MECHANICAL ENGINEERING, 13 YEARS OF SERVICE, SPRING SEMESTER**

Professor Lin will examine the human airway defense system that involves transmission of mechanical force due to motion of lung from macro scale to bronchial epithelial cells, and further translation to biochemical responses via cell signaling to maintain the periciliary liquid volume for mucociliary clearance. He will integrate a novel image-based lung mechanics model with a cell model, and apply it to study the above multi-scale process. This unique modelling capability has applications in drug design, clinical trials, individualized drug therapy, and inhalation dosage planning for systemic drugs. He will also develop new National Institutes of Health applications and further strengthen a business relationship growing out of a patent jointly filled by the University of Iowa and the University of Auckland, New Zealand. The business seeks to further focus the pharmaceutical industry on Iowa for imaging and computational solutions leading to the development, testing and targeting new pharmaceutical agents.

**LUTGENDORF, PHILIP A., PROFESSOR, ASIAN & SLAVIC LANGUAGES & LITERATURES, 24 YEARS OF SERVICE, HALF TIME FOR ONE YEAR**

The popularity of *chai*— a blend of milk, water, tea leaves, and various spices and sweeteners, that is immensely popular all over the Indian subcontinent, and lately, beyond—is a modern phenomenon, since the cultivation and consumption of tea was introduced into South Asia late in the colonial period. The spread of *chai* depended on urbanization, industrialization, improved transport, mass advertising and marketing, and changes in diet, eating habits, and social customs. Professor Lutgendorf will conduct research in India, collecting archival materials as well as oral histories, to

produce an illustrated book on how this everyday drink is interwoven with the South Asian experience of modernity and change. His findings will be incorporated into a unit on eating habits in a new team-taught general education course on contemporary South Asia ("India Now") he is developing with colleagues in several departments, partly supported by a grant from the U.S. Department of Education.

**\*LUTGENDORF, SUSAN K., PROFESSOR, PSYCHOLOGY, 14 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor Lutgendorf will examine the relationship of psychological stress factors and progression of ovarian cancer. Her current work has shown that stress hormones can be instrumental in promoting cancer growth. In this project she will expand her work to understanding the physiological regulation of the stress response in ovarian cancer patients, and will develop a broader understanding of pathways by which stress can influence cancer growth.

**MACKAY, MICHAEL A., ASSOCIATE PROFESSOR, BIOMEDICAL ENGINEERING, 9 YEARS OF SERVICE, FALL SEMESTER**

Professor Mackey will obtain preliminary data needed for a grant application that will significantly enhance the capabilities offered by the Large Scale Digital Cell Analysis System (LSDCAS), a live cell imaging project developed over recent years in the Colleges of Engineering and Medicine at the University of Iowa. LSDCAS allows biomedical researchers to obtain important information related to cellular behavior that is not available through other means, and has applications in cancer research, toxicology, aging, and many other biomedical research areas. Technology developed for LSDCAS is disseminated to University of Iowa researchers as a Research Core Facility at the Holden Comprehensive Cancer Center. The proposed development will add important new capabilities to LSDCAS and will likely result in increased funding for undergraduate, graduate, and post-graduate student training at the University.

**MCGREGOR, KARLA K., PROFESSOR, COMMUNICATION SCIENCES & DISORDERS, 5 YEARS OF SERVICE, SPRING SEMESTER**

Professor McGregor's objective is to share scholarship on children's language learning with a general audience. She intends to write a compelling and accessible book that presents scientifically sound information. The book will help readers understand language learning; relate the science of language learning to personal experiences; and instill an appreciation for the accomplishment represented by human language learning. The work is important for parents, teachers, and other caregivers—and ultimately for children—because children's language ability predicts later academic and career success. University of Iowa students will benefit when Professor McGregor brings enhanced knowledge and writing skill as well as new material to the classroom. The University will benefit by increased name recognition among the public, and Iowans will benefit by a greater understanding of their children's learning and development.

**\*MCLEOD, KEMBREW, ASSOCIATE PROFESSOR, COMMUNICATION STUDIES, 9 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor McLeod's long-term research program focuses on ways intellectual property considerations impinge on the work of scholars and artists, and his current project examines one significant area that has been troubled by copyright. In the 1980s, African-American hip-hop musicians pioneered a revolutionary form of sound collage known as sampling—in which an audio quotation is placed into a new musical work. Sampling is the latest manifestation of a rich tradition of musical quotation prevalent in jazz, blues and many other African-American musical forms. But it is controversial. By the 1990s, an increasing number of copyright lawsuits and rising costs of licensing musical works put the brakes on innovative musical-cultural form. The culmination of Professor McLeod's Faculty Scholar project will be a book titled *Creative License: Digital Sampling*,

*Culture, and the Law*, which will be a groundbreaking work that tackles key questions about quotation in a digital world. This work will enrich Professor McLeod's courses.

**MOONEY, BARBARA B., ASSOCIATE PROFESSOR, ART & ART HISTORY, 7 YEARS OF SERVICE, FALL SEMESTER**

As increasingly larger segments of the Midwestern physical and cultural landscape are lost to suburban housing developments and retail malls, the need to acknowledge the unique aspects and historical development of traditional buildings becomes more urgent. Professor Mooney's project, *Early Architecture of the Prairie*, analyses the built environment and material culture of Illinois from 1765 to 1928 and provides the scholarship and publicity for the public appreciation of Midwestern vernacular architecture. Relatively few scholars have addressed historical architecture in downstate Illinois and much of what has been published is descriptive rather than analytical. Professor Mooney's proposed research will draw from primary documents and fieldwork at building sites. Her project will provide data resulting in a book that will make a significant contribution to the field of American architectural history and will enhance her teaching.

**NOONAN, MARY C., ASSOCIATE PROFESSOR, SOCIOLOGY, 8 YEARS OF SERVICE, SPRING SEMESTER**

Professor Noonan will examine differences between men and women in lawyers' pay and partnership rates over the past four decades. Women first entered the legal field in large numbers in the 1970s. The expectation in the 1970s was that as women integrated the profession they would eventually achieve parity with men. The extent to which this has been realized is an open question however. Using a unique data set of University of Michigan Law School graduates, Noonan will document gender differences in earnings and partnership rates 15 years after law school graduation (covering the period from the late 1980s to the mid 2000s). Assuming a gender gap does exist, the project will identify factors responsible for the gap. The project is expected to result in a published book. Professor Noonan will incorporate her findings into her courses on gender, work, and the family. Additionally, she will involve graduate students in the project, providing important hands-on training in survey research and quantitative methods.

**OSIEL, MARK J., PROFESSOR, LAW, 18 YEARS OF SERVICE, FALL SEMESTER**

Professor Osiel will conduct research that will benefit University of Iowa students, and therefore the University, through his courses on the Law of War, Peace & Military Affairs, International Criminal Law, and Introduction to Public International Law. In all three classes, considerable time is spent reading and discussing the question of proportionality in the use of force. It is also a benefit to the University to have one of the world's leading experts on the subject—of perennial interest to the mass media, when reporting on military conflict—among its faculty. Professor Osiel's book will contend that the law of war crimes should dispense with the requirement of "proportionality," which undergirds the better-known notion of "collateral damage." The state of Iowa will benefit from the new material included in courses, the resulting written scholarship produced, and the discussion in Iowa media venues to which Professor Osiel will contribute.

**PIGGE, CHRIS, ASSOCIATE PROFESSOR, CHEMISTRY, 4 YEARS OF SERVICE<sup>3</sup>, SPRING SEMESTER**

Professor Pigge will develop new synthetic methods that can be applied toward the synthesis of biologically active natural products and pharmaceuticals based on the concept of dearomatization. Aromatic compounds comprise a class of readily available and inexpensive starting materials for organic synthesis. The utility of these building blocks will be greatly enhanced if general and widely applicable methods for engaging such compounds in bond-forming transformations leading to

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<sup>3</sup> Will have met the 10 semester requirement prior to taking the leave; approved per SUI policy.

non-aromatic products are successfully uncovered. Methods leading to the conversion of pyridine derivatives into complex heterocyclic molecular frameworks will be examined, along with novel stereocontrolled transition metal-catalyzed transformations of carbocyclic arene substrates. This research will significantly advance the field of synthetic organic chemistry, generate multiple publications in leading journals, result in external funding from major federal granting agencies, and enhance Professor Pigge's teaching.

**POREMPA, AMY, ASSOCIATE PROFESSOR, PSYCHOLOGY, 9 YEARS OF SERVICE, SPRING SEMESTER**

Sensory input to our brains—*i.e.*, what we see, hear, feel, smell, and touch—is critical to everything we accomplish, feel, and enjoy, as human beings. Identifying where and how in the brain these types of information are processed will help us to restore, boost, or repair these crucial functions. The proposed project will identify pathways in the brain for different types of hearing processes related to identifying complex sounds, locating where sounds are coming from, and the brain areas involved in remembering important sounds. Publication and dissemination of these findings through journal articles, seminar talks, ideas for grant proposals, and classroom teaching will benefit not only the individual professor's research area but inform the students' educational paths, while adding to the basic medical knowledge necessary for improvement or repair of brain functioning.

**SAMUELSON, LARISSA K., ASSOCIATE PROFESSOR, PSYCHOLOGY, 9 YEARS OF SERVICE, FALL SEMESTER**

Professor Samuelson has proposed a model of vocabulary development that integrates across individual instances of word learning in multiple tasks to build a lexicon. The model is based on her recent Dynamic Neural Field (DNF) model of noun generalization decisions and changes in those decisions over development. This DNF provides neural grounding that links brain and behavior in a way that can generate precise behavioral predictions and allow for the integration of the multiple systems involved in early word learning, including encoding of the word, selection of objects in the task space, word learning in context, and category formation. Professor Samuelson will focus on this grounding in neural processes during the period of her Professional Development Assignment by: 1) furthering her understanding of neural dynamics, 2) furthering her training in the use of Near Infrared Spectroscopy (a neuroimaging technique), and 3) completing two manuscripts. This work will enhance her teaching.

**SCULLION, ROSEMARIE, ASSOCIATE PROFESSOR, FRENCH & ITALIAN, 22 YEARS OF SERVICE, SPRING SEMESTER**

Professor Scullion is studying the constraints successive French governments placed on public expression in metropolitan France in the two decades following World War II. She examines the censorship a state organism, the *Commission de contrôle des films* (Film Oversight Board), imposed on important French films during this period. Scullion will also research the history of prominent French publications that were censored for the anti-colonial stances they adopted during France's decolonization wars in Indochina and Algeria. Her aim is to illuminate a neglected history of government repression that shaped cultural life in the aftermath of World War II, a period when France sought to restore the democratic institutions that had been quashed during the Nazi occupation (1940-44). Understanding gained in this research will advance knowledge in the fields of French cinema, historical and cultural studies and enrich the instruction provided in these areas at the University of Iowa.

**SHEN, HELEN, ASSOCIATE PROFESSOR, ASIAN & SLAVIC LANGUAGES & LITERATURES, 7 YEARS OF SERVICE, FALL SEMESTER**

Professor Shen plans to write a book that addresses adult Chinese as a second language (hereafter L2) vocabulary acquisition and instruction from the perspectives of both theory and practice. This book will be based on Professor Shen's more than 10 years' experience of L2 Chinese researching and teaching. It will be the first book in the field that specializes in L2 Chinese adult literacy issues in the classroom environment. It is expected that the book will meet increasing demands for research on the issues about slow development of Chinese vocabulary among American adult learners, and on the issues of effective instructional models and methodologies in vocabulary instruction in the field of Chinese education. This book could be used as a textbook for graduate students majoring in Teaching Chinese as a Second Language, and as a reference book by college and high school instructors who are teaching the Chinese language in Iowa and nationwide.

**\*SPENCER, JOHN P., ASSOCIATE PROFESSOR, PSYCHOLOGY, 12 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

During the past 15 years, a new theoretical framework for thinking about brain-behavior relations has emerged—the Dynamic Field Theory. This neural network approach was initially applied to issues in spatial cognition but has now been extended to a host of issues in visuo-spatial cognition, motor control, autonomous robotics, word learning, and executive function. The goal of the current project is to complete a two-volume book that summarizes the theoretical approach (volume 1) and provides a hands-on tutorial with computer software to learn how to develop neural network models within this framework (volume 2). The proposed books will solidify this theoretical perspective in a way that cannot be achieved within individual journal articles and book chapters, offering a core text from which to learn about Dynamic Field Theory. The books will be used in a graduate course on Dynamical Systems Theory at the University of Iowa and in a Dynamic Field Theory Summer School hosted at the university each summer.

**STENSVAAG, JOHN-MARK, PROFESSOR, LAW, 22 YEARS OF SERVICE, SPRING SEMESTER**

In 1977, Congress added part C to the Clean Air Act, establishing the Prevention of Significant Deterioration (PSD) program—an intricate regime designed to protect air quality in areas complying with one or more national ambient air quality standards (attainment areas), by imposing elaborate conditions on and requiring permits for major emitting facilities. Professor Stensvaag has published three articles exploring the legal and policy choices made by federal and state governments in fashioning the permit trigger, baseline, increment, and ceiling elements of the program, and this project will examine additional program aspects. Because all of Iowa is classified as attainment for one or more air pollutants, his research will provide a valuable resource for the Iowa Department of Natural Resources and for PSD permit applicants in the state. Moreover, Professor Stensvaag's teaching of Environmental Law has been and will continue to be enhanced by his ongoing PSD research project.

**SWENSEN, COLE, PROFESSOR, CREATIVE WRITING, 5 YEARS OF SERVICE, SPRING SEMESTER**

Professor Swensen's project is a series of poems on landscape painting that will explore, on one hand, the relation of beauty to place and, on the other, the ways in which the eye of the artist molds social understanding of the world. For instance, at the same time that the landscapes of the Hudson River School were contributing to the constitution of American identity, in France, Barbizon and then Impressionist landscapes were documenting a gradual but radical shift in class relations. Using short lyric forms focused on sound and rhythm, Swensen will write a series of 50 to 60 poems on the history of western landscape painting from its origins to the present day. By immersing herself in the creative process, she will be better able to help her students understand and develop their own



poetry, and this specific project will enrich her seminar “Ekphrasis: Writing the Visual Arts.” She will publish the poems individually in journals and collectively as a book.

**TANG, WENFANG, PROFESSOR, POLITICAL SCIENCE, <1 YEAR OF SERVICE<sup>4</sup>, SPRING SEMESTER**

The rising public dissatisfaction in China due to widening income gap and the lack of political freedom leads one to believe that the communist regime will collapse soon. Yet the Chinese government continues to enjoy strong public support 20 years after the collapse of communism in the Soviet Bloc. Existing explanations of regime legitimacy in China borrow the literature on western democracies and focus on the difference between supporting the political system while criticizing those in power. Professor Tang’s study uses rare public opinion survey data and shows that the reason for Chinese communist party to stay in power is its ability to successfully direct public anger from Beijing to local governments; but such anger can quickly spill over to the central government in Beijing if it is not dealt with promptly and effectively. He will incorporate his findings into his undergraduate course, Government and Politics of China.

**THELANDER, KRISTIN, PROFESSOR, MUSIC, 20 YEARS OF SERVICE, HALF TIME FOR ONE YEAR**

Kristin Thelander will engage in three projects during the period of the Professional Development Assignment: 1) preparation of three new courses to teach in the School of Music, 2) preparation of a critical edition of a previously unpublished early 19<sup>th</sup>-century horn concerto by German hornist-composer Carl Oestreich, and 3) writing an article on the technique, performance practice, and pedagogy of the historical natural (valveless) horn, to be submitted to the primary journal of the International Horn Society. Professor Thelander served for nine years as Director (Department Executive Officer) of the School of Music, and was horn professor for the previous 11 years. Having been replaced as horn professor nine years ago, she plans to develop three new courses that she will teach following the Professional Development Assignment. The projects on natural horn are a continuation of past research efforts, and will re-establish her research interests after her years of administrative service.

**TIERNEY, LUKE, PROFESSOR, STATISTICS & ACTUARIAL SCIENCE, 7 YEARS OF SERVICE, HALF TIME FOR ONE YEAR**

Effective statistical methodology made available through statistical software is critical to the ability of researchers to make maximal use of experimental and observational data, and for the ability of instructors to teach good research practices. Professor Tierney’s research explores and develops new principles for the design of statistical software to take advantage of modern high-performance computational resources. Particular emphasis is placed on exploring the effective use of parallel computing and compilation for statistical languages. Pilot implementations will be incorporated in open source statistical software systems. Applications in a range of areas serve as testbeds for methods and principles developed in this research.

**TSE, KENNETH T, ASSOCIATE PROFESSOR, MUSIC, 7 YEARS OF SERVICE, SPRING SEMESTER**

Over recent years, the development of saxophone performance in China has seen tremendous growth. The number of students studying the instrument is at a record high. For the past few years, Professor Tse has had the honor to visit and participate in several saxophone events in Beijing, GuangZhou, and other locations in China and has made some important connections. The primary goal for his Professional Development Assignment will be to perform and give master classes at several key music conservatories in China and to further his ties with Chinese colleagues and

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<sup>4</sup> Per offer letter, allowed to apply for a Professional Development Assignment to be taken in second year.

students. He also plans to give concerts and clinics in nearby countries such as Korea, Taiwan, and Japan to solidify his Pan-Asian connections. This work will also benefit his teaching at Iowa.

**VANDERVELDE, LEA, PROFESSOR, LAW, 24 YEARS OF SERVICE, FULL YEAR**

In the early 19th century, the American frontier was located in the valleys of the river corridors of the Ohio River and the upper Mississippi. Given its central location for river traffic, the St. Louis courts were often those most accessible to resolve disputes in the frontier territories. Building on her work, "Mrs. Dred Scott: A Life on Slavery's Frontier," which related the story of the slave litigants of the most famous case to arise from the St. Louis courts during the period, Professor VanderVelde has discovered documentation of 260 freedom suits brought by slaves in St. Louis, leading up to the tumultuous case of Dred Scott v Sandford. These cases were unknown six years ago when she began her search for them, and they have never been the subject of scholarly analysis. She will complete an original manuscript for a book entitled *Redemption Songs: One Hundred Freedoms*, based on these newly discovered cases. This work will enhance her teaching.

**\*VECERA, SHAUN P., PROFESSOR, PSYCHOLOGY, 11 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Alzheimer's disease (AD) is the most prevalent neurodegenerative disease in the elderly. Given the health consequences of AD, the research outlined in this proposal will investigate the operation of a key cognitive process in AD patients: visual memory. The proposed research tests the *visual memory deficit hypothesis* of AD functioning, which states that visual memory impairments are the primary cause of deficits in the early phases of AD. The proposed research is relevant for several mental health issues, including the development of methods for the early detection of AD. Also, a detailed understanding of the disrupted processes in AD will be important for treatment planning, the determination of patients' competencies, and the consequences of AD for everyday performance.

**\*WHITE, SUSAN C., ASSOCIATE PROFESSOR, ART & ART HISTORY, 9 YEARS OF SERVICE, SPRING SEMESTER (CONTINUING)**

Professor White proposes to develop a new and truly innovative body of paintings, requiring prolonged and uninterrupted periods of time in the studio. She will explore a broad range of new techniques using slow drying acrylic, offering the potential to eventually move away from the use of oils in the classroom. This will have a very positive impact on health and safety, creating a "greener" environment at the university. She will further expand the venues in which her work is shown. Exhibitions are for visual artists what publication is for other scholars—an opportunity to enter into dialog with others in the field and to raise the profile of their institutions. She is pursuing exhibitions in Europe, Mexico and India, where she recently set up a program for her students. She is planning another one-person show next year in New York, and she will explore the possibility of setting up a traveling show and creating a monograph about the work in conjunction with it.

**WIEMER, DAVID F., PROFESSOR, CHEMISTRY, 31 YEARS OF SERVICE, FULL YEAR<sup>5</sup>**

Professor Wiemer will conduct research in synthetic organic and medicinal chemistry. His major focus will be to pursue laboratory syntheses of biologically active natural products that may serve as potential anti-cancer agents. He also will pursue the design and synthesis of new organophosphorus compounds that are intended to mimic the phosphate esters central to metabolism and to have potential anti-cancer activity. These efforts will improve his ability to secure external research funding, and enhance his ability to teach organic chemistry courses at both the graduate and undergraduate levels.

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<sup>5</sup> Approved for spring 2008 but deferred due to administrative responsibilities. SUI approves request for a full year of leave given accumulation of 18 semesters since last leave and 10 full years as Department Executive Officer.

**\*WINET, JON, ASSOCIATE PROFESSOR, ART & ART HISTORY, 7 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

During 2008-2010, Professor Winet, School of Art & Art History Intermedia Area Head, will research and develop interactive new media artworks for the Internet, World Wide Web, and cell phones and other mobile devices, to be presented in national and international art and technology projects focusing on the 2008 U.S. presidential elections and 2010 FIFA Soccer World Cup. The research and projects investigate the potential of networked environments for creative practice and civic engagement while addressing significant social and cultural issues. The research will impact Intermedia's curriculum with the addition of new classes in interactive media, and will contribute to the University's research and scholarship in emerging technologies.

**WING, ADRIEN K., PROFESSOR, LAW, 22 YEARS OF SERVICE, FALL SEMESTER**

Many groups around the world suffer from physical and emotional damage as a result of racism, sexism, colonialism, and other "-isms." Professor Wing has termed this harm "spirit injury." Group members may not achieve their potential. Some may become suicidal or homicidal—engaging in gangsterism or terrorism. On a group level, these spirit injuries can devastate a culture. This project will examine how national and international legal systems can be used as one element in the treatment for spirit injury on a group wide basis. Among the solutions to be discussed will be the use of tools such as national and international court cases, constitution making, affirmative action, reparations, and truth commissions. Case studies will include Bosnia, South Africa, Palestine, Rwanda, and Black America. The project will result in a book length treatment, part to be completed during the Professional Development Assignment. The resulting material will also be used in Professor Wing's Human Rights and Muslim World courses.

**IOWA STATE UNIVERSITY**

**BADO, NIKKI, ASSOCIATE PROFESSOR, PHILOSOPHY AND RELIGIOUS STUDIES, 9 YEARS OF SERVICE, FALL SEMESTER**

Professor Bado will spend the fall semester 2010 at the Nanzan Institute for Religion and Culture in Nagoya, Japan, which is one of the largest and most prestigious international centers for the study of philosophy and religion in the world. In order to further her study of religious rituals, she will visit the Shikoku Pilgrimage at Shikoku Island and while there, she will produce a documentary on the rituals at each of the pilgrimage sites and on the strenuous trek between sites. This research will increase Professor Bado's international reputation as a religious studies scholar, and the international footprint of Iowa State University, with the likelihood of further fundable projects. The documentary has the potential to bring ISU-funded scholarship to a much larger audience than a typical journal or book publication.

**BAILEY, MICHAEL, ASSOCIATE PROFESSOR, HISTORY, 6 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Bailey will spend the academic year at multiple sites: 1) the Institute for Advanced Studies, 2) the Davis Center at Princeton, 3) the Stanford Humanities Center, and 4) the Wisconsin Humanities Institute. He will continue his work on medieval superstitions with a goal of finishing his book, *Superstition in the Late Middle Ages*, for Cornell University Press. This monograph will make a significant contribution to the field. The contacts with scholars at the centers he visits will facilitate future work and potential collaboration. In addition, his knowledge will benefit graduate students in both the department's agricultural history and rural studies program and the history of technology and science program.

**BASU, SAMIK, ASSOCIATE PROFESSOR, COMPUTER SCIENCE, 6 YEARS OF SERVICE, FALL SEMESTER**

Professor Basu will spend the Fall 2010 semester at the University of California, Santa Barbara. He will work with a world authority on a software engineering project directed toward software verification and program analysis. The results of this collaboration will broaden Professor Basu's research program and enable him to have a deeper understanding of the practical problems in software engineering. As a result, the new knowledge will benefit ISU students as he enhances the software engineering courses he teaches, and it will allow for further student involvement in exciting and interesting software engineering projects.

**CARAGEA, PETRUTA, ASSOCIATE PROFESSOR, STATISTICS, 6 YEARS OF SERVICE, FALL SEMESTER**

Professor Caragea will visit the Universities of California, Santa Barbara and Santa Cruz while on the Professional Development Assignment. She will work with distinguished scholars at both institutions to develop methods for working with the large datasets that are needed for wind forecasting. A result will be the development of a more integrated course of applied spatial statistics at ISU. In addition, the leave will allow her the time to complete a series of peer-reviewed articles regarding models for massive spatial data and stochastic wind forecasting. Continued funding depends on developing methodology and advancing the field that leads to respected publications.

**CHAPELLE, CAROL, PROFESSOR, ENGLISH, 24 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Chapelle will work at the Laval University in Quebec during AY2011. She is a recognized leader in applied linguistics and is currently president of the American Association of Applied Linguistics. Her specialty areas are the teaching and learning of second languages. She is interested in the unique problems of English education in French Canada and will gather materials

and begin writing her next book, *Cultural Content in Beginning Language Learning Materials: Quebec and Canadian French*. While there have been institutional partnerships and student exchanges for semesters, this will be the first time an ISU faculty member will spend an extended time at a partner institution engaging in research on this subject.

**CLARK, WILLIAM, PROFESSOR, ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY, 25 YEARS OF SERVICE, FALL SEMESTER**

Time spent in Winnipeg and Manitoba, Canada, and Frederick, Maryland, as well as Ames, will allow Professor Clark to strengthen existing collaborations and build new ones. While on Professional Development Assignment, Professor Clark will bring long-standing efforts to fruition in terms of data analysis and publications, and he will hone skills in rapidly developing fields of spatial statistical analysis and landscape genetics/genomics.

**D'ALESSANDRO, DOMENIC, PROFESSOR, MATHEMATICS, 10 YEARS OF SERVICES, FALL SEMESTER**

During Fall 2010, Professor D'Alessandro will be at the University of Minnesota moving his research into a new area that combines algebraic geometry and string theory. He has been reading in this area for years and now will move this expertise to the professional level by working with an expert in the field. He will return to ISU and work to establish and expand the group within the Mathematics Department with expertise in this and related areas.

**DAVIS, RADFORD, ASSOCIATE PROFESSOR, VETERINARY MICROBIOLOGY AND PREVENTIVE MEDICINE, 11 YEARS OF SERVICE, FALL SEMESTER**

Professor Davis will further enhance his knowledge in the areas of public health while strengthening the linkage between the United Nations' Food and Agriculture Organization (FAO) and universities during this Professional Development Assignment. Specifically, he will contribute to the development of disease prioritization methodology and tools, explore synergies between community animal and community health delivery systems and propose options for improvement, and investigate the role of trade in disease spread and their socio-economic impacts while working at the FAO. Dr. Davis has taken an active role in promoting the "One Health, One Medicine Program" in the College of Veterinary Medicine; the program is an international mission to bring veterinary and human medicine closer to solve important public health issues of today.

**DIMITROVA, DANIELA, ASSOCIATE PROFESSOR, GREENLEE SCHOOL OF JOURNALISM AND MASS COMMUNICATION, 6 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Dimitrova will travel to both the Mid Sweden University and Sofia University in Bulgaria where she will continue her research on cross-cultural media framing of political events. She will focus on how Bulgaria's communist past has influenced media coverage of contemporary events. The findings of her research will be used to produce several manuscripts, including journal articles and book chapters, which will be accessible and useful to media scholars and to journalism practitioners. In addition to these outcomes, the contacts and relationships that Professor Dimitrova develops will enhance her classroom instruction, and lead to potential future research and teaching collaborations between ISU, Mid Sweden University and Sofia University.

**DRAKE, COREY, ASSOCIATE PROFESSOR, CURRICULUM AND INSTRUCTION, 4 YEARS OF SERVICE, SPRING SEMESTER**

Professor Drake will collaborate with colleagues at the University of Arizona for a joint program of research focused on the design and study of activities for elementary mathematics methods courses. Specifically, she will investigate pre-service teachers' learning and practices related to incorporating family and community funds of knowledge in elementary mathematics instruction. The research team will analyze two years of data collected in courses, and then they will disseminate both new course designs and the results of research through articles, presentations, and a book for mathematics education educators. In addition, Professor Drake will learn more about the University of Arizona's well-regarded teacher education program and use that to inform the re-design of the ISU elementary education program.

**FEI, SHUI-ZHANG, ASSOCIATE PROFESSOR, HORTICULTURE, 8.5 YEARS OF SERVICE, SPRING SEMESTER**

During this professional development assignment at the Plant Gene Expression Center, USDA in Berkeley, California, Professor Shui-zhang will work in two labs on several plant species, including one model for biofuel grasses. He will perform research with UC-Berkeley faculty on self-incompatibility (SI) in *Miscanthus sinensis*. (*Miscanthus*, along with switchgrass, is an ideal biomass producer for renewable energy production because of its high yield and low input need.) As a result, Professor Shui-zhang will learn new skills and ideas to develop collaboration that will enhance his ability to obtain competitive federal grants.

**FIORE, ANN MARIE, PROFESSOR, APPAREL, EDUCATIONAL STUDIES AND HOSPITALITY MANAGEMENT, 20 YEARS OF SERVICE, FALL SEMESTER**

Professor Fiore will develop a short course, and travel to Wuhan University of Science and Engineering in China as part of her three-year Chutian Scholar appointment (2009-2011). She will analyze data, and author peer-reviewed Rural Renaissance Community Index manuscripts to support development of a post-Professional Development Assignment external grant. She also plans to continue development of a distance education version of a graduate course to be used as part of the department's graduate merchandising certificate, and work on edited chapters of a co-authored forecasting textbook.

**FLETCHER, CYNTHIA, PROFESSOR, HUMAN DEVELOPMENT AND FAMILY STUDIES, 33 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Fletcher plans short-term stays at the University of Wisconsin-Madison, University of Vermont, and the University of New Hampshire to visit trans-disciplinary centers and institutes that are using community-based research methods to conduct engaged scholarship. She will return to ISU to spend concentrated time on analysis and manuscript preparation using existing data from several Extension community-based projects. The long-term outcome is to strengthen connections between the department's academic (service learning), research and Extension programs and to enhance effectiveness as an Extension faculty member in addressing critical public issues affecting family economic well-being.

**FOX, RODNEY, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 11 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Fox is an outstanding researcher who has completed a previous productive professional development assignment. He proposes to pursue collaborations with several international institutions, such as at Politecnico di Toroni, Italy, and École Centrale de Paris, France. With a colleague in Italy, he will work on a research monograph on quadrature based methods related to multiphase flow. This monograph will enhance the visibility of Professor Fox's work and its impacts

on different fields. The successful completion of the proposed book on multiphase flows will establish ISU as a world-class leader in multiphase flow research.

**GOGGI, ALCIRA SUSANA, ASSOCIATE PROFESSOR, AGRONOMY, 9.5 YEARS OF SERVICE, SPRING SEMESTER**

During this professional assignment at the United Nations' Food and Agriculture Organization (FAO) in Rome, Italy, and at the Organisation for Economic Co-Operation and Development (OECD) in Paris, France, Professor Goggi will develop closer international and seed science collaborations. At the FAO, she will focus on research on the impact of well-developed seed delivery systems for mitigating the negative effect of climate change on seed supply. At the OECD, Professor Goggi will explore aspects of world-wide seed certification plans for the delivery of seeds from improved varieties in an era of climate change. Her overall goal is to enhance her qualifications for funding opportunities in seed quality and environmental stress research in a changing climatic environment.

**HILL, MATTHEW G., ASSOCIATE PROFESSOR, ANTHROPOLOGY, 7 YEARS OF SERVICE, SPRING SEMESTER**

Professor Hill will further work on a book detailing the archeology of the Paleo-Indians of Western Nebraska – the subject of his research for the past decade. The Spring Semester of 2011 will be spent bringing together and analyzing the tremendous amounts of data collected during these studies, and on the writing of several book chapters.

**HILLIER, ANDREW, ASSOCIATE PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 6 YEARS OF SERVICE, SPRING SEMESTER**

Professor Hillier's research has blossomed recently, and he has received National Science Foundation, Department of Energy, and National Institutes of Health grants this year. Thus, it is timely that he proposes to visit the Center for Ultrahigh Bandwidth Devices for Optical Systems at the University of Sydney, Australia, to further collaborations with leading researchers. His recent work in plasmonic sensors can be expanded to metamaterials – an area that offers several new funding opportunities at various federal funding agencies. This collaborative opportunity, and the ability to move into new related areas, will allow Professor Hillier to garner additional research funding.

**KOTHARI, SURAJ, PROFESSOR, ELECTRICAL AND COMPUTER ENGINEERING, 25 YEARS OF SERVICE, FALL SEMESTER**

Professor Kothari is an influential instructor and high quality researcher in the area of software engineering. He proposes to visit national and international companies while on Professional Development Assignment, as engagement with companies is important in order to grasp the complexity of many software problems. Upon his return from the Professional Development Assignment, Dr. Kothari plans to develop ISU distance education courses geared towards industry, and initiate new research on software transformation technology for code migration.

**LAVROV, DENNIS, ASSISTANT PROFESSOR, ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY, 5 YEARS OF SERVICE, SPRING SEMESTER**

Professor Lavrov will spend a semester at the Centre d'Océanologie de Marseille, France. He uses genomics to study the evolution of sponges. Travel to the Mediterranean will allow him to collect and study the huge diversity of organisms available in that region. His Professional Development Assignment will be dependent on his successful promotion to associate professor with tenure this academic year.

**LU, PING, PROFESSOR, AEROSPACE ENGINEERING, 19.5 YEARS OF SERVICE, FALL SEMESTER**

Professor Lu is a valued researcher with grant support from the U.S. Air Force. From 2005-07, Professor Liu was the only member from academia on the Guidance, Navigation and Control Team in the NASA Crew Exploration Vehicle Project, which is to replace the Space Shuttle in the next decade. While on professional development assignment with the Air Force Research Lab in New Mexico, Professor Lu will represent Iowa State University and its leading role in ongoing research with the Air Force. It is important for Professor Lu to keep this connection strong because of the ISU student support that his work has provided.

**MARTIN, RYAN, ASSOCIATE PROFESSOR, MATHEMATICS, 6 YEARS OF SERVICE, FALL SEMESTER**

Professor Martin will visit several locations including the University of California, San Diego, and Cambridge University during a Fall Semester Professional Development Assignment. Dr. Martin is part of a group of faculty at ISU that has made recent advances in graph theory. He will use the semester to meet with other authorities in this field to extend his research and to communicate his discoveries. It is important that ISU supports this research, which will be welcomed by the combinatorial community.

**MAZUR, ROBERT, ASSOCIATE PROFESSOR, SOCIOLOGY, 24 YEARS OF SERVICE, SPRING SEMESTER**

Professor Mazur will spend the semester at the Makerere University in Uganda to study issues of post-conflict resettlement and food security, in order to promote the international recognition for his work and publications in the fields of population mobility, livelihood strategies, food security, and child health. His research, writing and publications will contribute to the evolving development and research activities for ISU's Center for Sustainable Rural Livelihoods, for which Professor Mazur serves as Associate Director for Socioeconomic Development. Research in these areas will contribute to his graduate and undergraduate teaching at ISU, and he will advance sociological concepts and models appropriate for future research and policy-making internationally.

**MCLEOD, SCOTT, ASSOCIATE PROFESSOR, EDUCATIONAL LEADERSHIP AND POLICY STUDIES, 2 YEARS OF SERVICE, FALL SEMESTER**

Professor McLeod is a leading academic regarding K-12 school technology issues who will spend this time writing a book that has been requested by several publishers for school principals and superintendents. The book will address many issues, including digital school leadership, technology planning and funding, classroom technology integration, safety and security. His book project promises to be the leading text in the field, and the completion of the project will increase Professor McLeod's visibility in the field as well as that of the Department of Educational Leadership and Policy Studies among peer faculty and institutions.

**MIRANOWSKI, JOHN, PROFESSOR, ECONOMICS, 14.5 YEARS OF SERVICE, SPRING SEMESTER**

During this professional development assignment at the United Nations' Food and Agriculture Organization (FAO) in Rome, Italy, and the Organisation for Economic Co-Operation and Development (OECD) in Paris, France, Professor Miranowski will develop a more integrated and global economic assessment of greenhouse gas reduction impacts associated with carbon and biofuel policies in different economic environments. His work is heralded as important to the global implications of greenhouse gas emission, indirect land use, and environment-landscape impacts in the U.S. and abroad. This Professional Development Assignment offers Dr. Miranowski the opportunity to complete projects and publish results.



**MONTABON, FRANK, ASSOCIATE PROFESSOR, LOGISTICS, OPERATIONS AND MANAGEMENT INFORMATION SYSTEMS, 9 YEARS OF SERVICE, SPRING SEMESTER**

Professor Montabon plans to teach and conduct research in supply chain management in Budapest, Hungary, or Katowice, Poland, in conjunction with invitations from both via the Fulbright Scholar Program. The research in environmental management and the Global Manufacturing Research Group is a continuation of his work at ISU within the Colleges of Business and Engineering. Expected outcomes include increasing the network of research colleagues, enhancing content of classes to be taught, and enhancing research articles to be published.

**MU, AILI, ASSOCIATE PROFESSOR, WORLD LANGUAGES AND CULTURES, 8 YEARS OF SERVICE, SPRING SEMESTER**

Professor Mu will continue her studies on contemporary Chinese culture and finish her latest book, *Moments of Truth: The Chinese Short-shorts Phenomenon*. The completion of the book will impact the understanding of contemporary Chinese culture and society. Professor Mu already has presented this topic at national and international conferences, which have brought this current research to the attention of intellectual communities globally. As the only stand-alone Chinese Studies minor in Iowa, the ISU program distinguishes itself with a focus on modern China. This project will contribute to that goal.

**MUENCH, JOSEPH, ASSOCIATE PROFESSOR, ART AND DESIGN, 8 YEARS OF SERVICE, SPRING SEMESTER**

Professor Muench wants to continue to broaden his exploration of, and apply knowledge towards, the creation of a cohesive body of artwork that demonstrates specialized technical approaches to fabricated metal sculptures. While on Professional Development Assignment, he will work directly with specialists across the U.S. in the "Auto/Aero" sheet metalworking trade – using techniques and materials specific to the custom automobile and aircraft metalworking industries. This approach will strengthen his scholarship on metal structures, and will open new venues not only for his artwork, but also for his teaching in the College of Design.

**OLIVER, JAMES, PROFESSOR, MECHANICAL ENGINEERING, 8 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Oliver is currently director of several ISU centers/institutes: the Virtual Reality Application Center, the CyberInnovation Institute, and the graduate program in Human-Computer Interaction (HCI). He is internationally known for his contributions in HCI and virtual reality. He will use this Professional Development Assignment to develop scholarly relationships with Ecole Nationale Supérieure d'Arts et Metiers (ENSAM) in France and Technische Universität Dresden in Germany. Both have centers similar in scope and mission to the Virtual Reality Applications Center at ISU. A potential outcome of this Professional Development Assignment is a collaborative graduate program among the three institutions.

**ONG, SAY KEE, PROFESSOR, CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING, 15.5 YEARS OF SERVICE, SPRING SEMESTER**

Professor Ong's scholarly interests are in the areas of water and wastewater engineering and in the fate of pollutants in the environment. During this Professional Development Assignment at the University of Canterbury, Christchurch, New Zealand, Professor Ong will explore various issues on sustainable water and wastewater infrastructure systems and the application of advanced technologies for wastewater reuse. New Zealand is an ideal site to explore these issues because it is in the forefront of developing and infusing sustainability in engineering practices. Water quality research is a key topic for the state of Iowa. Results of this ISU faculty member's research will help address major ecological and environmental problems in the State.

**POON, YIU, ASSOCIATE PROFESSOR, MATHEMATICS, 24 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Poon will spend the academic year at the College of William and Mary. Dr. Poon will continue his research on quantum computing, laying out the theoretical foundation for building computer processors that are so tiny that quantum electron effects will overwhelm standard electronics. In addition to working with a leader in this field at William and Mary, he will travel to Canada, Germany, and Poland to work with other experts in the field. Benefits for this professional development assignment include continued lectures following the Participating Institutions Summer Program for Graduate Students: Linear Algebra and its Applications, which Professor Poon co-organized in 2008. Also, this will inform his teaching, which includes a graduate course in linear algebra.

**PRUETZ, JILL, ASSOCIATE PROFESSOR, ANTHROPOLOGY, 8 YEARS OF SERVICE, FALL SEMESTER**

Dr. Pruetz will spend the Fall Semester in Senegal, West Africa, studying the chimpanzees of that region. Dr. Pruetz is probably the Iowa State University faculty member most recognized outside the state of Iowa. The television, radio and print specials on her work on how human behavior is mirrored in that of chimps have made her the top field primatologist since Jane Goodall relinquished the position. She will spend the semester observing chimp behavior that is unique to that time of year.

**SCHULTE-MOORE, LISA, ASSOCIATE PROFESSOR, NATURAL RESOURCE ECOLOGY AND MANAGEMENT, 6 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

During visits to the University of Minnesota and the Minnesota Chapter of the Nature Conservancy in Minneapolis/St. Paul, Minnesota, Professor Schulte-Moore will further develop a portfolio of sustainable biomass cropping systems. This research involves ongoing activities regarding biomass production in the northern U.S. Corn Belt, and an analysis of alternative biomass cropping systems. Knowledge gained will benefit the work of her research team at ISU – including faculty from five ISU departments – and current collaborations with the U.S. Forest Service.

**SHANKS, JACQUELINE, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 10 YEARS OF SERVICE, FALL SEMESTER**

Professor Shanks is a leader in the new Engineering Research Center (ERC) on Chemicals from Biorenewables. The granting of a Professional Development Assignment will allow her to strengthen research collaborative relationships with the ERC partner institutions, which will be very important for the critical three-year site visit the following year. The continued success for the ERC and the renewal after the three-year site visit is important for the Department of Chemical and Biological Engineering, the College of Engineering, and the University for both the current project and for potential projects that may be awarded to ISU. Activities during the Professional Development Assignment include short, intensive visits to laboratories of collaborators at University of California Irvine, California State University at Chico and University of Puerto Rico Mayaguez. Professor Shanks will attend conferences for ERC leadership and leadership for women in technology.

**TUGGLE, CHRISTOPHER, PROFESSOR, ANIMAL SCIENCE, 18.5 YEARS OF SERVICE, SPRING SEMESTER**

Professor Tuggle will study immune responses in gene expression and function while gaining experience working with geneticists and computer scientists at the Roslin Institute, Midlothian, United Kingdom. The team of researchers will jointly analyze data and improve understanding of the pig immune system. Future application of these approaches includes the development of more sophisticated methods to combat infectious disease, such as diagnostics to predict disease outcomes.

**VANCE, JUDY, PROFESSOR, MECHANICAL ENGINEERING, 25 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Vance is an expert in virtual reality with applications to mechanical design. During AY2011, she will explore opportunities in multidisciplinary design that cross the boundaries of engineering, business, industrial design, and architecture, as well as the use of haptics in virtual reality applications. Professor Vance will visit Edinburgh, Scotland; Leeds, United Kingdom; and Delft, Netherlands during this Professional Development Assignment. She will focus on multidisciplinary design that will benefit the Mechanical Engineering Department as it develops an industrial design option. Her work will help maintain the institution's leadership in industrial design and virtual reality applications.

**YANG, XIAO-BING, PROFESSOR, PLANT PATHOLOGY, 16.5 YEARS OF SERVICE, FALL SEMESTER**

During a visit to the Beijing Agricultural University in Beijing, China, Professor Yang will study the effects of climate change on the pandemic of wheat yellow rust. This experience will provide new insights to understanding macro-scale disease epidemics. Professor Yang was successful in projecting the entry of soybean rust, its damage potential and overwintering regions. This seasonal forecasting is essential to the soybean industry, and has been honored with a U.S. Department of Agriculture Award for Excellence.

**ZHU, DAN, ASSOCIATE PROFESSOR, LOGISTICS, OPERATIONS AND MANAGEMENT INFORMATION SYSTEMS, 11 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Professor Zhu will collaborate with scholars from China and the United States – at Beijing University of Technology, Tsinghua University, Pekin University, the Chinese Academy of Sciences, Emory University and Carnegie Mellon University. These collaborations will significantly advance her research project on Direct Knowledge Exchange. The three major goals of the project are to enhance and share research experiences on knowledge management through national and international exchange, enrich and expand research interests by learning and interacting with world-renown scholars in the field of data mining, and develop additional opportunities for future research and study abroad programs to benefit ISU students' learning experiences.

**UNIVERSITY OF NORTHERN IOWA (\*denotes a terminal degree proposal)**

**BERGHAMMER, GRETTA, PROFESSOR, THEATRE, 20 YEARS OF SERVICE, SPRING SEMESTER**

The focus of this creative activity Professional Development Assignment is to create and implement a drama and theatre program designed to embrace the specific creative, social, and physical needs of youth with autism between the ages of 6 and 12 in order to discover best practices for artistically serving them. This program will:

- ⇒ determine which elements of drama/theatre (sensory awareness, movement, pantomime, characterization, role-play and improvisation) and methodologies (teaching in role, individual work, pair work, small group work) best support creative expression of autistic youth, and enhance and expand their ability to: engage in pretend play, communicate non-verbally, share an idea dramatically, assume a role beyond self, and promote positive social interactions.
- ⇒ be 6-8 weeks in length.
- ⇒ be designed exclusively for autistic youth between the ages of 6-12.
- ⇒ offer specific workshop classes that meet 60-90 minutes each week.
- ⇒ feature workshop sessions that are age specific; will need to offer 6-7 class sessions per week for 6-8 weeks.
- ⇒ will reach at least 40 autistic youth in the Cedar Valley.
- ⇒ will be promoted by Exceptional Persons Inc, The YMCA Together We Play program and the Autism Spectrum Disorders Support Group.
- ⇒ will conclude with the creation and publication of proven artistic approaches and best practices to be used by other theatres and teaching artists in adapting their creative process to meet the specific needs of autistic students.

**BULLARD, JULIA, ASSOCIATE PROFESSOR, SCHOOL OF MUSIC, 9 YEARS OF SERVICE, SPRING SEMESTER**

This Professional Development Assignment will support the composition of a series of original studies (etudes) for the viola, entitled "Technical Studies for the Contemporary Violist," which will be idiomatic to the instrument and will serve to teach and refine the important technical skills needed for the performance of music composed after 1900. These etudes will be progressive in difficulty and will be appropriate for intermediate to advanced students. They will address the various harmonic, melodic, and rhythmic structures of 20<sup>th</sup> and 21<sup>st</sup> century music, as well as use of various extended techniques. After completion of the compositions, the etudes will be recorded and they will be published by Fountain Park Music Publishing. There is a wealth of literature for the concert violist composed after 1900. This music reflects the monumental changes in compositional style and instrumental techniques of the 20<sup>th</sup> century to the present time. However, an extensive review of literature has determined that there are very few technical studies or etudes in print that are specifically designed to teach the techniques particular to music of this period. The vast majority of the technical studies that do exist and are used by viola students to develop their performing skills were composed much earlier (mostly during the 1800s), and therefore do not address the techniques necessary for performing contemporary music. Further, many of these "traditional" studies were originally composed for violin and were adapted for the viola, and therefore do not address important differences between these instruments. For these reasons, these original etudes will fill a major void in the pedagogical literature for the viola, and will be a significant and lasting contribution to the field of viola pedagogy.

**BURKHARDT, REBECCA, PROFESSOR, SCHOOL OF MUSIC, 15 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Ann Richards, known for her trenchant wit and fiery humor, rose to national prominence at the 1988 Democratic National Convention, and she was suggested as a future candidate for the first woman president of the U.S. When she became governor of Texas in 1991, it seemed as if nothing could stop her, but George W. Bush managed a successful challenge to her bid for reelection in 1995. Though no longer Texas governor, Richards continued her active political life up until her death from esophageal cancer in 2006. A political pioneer and openly recovering alcoholic, Governor Ann Richards continues to loom large on the landscape of Texas. This joint Professional Development Assignment proposes to write a musical about Ann Richards. The objectives are to complete archival research in the Ann Richards collection at the University of Texas (Goatley and Burkhardt), finish a first draft of the book (text) of the musical (Goatley), draft song lyrics (Goatley and Burkhardt), and compose the music (Burkhardt). An important step in the development of a new musical is a reading or readings of the work at various stages, which would directly involve University of Northern Iowa students as performers as well as contributors to future drafts of the work. In addition, Goatley's and Burkhardt's future goal is production at a national venue, bringing recognition not only to the writer and composer, but also to the University and the state.

**EDEN, TRUDY, ASSOCIATE PROFESSOR, HISTORY, 9 YEARS OF SERVICE, SPRING SEMESTER**

Botany was arguably one of the most practiced scientific disciplines in colonial America. Furthermore, early American botanists made numerous important contributions to the development of modern botany. However, the history of botany in early America is only partially written and much of the scholarship that exists is in need of updating. While this scholarship has enabled scholars, museums, and the public at-large to see the outlines of the history of the field and to understand discrete facts about the lives and individual works of botanists, it offers little in the way of depth, synthesis and analysis. This Professional Development Assignment will begin to fill this gap with this project. The time granted by this assignment will allow for researching distant archives and to begin writing this book. Many of the pertinent sources are only available at numerous archives located between Boston and Virginia. The only way to expeditiously and economically research this topic is to tour archives, moving down the East Coast from one to the next, gathering and organizing the sources as one goes. Many of the archives to be visited offer short-term fellowships to assist with living costs and application will be made for all that are available. Archival research is highly unpredictable because one never knows exactly what one will find, nor how long it will take. This assignment will allow for major progress on this project. This research will result in one or more journal articles and eventually a book. Students will benefit from Eden's enhanced classes (Colonial America, History of American Thought). Faculty will benefit from lectures and collaboration, and the general public will benefit from public talks and exhibits.

**GOATLEY, CYNTHIA, PROFESSOR, THEATRE, 18 YEARS OF SERVICE, FALL SEMESTER**

Ann Richards, known for her trenchant wit and fiery humor, rose to national prominence at the 1988 Democratic National Convention, and she was suggested as a future candidate for the first woman president of the U.S. When she became governor of Texas in 1991, it seemed as if nothing could stop her, but George W. Bush managed a successful challenge to her bid for reelection in 1995. Though no longer Texas governor, Richards continued her active political life up until her death from esophageal cancer in 2006. A political pioneer and openly recovering alcoholic, Governor Ann Richards continues to loom large on the landscape of Texas. This joint PDA proposes to write a musical about Ann Richards. The objectives are to complete archival research in the Ann Richards collection at the University of Texas (Goatley and Burkhardt), finish a first draft of the book (text) of the musical (Goatley), draft song lyrics (Goatley and Burkhardt), and compose the music

(Burkhardt). An important step in the development of a new musical is a reading or readings of the work at various stages, which would directly involve University of Northern Iowa students as performers as well as contributors to future drafts of the work. In addition, Goatley's and Burkhardt's future goal is production at a national venue, bringing recognition not only to the writer and composer, but also to the University and the state.

**GROVES, JOHN R., ASSOCIATE PROFESSOR, EARTH SCIENCE, 9 YEARS OF SERVICE, FALL SEMESTER**

The geologic time scale is a nested set of units that was created for subdividing the 4.6 billion years of Earth's history. It consists of stages, of relatively short duration, which are grouped into periods. The periods are grouped into eras, and the eras are grouped into eons. Each stage is formally represented by its "type locality," a site where rocks of the given age are well exposed and contain datable fossils or mineral grains. The development of the geologic time scale is overseen by the International Commission on Stratigraphy (ICS), a non-governmental scientific organization with 120 national members. This Professional Development Assignment will allow Groves to complete a research project on microfossils from a site in Guizhou Province, South China that is being evaluated as a potential type locality for the "Moscovian Stage" of the international geologic time scale. His work on microfossils from this site is being performed in his capacity as head of a Task Group organized under the auspices of the ICS. The assignment also will enable him to co-convene in China a month-long workshop and field excursion for members of Groves' Task Group so that each of the 18 specialists can evaluate the merits of the site relative to the ICS's requirements for type localities. Funding for travel, the workshop, and the field excursion has been secured through a grant from the Chinese National Science Foundation. Successful completion of this project will result in at least one published article and a formal report to the International Commission on Stratigraphy of the International Union Geological Sciences. Work performed as part of this project likely will lead to a permanent revision of the international geologic time scale, which itself is central to all basic and applied geologic research worldwide. This will draw favorable attention from the international community to UNI and its institutional support for faculty research.

**KLASSEN, MICHAEL, ASSOCIATE PROFESSOR, MARKETING, 22 YEARS OF SERVICE, SPRING SEMESTER**

The culture of the 1960s impacted not just consumer products, such as clothing and music, but also ideas (e.g., eco-friendly), events (e.g., farmer's markets), lifestyles (e.g., communal living), practices (e.g., organic farming), diets (e.g., raw food-ist) and dishes (e.g., vegan). Scholars and others are interested in understanding the true impact of the 1960s movement on American enterprise. What exactly is an authentic product of this era? This Professional Development Assignment project will identify *authentic* consumer products of the 1960s and discuss the impact of these products on U.S. commercial culture. Two purposes are served by such an analysis: First, future researchers may confidently refer to the products identified here in their own analyses of American consumer behavior; and second, by deriving an estimate of the billion-dollar contribution of 1960s products to the very American capitalist system the young people of the 1960s once opposed, insight is gained into the impact of past and future counterculture movements on mainstream commercial culture. This project draws on firsthand accounts of consumer behavior observed in the San Francisco Haight-Ashbury neighborhood during a four-year time period, 1964 -1967, to identify 219 (as of this writing) authentic counterculture products in ten categories: 1) clothing and accessories, 2) food, 3) transportation, 4) home and furnishings, 5) music and art, 6) leisure, 7) health and beauty, 8) books and authors, 9) fragrance and ambiance, and 10) other. The project's success will be measured by the submission of an article to a refereed journal (the *Journal of Consumer Research* followed by the *Journal of Consumer Behavior*) and the completion of five chapters of a 10-chapter book. Klassen has also initiated an empirical study (content analysis) in conjunction with one of his marketing students on the impact of 1960 values on American advertising content. This study has been

accepted for presentation at the International Academy of Business and Public Administration Disciplines Conferences to be held in January 2010. Klassen's work has already benefitted the university and the state due to his involvement of students in his research, his appearances in the national media (e.g. ABC 20/20, Dateline NBC), and marketing consulting for businesses in Iowa and the rest of the U.S.

**LINDQUIST, TIM, PROFESSOR, ACCOUNTING, 18 YEARS OF SERVICE, FALL SEMESTER**

Educators face a difficult dilemma in deciding how much assistance to provide students in completing assigned homework. Feedback possibilities include *no assistance*, *completed solutions* or *check figures*. Previous U.S. research indicates the level of homework feedback provided does not influence knowledge gains but does impact students' satisfaction and frustration as well as perceptions of achievement (Lindquist and Mason-Olsen, 2007). But does this finding transcend to cultures other than the U.S.? This research proposes a laboratory experiment to measure the impact of national culture on the efficacy of homework feedback. Specifically the cultural dimensions of power distance, masculinity/femininity and uncertainty avoidance are predicted to impact Austrian students' reaction to varied levels of homework feedback in completing an accounting homework assignment. Though both cultures represent Western thought, differences are hypothesized to exist in individuals' reactions to feedback. This project is important to the citizens of Iowa. Understanding how cultural differences impact the efficacy of learning helps UNI faculty teaching international students here and abroad be more effective. Additionally, all Iowans involved in international relations for business or personal reasons, will gain from this knowledge. Findings from this research will be presented at national and international conferences and will be submitted for publication at a top-tier accounting journal.

**LYNCH, ANNETTE, PROFESSOR, DESIGN, TEXTILES, GERONTOLOGY & FAMILY STUDIES, 18 YEARS OF SERVICE, FALL SEMESTER**

This Professional Development Assignment will support a single authored book contracted with Berg Publications based on original ethnographic fieldwork and content analysis of popular culture. The manuscript is due to the publisher on May 31, 2011. The focus of the book will be exploring the breakdown of traditional barriers between the current ideals of female beauty associated with provocative clothes and behavior and mainstream fashion and popular culture. This Professional Development Assignment will be committed to on-site research in Oxford and London on British fashion culture (Katie Price and British Red Hat Societies) and focused writing time at UNI. Lynch has chosen Oxford as her base in UK as Berg Publishers offices are located there. In addition she has applied to be a visiting scholar affiliated with the International Gender Studies Centre at the University of Oxford. This non-paid appointment will give her access to libraries, lectures, seminars, and other resources of the University of Oxford. The contracted book will consist of one introductory chapter and nine individual chapters focusing on a range of popular culture images of today's media on women's clothing and its impact on domestic and gender violence. The book will be of social value in terms of raising issues related to the potential impact of the current clothing trends on gender violence rates within our K-12 educational system, on university campuses, and across the culture more generally. Lynch is actively involved at present in the planning of a K-12 and university initiative focused on development of a Violence Prevention Leadership Institute at UNI. The purpose of this institute will be to disseminate methods of positive leadership development and violence prevention strategies across the State of Iowa. She also worked with the Waitt Foundation for Gender Violence Prevention in the implementation of the Mentors in Violence Prevention program at East High School in Waterloo, Iowa in 2008-2009.

**MAIER, DONNA, PROFESSOR, HISTORY, 31 YEARS OF SERVICE, FALL/SPRING SEMESTERS**

Today in courtrooms across the world witnesses are testifying to what they experienced in the 1994 Rwanda Genocide, one of the most horrifying and defining events of the late 20<sup>th</sup> century. Their testimony is creating a judicial and historical record that will be used by historians and world leaders for decades to come. This will allow the examination and comparison of court proceedings, witness testimony and final judgments of persons found guilty of genocide from trials in four different venues: International, Canadian, Belgian and Rwandan. The study will analyze the way these different court systems treat witness testimony and hence produce different perspectives of the same events. The court records and witness statements needed can be found in the archives of the International Criminal Tribunal for Rwanda (ICTR) in Arusha Tanzania and Kigali Rwanda and research will be conducted in these places. Maier has past experience in working in the Evidence and Foreign Request Unites of the ICTR evaluating and classifying witness statements from around the world and anticipates no difficulty gaining archival access. The results will be of interest to African historians, and persons studying genocide and the implementation of international justice. This research will allow the publication of several academic articles and presentations and build on it for future research into victim satisfaction with international justice. The proposed research will contribute to current attempts to understand the chronicling of the Rwanda Genocide. It is also meant to evaluate the success and failure of criminal prosecutions in establishing valid accounts of events, and how well prosecutions convey a sense of justice to perpetrators and victims alike. Maier expects to present her results at both national and international professional conferences with her affiliation with the University of Northern Iowa clearly acknowledged. She teaches university classes on African affairs and the Rwanda Genocide, and regularly gives public lectures in Iowa on the Rwanda genocide and human rights issues. This Professional Development Assignment will inform and improve her ability to continue this service to students and Iowans.

**MATTINGLY, JAMES, ASSOCIATE PROFESSOR, MANAGEMENT, 6 YEARS OF SERVICE, FALL SEMESTER**

The proposed Professional Development Assignment is a research project in 2 phases, aimed at identifying specific companies that exhibit distinct modes of organization citizenship and then comparing those cases to profile the modes and underlying dimensions of variation. A mixed-mode approach will use exploratory statistical methods to locate companies within distinct regions of a multi-dimensional property space, whereas comparative case studies will be employed to describe profiles and interpret underlying dimensions along which variation can be usefully identified and measured. Culture Theory, an anthropological framework of socio-cultural variety that has been usefully applied to policy science, guides exploration of patterns within and between organizations' social practices. The result of the mixed-mode study will be a thorough accounting of organization citizenship profiles that overcomes the dichotomous model of good versus bad companies, currently dominant in extant literature. Immediate benefits of the Professional Development Assignment will be 2 solid journal articles that are likely to provide lasting contribution to administrative science. As important, however, is that this foundational work will provide a spring-board to the collaboration already begun with 3 faculty members across multiple colleges at the University of Northern Iowa and will provide a catalyst for collaborative plans with colleagues at other universities – both within and outside the U.S.

**PALCZEWSKI, CATHERINE, PROFESSOR, COMMUNICATION STUDIES, 15 YEARS OF SERVICE, SPRING SEMESTER**

The goals for the Professional Development Assignment are to complete two articles analyzing the rhetoric of suffrage postcards and submit them for publication in national peer-reviewed journals and to complete construction of a digital archive of historic suffrage postcards. Palczewski has already



published one essay on U.S. made anti-suffrage postcards and visual argument, and this would enable her to work on counterparts to that article and complete a digital archive which would supplement the publications. The first essay would explore the way in which commercially produced postcards depicting police actions against suffrage protestors domesticated repression. The second essay would focus on the 30-card series approved and endorsed by the National American Women Suffrage Association. Finally, as an extension of the Carver Institute project, the PDA would allow complete construction of a digital archive of Palczewski's collection of 100s of cards, as well as construct links to other sites (which often contain only a single image). Such a focus on postcards is justified. Although we now think of postcards as mass-produced slips of paper (festively decorated with generic images or off-color jokes) to be sent to family and friends from vacation destinations, the social import of postcards during their "Golden Age" (1893-1918) rivals the power of the Internet in contemporary times. Palczewski's work on suffrage postcards, and analysis of how the images in them can inform contemporary struggles within a multi-mediated society, has been the project that has most allowed her to represent the University of Northern Iowa to external communities. She has already presented a public lecture on the topic to community organizations (i.e. Cedar Falls Women's Club), as well as at other universities (i.e. the University of Wisconsin-Madison). Analyses of postcards translate well into public presentations for non-academic audiences and enable her to be a public face for the university across this state and in others. In addition to enhancing the reputation of the university by enhancing her status as a nationally recognized scholar, she also hopes to make the university a center for research. The one-of-a-kind digital archive of postcard images that includes scholarly commentary will provide the definitive location for research on this era and medium. This archive also will benefit students, giving them access to historical documents they otherwise would not have a chance to study. As her resume demonstrates, she consistently involves students in her research. She sees the archive as an open invitation to students to work with her on analyzing these historic images.

**PETERS, C. SCOTT, ASSOCIATE PROFESSOR, POLITICAL SCIENCE, 6 YEARS OF SERVICE,  
SPRING SEMESTER**

About two dozen states elect their state Supreme Court justices in either partisan or nonpartisan contestable elections. In terms of the money spent, the sophistication of the campaigns, and the tone and extent of candidate and interest group advertising, these elections are coming to resemble statewide races for offices like governor or U.S. Senate. There is something unique about them, however. In order to protect judicial impartiality, most states place limits through state canons of judicial ethics on how candidates for judicial office may campaign, including what they may say in their campaign communications. The Professional Development Assignment will be used to prepare a book manuscript that explores the effects of these canons of ethics on various aspects of judicial campaigning. Their importance has, so far, been little investigated, even as a 2002 U.S. Supreme Court decision interpreting them has led to much commentary and speculation. The project will be empirically based, relying mostly upon datasets that Peters has already compiled. The goal is to examine overall effects of the canons on levels of competition in these elections, but to also explain how they influence the strategic choices that candidates make, the quality and quantity of information available to voters, and how voters make their choices. This Professional Development Assignment will benefit UNI and its students in several ways. First, the topic of judicial selection is an important one in the study of judicial systems, and Peters has used and will continue to use his expertise in the area to inform his classroom teaching. Second, for the past year he has been involving students in his research--two students and Peters will present a co-authored paper at a conference in April. Peters plans to continue doing research with students as he works on this project. Finally, these elections are increasingly controversial and scholars are frequently called upon to comment upon them. Such attention increases UNI's visibility in the larger public.

**SOMODI, MARIUS, ASSOCIATE PROFESSOR, MATHEMATICS, 8 YEARS OF SERVICE, FALL SEMESTER**

This project aims to make a contribution to the understanding of zeta functions of graphs. Introduced as an analogue of one of the most famous functions in mathematics known as the Riemann zeta function, the zeta function of a graph is a relatively new mathematical object whose properties are not fully understood. This project will investigate invariants of graphs that are captured in the graph's zeta function as well as different classes of graphs that have the same zeta function. The expected outcomes of the professional development assignment include: 1) A significant contribution to the understanding of zeta functions of graphs, disseminated in one or more publications in prestigious mathematics journals and presentations at regional and national mathematics meetings and conferences. The quality of these publications/presentations will enhance the reputation of the university. 2) A number of related research problems for undergraduate and graduate students in UNI mathematics degree programs. These problems may lead to additional presentations and/or publications by UNI students.

**\*STICHTER, JAMES, INSTRUCTOR, TEACHING, 11 YEARS OF SERVICE, FALL SEMESTER**

Many school districts in Iowa do not have formalized alternative high schools. These districts still must provide some degree of support for at-risk students. This study will consider what factors provide for student success as measured by student retention rates and graduate completion at non-alternative high schools. A sample of rural high school principals in Iowa will be surveyed to determine which factors contribute to academic success. Specifically, this study will consider current practice, perceived barriers, and structured support systems of each high school as they relate to student outcomes.

**STRAUSS, LAURA, ASSOCIATE PROFESSOR, CHEMISTRY & BIOCHEMISTRY, 11 YEARS OF SERVICE, FALL SEMESTER**

The search for materials that can store a high density of hydrogen is essential for future development of a hydrogen economy (using H<sub>2</sub> as a non-pollutant fuel). Transition metal dichalcogenides show promise for this purpose due to the sandwich layer-like nature of these materials especially if additional metal is added in between the layers. The primary focus of this project will be to investigate the intercalation limits of several transition metal dichalcogenide targets that will be determined early in the study period. Strauss has found that higher levels of intercalation (more additional metal between the layers) correspond with higher H<sub>2</sub> storage. This project should narrow the number of viable compounds for study of hydrogen storage.

**STRAUSS, MITCHELL, PROFESSOR, DESIGN, FAMILY, GERONTOLOGY, & FAMILY STUDIES, 10 YEARS OF SERVICE, SPRING SEMESTER**

This project will be an historical study of Sweetree Mills, a knit sweater manufacturer located in Cherryville, N.C., a business that functioned for roughly 50 years since its founding in 1956. This study will document the triumphs, trials and tribulations of managing a textile enterprise during the zenith of U.S. textile manufacturing through to its eventual demise. In addition, the company's founder, Harry Sweetbaum, was a Jewish immigrant from Odessa, Russia, which further enriches the history with an interesting ethnic context that addresses Jewish immigrant assimilation during the first half of the twentieth century, a time of overt anti-Semitism. This historic analysis will be important because it will encapsulate a way of life that predominated in North Carolina during the 1900's, as well as capture the deep personal impact resulting from the rapid disappearance of the domestic textile industry around 2005, when all protective quotas were lifted by the U.S. Government. No histories exist yet that capture the final end days of the industry in part or as a whole. Apparently, the industry dissolved so quickly and so recently, historians have yet to grapple with the subject matter. In sum, this will be one of the first studies of this particular historical subject.

Mr. Sweetbaum's daughter, son-in-law and his grandson have agreed to participate in creating an oral history of Sweettree Mills and its founder. Access to supporting historical papers have also been granted by Mr. Sweetbaum's family. Strauss plans to write and publish a series of peer reviewed journal articles based on his findings. It is anticipated too, that the results of this study will serve as the foundation for a book focusing on the theme of Jewish owned textile manufacturing companies during the halcyon days of Southeastern textile manufacturing. Further, it is anticipated that this research will be funded in the future by an outside agency, which could bring additional revenues to the university.

**WILLIAMS, JOHN, ASSOCIATE PROFESSOR, PSYCHOLOGY, 7 YEARS OF SERVICE, FALL SEMESTER**

The project is development of a Flash-based version of *PsychExperiments*, <http://www.psych.uni.edu/psychexperiments>; an Internet-based application for teaching statistics, research methods and other common aspects of social science research. In addition, it provides an opportunity for students to participate in research activities and laboratory exercises, including experiment design, data collection, data analysis, and results presentation all in an online environment. *PsychExperiments* is an online psychology laboratory that offers research and teaching opportunities to students and their instructors and as the sole administrator of *PsychExperiments*, updating and bringing it to UNI will serve the mission of UNI well.