

Contact: Diana Gonzalez

PROFESSIONAL DEVELOPMENT ASSIGNMENT REQUESTS FOR FY 2012

Action Requested: Consider approval of the requests by the Regent universities for professional development assignments for FY 2012.

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 95 faculty professional development assignments for FY 2012. This represents a decrease of 12 (-11.2%) proposed professional development assignments from the prior year and the third consecutive decrease. A brief description of each proposed assignment is available in Attachment A (pages 6-32). A brief description of each professional development assignment completed in 2009-2010 is available in Attachment B (pages 33-59); this report provides information about the value added to the students, university, and state from the assignments, including more than \$5.2 million of funds obtained through grant proposals and the submission of additional grant proposals. This report addresses the Board of Regents Strategic Plan priority on “educational excellence and impact.”

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 131 professional development assignments (PDAs) per year has been requested.

**NUMBER OF PDA RECIPIENTS AND PERCENT OF ELIGIBLE FACULTY
FY 2007 – FY 2012**

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
SUI	96 (7.6%)	74 (4.8%)	100 (6.5%)	82 (5.2%)	52 (3.3%)	58 (4.2%)
ISU	33 (2.3%)	49 (3.7%)	48 (3.7%)	41 (3.1%)	37 (2.2%)	22 (1.4%)
UNI	22 (6.1%)	18 (4.5%)	19 (4.8%)	20 (3.7%)	18 (3.4%)	15 (3.7%)
REGENT TOTAL	151 (4.8%)	141 (4.4%)	167 (5.1%)	143 (4.2%)	107 (2.8%)	95 (2.9%)

- ◇ Faculty replacement costs. ISU and SUI identified estimates of the replacement costs for faculty members who are on professional development assignment. The Faculty and Global Scholars programs at the University of Iowa, which also provide support for research expenses, are budgeted at \$38,500 for FY 2012.
 - ☑ The primary method of reducing costs at the University of Iowa for FY 2011 is a reduction in the total number of new awards, including fewer professional development awards. There were no new faculty or global scholar awards recommended for FY 2012. For the recommended awards, costs will be reduced, where possible, by having colleagues cover courses or deferring non-required courses to a later time.

- To the extent possible, ISU department chairs and deans provide flexible approaches to managing the workload and associated costs for the assignments, including reassignment or alternate scheduling of courses. Some PDA requests do not represent new costs because they are managed by the department through a reassignment of course load among current faculty. Salary savings generated from other faculty members on assignment for a full year are used to offset the replacement costs for other faculty members.
- UNI adjusts the schedules of existing faculty members, as appropriate, to cover the teaching assignments of faculty members who have professional development assignments. If a replacement faculty member needs to be hired, the costs are borne by the faculty member's department or college. Initially, the University had indicated that there were no replacement costs because there is no central fund out of the provost's office that provides the funds.

**BUDGETED REPLACEMENT COSTS
FY 2007 – FY 2012**

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
SUI	\$154,743	\$123,485	\$342,436	\$201,800	\$148,700	\$130,800
ISU	\$165,246	\$159,762	\$167,348	\$68,569	\$107,747	\$125,000
UNI	\$44,896	\$73,231	\$126,013	\$120,994	NA	\$166,483
REGENT TOTAL	\$364,885	\$356,478	\$635,797	\$391,363	NA	\$422,283

- ◇ Proposed professional development assignment recipients by gender.
 - There are 56 proposed professional development assignments for men; this represents 58.9% of the total proposed PDAs. Men represent 67.0% of the total number of eligible faculty.
 - There are 39 proposed professional development assignments for women; this represents 41.1% of the total proposed PDAs. Women represent 33.0% of the total number of eligible faculty.
- ◇ Proposed professional development assignment recipients by race/ethnicity.
 - There are 11 proposed professional development assignments for racial/ethnic minorities; this represents 11.6% of the total proposed PDAs. Racial/ethnic minorities represent 15.4% of the total number of eligible faculty.
 - There are 84 proposed professional development assignments for non-minorities; this represents 88.4% of the total proposed PDAs. Non-minorities represent 82.6% of the total number of eligible faculty.

FY 2012 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY¹
UNIVERSITY OF IOWA

	TOTAL NUMBER OF FACULTY ²		NUMBER OF FACULTY ELIGIBLE FOR AWARD		NUMBER OF FACULTY WHO SUBMITTED AN APPLICATION		NUMBER OF FACULTY PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
Hispanic	35	18	19	14	2	2	1	1
Am. Indian/Alaska Native	1	7	1	5	0	1	0	0
Asian-Am.	130	31	95	18	3	1	3	1
Black/African Am.	19	23	12	14	0	1	0	0
Native Hawaiian/Pacific Islander	0	0	0	0	0	0	0	0
White	898	409	778	300	39	29	33	19
Two/more races	0	0	0	0	0	0	0	0
Unknown R/E	18	4	14	0	0	0	0	0
Nonres. Alien/Intl.	20	13	1	3	0	0	0	0
TOTAL	1,121	505	920	354	44	34	37	21

FY 2012 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY¹
IOWA STATE UNIVERSITY

	TOTAL NUMBER OF FACULTY		NUMBER OF FACULTY ELIGIBLE FOR AWARD		NUMBER OF FACULTY WHO SUBMITTED AN APPLICATION		NUMBER OF FACULTY PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
Hispanic	20	23	19	21	0	0	0	0
Am. Indian/Alaska Native	5	1	5	1	0	0	0	0
Asian-Am.	160	46	159	44	1	1	1	1
Black/African Am.	18	13	16	12	0	0	0	0
Native Hawaiian/Pacific Islander	1	0	1	0	0	0	0	0
White	871	517	816	479	13	9	11	9
Two/more races	3	1	3	1	0	0	0	0
Unknown R/E	0	0	0	0	0	0	0	0
Nonres. Alien/Intl.	36	17	33	16	0	0	0	0
TOTAL	1,114	618	1,052	574	14	10	12	10

¹ The new race/ethnicity categories defined by the U.S. Department of Education.

² Includes tenured, tenure-track, and clinical-track faculty.

FY 2012 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY¹
UNIVERSITY OF NORTHERN IOWA

	TOTAL NUMBER OF FACULTY		NUMBER OF FACULTY ELIGIBLE FOR AWARD		NUMBER OF FACULTY WHO SUBMITTED AN APPLICATION		NUMBER OF FACULTY PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
Hispanic	5	4	5	3	0	0	0	0
Am. Indian/Alaska Native	0	1	0	1	0	0	0	0
Asian-Am.	21	6	18	5	2	1	2	1
Black/African Am.	8	3	8	3	0	0	0	0
Native Hawaiian/Pacific Islander	1	0	1	0	0	0	0	0
White	241	168	211	149	7	11	5	7
Two/more races	3	2	2	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
TOTAL	279	184	245	163	9	12	7	8

FY 2012 PROPOSED PDAs BY GENDER AND RACE/ETHNICITY¹
REGENT TOTAL

	TOTAL NUMBER OF FACULTY		NUMBER OF FACULTY ELIGIBLE FOR AWARD		NUMBER OF FACULTY WHO SUBMITTED AN APPLICATION		NUMBER OF FACULTY PROPOSED FOR AWARD	
	Male	Female	Male	Female	Male	Female	Male	Female
Hispanic	60	45	43	38	2	2	1	1
Am. Indian/Alaska Native	6	9	6	7	0	1	0	0
Asian-Am.	311	83	272	67	6	3	6	3
Black/African Am.	45	39	36	29	0	1	0	0
Native Hawaiian/Pacific Islander	2	0	2	0	0	0	0	0
White	2,010	1,094	1,805	928	59	49	49	35
Two/more races	6	3	5	3	0	0	0	0
Unknown R/E	18	4	14	0	0	0	0	0
Nonres. Alien/Intl.	56	30	34	19	0	0	0	0
REGENT TOTAL	2,514	1,307	2,217	1,091	67	56	56	39

- ◆ Average length of service. The average length of service for the proposed professional development assignment recipients is 17.1 years at SUI; 15.2 years at ISU; and 11.7 years at UNI.
- ◆ Proposed professional development assignments by rank. There are 45 (47.3%) proposed professional development assignments for professors; 48 (50.5%) for associate professors; one (1.1%) for an assistant professor; and one (1.1%) for an instructor.

¹The new race/ethnicity categories defined by the U.S. Department of Education.

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

ABBAS, PAUL J., PROFESSOR, COMMUNICATION SCIENCES & DISORDERS, 36 YEARS OF SERVICE, FALL SEMESTER

Paul Abbas will use this professional development assignment to expand the scope of his research program in cochlear implants. Cochlear implants are a prosthetic device that can restore hearing in deaf individuals. Most of his previous work has been in understanding basic function – how the cochlear implant can stimulate the hearing nerve, what are the limitations and how can those limitations be overcome to improve performance. The developmental leave will allow specific research time to expand his research to develop a computer model of how the nerve is stimulated and to develop means of applying that model to individual cochlear implant users. The model will be a useful research and teaching tool and will have clinical utility in helping to characterize problems with individual implant users.

ADAMS, CHARLOTTE, ASSOCIATE PROFESSOR, DANCE, 12 YEARS OF SERVICE, SPRING SEMESTER

Professor Adams will examine the effects of yoga on dancers and performing artists by deepening her study of the principles of yoga begun in her first PDA in 2005. In Spring 2012, she will take an advanced level 500-hour teaching certification course in Tucson, AZ, completing the 500 hours for a master teacher (200 hours were completed in 2005). Knowledge gained will be used to develop a 200-hour teaching training course for UI dance students and other interested students in the College of Liberal Arts and Sciences to become certified teachers. As a master teacher, Adams will be licensed through the National Yoga Alliance to develop this certification program. The course is expected to provide a rich opportunity for students in dance and other areas for personal growth, healthy living choices, and opportunities for employment. This certification program is expected to add a unique recruiting tool for the Iowa Department of Dance.

ARMSTRONG, MARC P., PROFESSOR, GEOGRAPHY, 26 YEARS OF SERVICE, FULL YEAR

The purpose of the proposed PDA is to complete a book project that will focus on the role of geocoding in geographic research. Geocoding is a process in which map coordinates are added to computer records that contain only postal addresses. In addition to coverage of the range of geocoding methods often employed, the book will explore how geocoding can be used to compromise the privacy of individual-level information and how global positioning devices are changing the way that geocoding is used in numerous application domains. As an adjunct to the book project, materials will be developed for a new course on the ethical collection and use of geographic information.

BALLER, ROBERT D., ASSOCIATE PROFESSOR, SOCIOLOGY, 10 YEARS OF SERVICE, SPRING SEMESTER

Professor Baller will test the interaction between resource deprivation and the externalization of blame in models of inward and outward directed violence. He will estimate models at the individual, community, and national levels of analysis. The research will shed light on how structural and cultural factors affect violence. Of particular interest is how inequality and the externalization of blame affect suicide and suicidal tendencies. With the assistance of faculty in the School of Social Work at the University of Iowa, the research also promises to inform counseling practice in Iowa. Professor Baller will apply for external research money to fund both basic research and intervention efforts.

BARBUZZA, ISABEL, ASSOCIATE PROFESSOR, ART & ART HISTORY, 13 YEARS OF SERVICE, FALL SEMESTER

Prof. Barbuzza's Fall 2011 PDA proposal investigates how the landscape and the environment in lithium rich areas will be permanently damaged as we look for sustainable ways to fossil fuel alternatives, such as the electric car propelled by lithium batteries. For this proposal, she'll research the salt desserts in Argentina, Bolivia and Chile, an area containing 80% of the world's known lithium reserves. Two installations using salt, cotton thread, photos, video and sound will be presented in the Spring 2012 at Western Kentucky University Art Gallery and in the Fall 2012 at Espacio Contemporáneo de Arte in Argentina. In Fall 2012, she'll teach Topics in Sculpture: Land Art, Sustainability and The Environment and Sculptural TransFormations: From Recycled Materials to Art, classes for undergraduate and graduate students. She'll present her work at the Public Library and the Longfellow Elementary School both in Iowa City. She'll produce and distribute graphic material with information on her research.

BAYNTON, DOUGLAS C., ASSOCIATE PROFESSOR, HISTORY, 15 YEARS OF SERVICE, FALL SEMESTER

Professor Baynton will begin a new phase in his research on the history of disability and American immigration policy. Using records that he has identified in Italian state archives, he will trace Italian immigrants who were refused entry on the basis of disability and returned to Italy, between 1882 and 1924, to determine the consequences of American policy decisions for immigrant individuals and families. He has also been invited by the Siena School for the Liberal Arts to co-teach two workshops, with Italian scholars, on the comparative histories, cultures, and languages of national deaf communities; to study Italian Sign Language; to attend a series of discussions on sign language teaching methodologies and curricula; and to establish an ongoing relationship between the University of Iowa American Sign Language Program and the Siena School for the Liberal Arts to develop study abroad opportunities for our students and theirs.

BENNETT, DAVID A., PROFESSOR, GEOGRAPHY, 10 YEARS OF SERVICE, SPRING SEMESTER

The sustainable management of natural resources often requires decision-makers to strike a balance between the resources extracted to meet societal needs, and the health of the natural systems that produce these resources. The objective of this professional development assignment is to better understand how decisions about resource use are made and to ascertain which management strategies lead to sustainability. This work builds on existing National Science Foundation (NSF) funded research on ranching in the western US and the production of biofuel in Iowa. These projects are designed to help us understand the potential tradeoffs among competing objectives. During this award, a research team will be organized, preliminary investigations completed, and a NSF grant proposal developed to study resource decision-making processes. If awarded, this grant will provide funds to educate UI undergraduate and graduate students, help support UI's research mission, and provide insight into the sustainability of Iowa's natural resources.

BERMAN, CONSTANCE A., PROFESSOR, HISTORY, 22 YEARS OF SERVICE, SPRING SEMESTER

Berman plans an English translation of 13th-century building accounts for the French Queen. Important as earliest records for a large Gothic complex, they list the purchases of materials (nails, cut-stone, ropes, paneling) and horses, weekly wages for laborers, payments to subcontractors for "pre-fab" stone door and window-moldings, for fountains, and complex wooden raftering of barns and churches. The accounts of land purchase show the Queen purchasing properties and consolidating them into new estates in northern France. Previously unremarked are payments to those holding liens for taxes, tithes, and mortgages. Analysis of the sophisticated book-keeping (sections on purchases of land, material, payments to subcontractors and laborers) include running

totals "from the beginning," and provide a view of both money management and the expense of medieval construction. These are of interest to students and wider audiences in business/management, art/architecture, history/medieval studies.

BEZANSON, RANDALL P., PROFESSOR, LAW, 37 YEARS OF SERVICE, FALL SEMESTER

Over the past 10 years, the United States Supreme Court has greatly expanded the meaning of "speech" protected by the First Amendment. This development has large consequences that need to be evaluated with a wider lens than legal scholarship ordinarily permits. The aim of the book will be an exploration of the question for scholars, courts, students, and for the well educated person interested in freedom of speech and the Supreme Court. The book will be used by law students and graduate students in a wide range of disciplines in American and Foreign Universities. The issues raised by the cases are provocative and profound: the extension of free speech protection to corporations; to groups whose members do not share convictions expressed in the name of the group; to the act of voting; to meaning that emerges "out of thin air;" to religious speech, formerly protected under the free exercise of religion guarantee; and to government speech.

BLUM, CINZIA, PROFESSOR, FRENCH & ITALIAN, 21 YEARS OF SERVICE, FALL SEMESTER

Professor Blum will work on a book entitled Modern Italian Literature in the Light of the Fantastic, which explores various developments of the fantastic narrative mode in Italian literature during the period between the founding of the unifying monarchy (1861) and the rise of fascism (1922). She will complete an extensive review and analysis of literary and cultural debates in the periodical press; she will write a chapter on fantasies related to the post-unification struggle with modernity's destabilizing effects on the boundaries of individual and national identity; and she will submit a prospectus to major university presses. This project will also result in the revision of a course on Modern Italian Fiction, and in the development of a new GE course on fantasy literature.

***BOEHMKE, FREDERICK J., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, 10 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.

CAMPBELL, MARY E., ASSOCIATE PROFESSOR, SOCIOLOGY, 6 YEARS OF SERVICE, FALL SEMESTER

As immigration has increased and interracial relationships have become more common, ethnic inequality has become more complex in the United States, and research has begun to focus more on inequality within, as well as between, ethnic and racial groups. Using data collected by the New Immigrant Survey, Mary Campbell will examine the effect of skin tone on ethnic inequality for new immigrants to the United States. In addition, Professor Campbell will collect new data on the effect of skin tone on the treatment that individuals receive during a medical examination. This data collection project will involve graduate students, who will learn about writing grant proposals for external funding as well as collecting and coding videotaped interaction data. The results will also be incorporated into Professor Campbell's Introduction to Sociology and Sociology of Race and Ethnicity courses.

CASAVANT, THOMAS L., PROFESSOR, ELECTRICAL-COMPUTER ENGINEERING, 21 YEARS OF SERVICE, SPRING SEMESTER

Professor Casavant will visit the ARC Centre for Excellence in Plant Energy Biology (PEB) at the University of Western Australia in Perth. During the past 15 years, his research has applied high-performance computing methods (which were the focus of his early career) to problems in biomedicine and basic bioscience. The University of Iowa has recently identified sustainability/renewable energy as a strategic focus, and it is his intention to develop his knowledge/skills in plant genomics and strategies for molecular engineering of plants best suited as biomass. In addition, Professor Casavant will adapt methods developed in his previous research for DNA sequence mutation detection in mammals (in the field of medicine) to plant systems of interest to bio-energy. The PEB is a leading international research center in plant energy biology. He will develop new algorithms and software tools for genome analysis at the PEB that will directly enhance his research and teaching at the university upon his return.

CATES, DIANA F., PROFESSOR, RELIGIOUS STUDIES, 20 YEARS OF SERVICE, FALL SEMESTER

Prof. Cates will write two chapters of *The Ethics of Love and Hatred*. The first chapter will analyze scholarship in religious ethics on the ethics of love. It will show that a significant weakness in this scholarship is its neglect of the problem of hatred. The second chapter will analyze philosophically the concept of hatred, understood in relation to the concept of love, as articulated by medieval philosopher Thomas Aquinas. Hatred is in some respects natural to humans and protective of their well-being, but hatred is a mental state that can also be destructive of individuals and communities. Professor Cates's scholarship will promote clear and critical thinking among her students, the people of Iowa, and the broader public regarding the many forms and dimensions of hatred and the place—if any—that each dimension has in a good human life. Professor Cates's project will foster civility in the face of human diversity, which is often perceived as threatening and thus hateful.

CHRISTENSEN, GARY E., Professor, ELECTRICAL-COMPUTER ENGINEERING, 14 YEARS OF SERVICE, FALL SEMESTER

Over the last 20 years, image registration has become indispensable in medical diagnosis, treatment, and research. Applications of image registration include studying brain function, developing better radiation therapy treatment methods, investigating mechanical properties of the lung, preoperative planning, computer aided surgery, and post procedure evaluation. Unfortunately, there is no "gold standard" for evaluating image registration performance and therefore it is difficult to determine which registration approach is best for specific applications. Professor Christensen will research new methods for evaluating image registration performance and refine the design of his software tool that makes it easy for others to evaluate image registration algorithms for their own applications. During his professional development assignment, Professor Christensen plans to write two synergistic National Institutes of Health (NIH) grant proposals and help organize a conference on image registration.

***CLUBB, DARE, ASSOCIATE PROFESSOR, THEATRE ARTS, 11 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. 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. Clubb's research will enhance the work of every course he

currently teaches at the University of Iowa, including Dramas of the Spirit, Dramatic Theory, and the Iowa Playwrights Workshop, and will lead to the development of three new courses.

DARCY, ISABEL K., ASSOCIATE PROFESSOR, MATHEMATICS, 7 YEARS OF SERVICE, HALF TIME FOR ONE YEAR

As scientists collect vast amounts of data, the field of information science is vital for understanding and interpreting this data. In order to learn more about this research area, Dr. Darcy will participate in the Institute for Mathematics & its Applications (IMA) Thematic Year on Mathematics of Information. Her current research area involves applying the mathematics of topology to molecular biology. She will greatly expand the types of problems she currently works on. She looks forward to collaborating with researchers she meets at the IMA and researchers at UI in analyzing large data sets. She also has a strong interest in curriculum development. She will organize workshop(s) on (1) Calculus for biology teaching modules involving technology; (2) Revising mathematics curriculum for undergraduate majors related to biological sciences. She will learn about the latest curriculum and program innovations and the many grant opportunities available for transformative curriculum development.

DIFFLEY, KATHLEEN, ASSOCIATE PROFESSOR, ENGLISH, 27 YEARS OF SERVICE, SPRING SEMESTER

Between the fall of Fort Sumter in 1861 and the American Centennial celebrations in 1876, more than 300 Civil War stories circulated in popular periodicals, ample evidence that the war did not go “unwritten” in magazines poised for the first time to help configure national crisis. As the second volume in an ongoing trilogy, *The Fateful Lightning* extends Professor Diffley’s NEH³-funded work on two previous books, *To Live and Die: Collected Stories of the Civil War* and *Where My Heart Is Turning Ever: Civil War Stories and Constitutional Reform, 1861-1876*. During the grant period, she will produce an invited essay, a nearly complete book manuscript, an ACLS grant proposal for the remaining chapter, and a new undergraduate course on “Inventing American Memory.”

***DURHAM, MEENAKSHI G., ASSOCIATE PROFESSOR, JOURNALISM & MASS COMMUNICATION, 10 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, eating disorders and sexual dysfunction. Following the 2008 publication of the applicant’s nationally recognized book on a related topic, “The Lolita Effect” (Overlook Press), this award would 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 would 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.

FARRIN, LAUREL, ASSOCIATE PROFESSOR, ART & ART HISTORY, 12 YEARS OF SERVICE, FALL SEMESTER

Laurel Farrin will produce a body of work in NYC, consisting of paintings and drawings based on analog TV for a solo exhibition at Lesley Heller Workspace in NYC and Anton Gallery, CA. Carrying a personal narrative, these works also contribute cultural observations about our digital age. Farrin will examine the woven ground these mediums share—the woven canvas of painting and the interlaced skews of analog broadcast TV. Farrin’s project will show that broadcast TV has much in common with the processes of painting, seen historically in Impressionism, Abstract Expressionism and much Post Modern contemporary painting. The concept and form of this project is innovative

³ National Endowment for the Humanities.

and has never been investigated in the applicant's area of research. It furthers the field of painting, by connecting and expanding painting's history with the history of electronic images. Farrin will teach digital techniques for painting developed during her PDA to undergraduate and graduate painting/drawing courses.

FRANCISCUS, ROBERT, ASSOCIATE PROFESSOR, ANTHROPOLOGY, 12 YEARS OF SERVICE, SPRING SEMESTER

The study of modern human origins from more primitive fossil ancestors, as well the domestication of the dog from ancestral wolves have each proceeded as disparate academic enterprises. Yet, similar patterns of skeletal size reduction appear to have occurred in both cases. Some scholars have described modern humans as a "self-domesticated" species in terms of social and behavioral evolution. This theoretically important idea likely also extends to anatomical evolution but has not been explicitly studied. Professor Franciscus will collect 3-D skeletal data from a large number of early domesticated dogs and ancestral wolves, and analyze these against homologous data on early modern humans and their fossil predecessors in a novel interdisciplinary test of whether skeletal changes in both dogs and modern humans from their respective ancestors were congruent. This project will result in journal articles, enhanced graduate student development, and grant acquisitions.

GHOSH, SUKUMAR, PROFESSOR, COMPUTER SCIENCE, 24 YEARS OF SERVICE, SPRING SEMESTER

Since early 2007, when Facebook began its rapid growth, social networks began to blossom. Professor Ghosh will explore how social networking using smart mobile devices can enhance a new generation of community-oriented or people-centric services. Smartphones of various types have now become increasingly popular and affordable, and a large fraction of the population enjoys the freedom of accessing the web and staying connected through mobile devices. Nearly 20% of the smartphones today support satellite-based global positioning system (GPS), enabling the device and its messages to be precisely geo-tagged. This can potentially enhance disaster recovery operations, simplify law enforcement agency's abilities to track people, and improve the quality of corporate decision-making. The results will be used to enhance the content of the Computer Science department's course on Peer-to-Peer Networks, and will lead to a collaborative grant proposal for an appropriate funding agency.

***GIBSON, CRAIG A., ASSOCIATE PROFESSOR, CLASSICS, 11 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 UI and its students by enriching Professor Gibson's understanding of these topics, many of which have direct classroom application.

GILLAN, EDWARD G., ASSOCIATE PROFESSOR, CHEMISTRY, 13 YEARS OF SERVICE, SPRING SEMESTER

Professor Gillan will work with graduate and undergraduate students to investigate new synthetic strategies that will produce nanoscale and porous inorganic solids with broad potential in renewable energy areas. These materials will either utilize light illumination to enhance chemical transformations (photocatalysis) or improve conventional thermal catalytic processes. Targeted chemical conversions include those that convert biomass derived species into hydrogen gas for clean energy applications. Selected materials will enhance hydrogen energy storage capabilities. This focused catalytic research will result in journal publications and preliminary results for federal

research grant applications, in addition to new teaching modules for university instruction. The students' research training in materials synthesis and critical analysis of catalytic properties will help create a technologically strong Iowa workforce.

GITTLER, JOSEPHINE, PROFESSOR, LAW, 38 YEARS OF SERVICE, FALL SEMESTER

The population of older persons with Alzheimer's disease and other types of dementia is large and growing. Professor Gittler will examine state regulation of nursing homes that provide care to persons with dementia. She also will examine state statutes governing substitute decision making for nursing home residents whose decision making capacity is impaired due to dementia. The aim of her project is to contribute to the development of public policies and laws directed at assuring that older persons with dementia in nursing homes receive appropriate care and adequate protection from mistreatment and financial exploitation. It is expected that project will result in journal articles and an electronically disseminated report.

GORDON, COLIN, PROFESSOR, HISTORY, 16 YEARS OF SERVICE, FALL SEMESTER

The suburban sprawl of American cities, and efforts at urban renewal in declining central cities, are now familiar stories. Less familiar is the pattern and politics of urban renewal on the suburban fringe. Professor Gordon proposes to examine the fate of two African-American enclaves on the outskirts of St. Louis which were surrounded—and ultimately erased—by the westward push of new suburban development. These neighborhoods offer powerful case studies of metropolitan race relations, the politics of redevelopment, and the riddle of American housing policy. This work builds on Professor Gordon's previously-published research on the postwar city, and contributes to the development and refinement of courses in the history of American public policy.

HAN, WEIMIN, PROFESSOR, MATHEMATICS, 19 YEARS OF SERVICE, SPRING SEMESTER

Optical imaging tomography has become a most rapidly developing area in biomedical imaging, due to its superior performance, high versatility, ease-of-operation, and cost-effectiveness. Light propagation within biological media is described by the radioactive transfer equation (RTE) or its appropriate simplification such as the modified Leakeas-Larsen equation (MLLE) for strongly forward peaked media. In optical imaging tomography, mathematical formulations are inverse problems to determine the absorption/scattering coefficient and/or the light source function, with the RTE or the MLLE as the forward model. Professor Han will develop a comprehensive mathematical theory for problems arising in optical imaging tomography. His Ph.D. students will receive solid training through participating in the project. Research results from this project will aid a better understanding of optical imaging tomography, and will lead to several journal papers and submission of an NSF grant.

JORGE, RICARDO E., ASSOCIATE PROFESSOR, PSYCHIATRY, 11 YEARS OF SERVICE, OTHER

Diabetes Mellitus (DM) is a major public health concern. In Iowa, there was an increase in the percentage of persons with DM from less than 4.5 % in 1994 to approximately 7% in 2008. The brain might be severely affected by DM and the frequency of dementia, depression and apathy is increased among diabetic patients. The purpose of this project is to examine how vascular disease, neurodegeneration, and brain inflammatory changes contribute to the genesis of cognitive decline, depression and apathy associated with DM. The project will be done in cooperation with investigators from Spain and Australia and will be superimposed on an ongoing funded project in Spain. Otherwise, it won't be possible to make it in Iowa for budgetary reasons. Completion of this project would increase the prestige of the University of Iowa and provide the preliminary data necessary to compete for funds in the US. More important, it might contribute to develop efficient strategies to reduce the burden of DM.

KADERA, KELLY M., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, 17 YEARS OF SERVICE, SPRING SEMESTER

Why are democracies much more likely to win wars than autocracies? This project proposes that democracies can rely more on aid from their allies, who are also more likely to be democracies. As a result, democracies may be less likely to be attacked in the first place. It also considers factors that might make democratic alliances exceptional war executors (e.g., better military capabilities, common military culture, number of allies). Empirical tests of these arguments will inform scholarship on institutional design, democratic peace, and military efficacy; the foreign policy of the U.S.; and policies of international organizations that require democratization for membership, such as the European Union. Iowans will benefit from findings concerning features that make agreements, whether they are alliances or business contracts, credible and durable. Students, who increasingly explore world affairs, will gain from Kadera's expanded expertise on the mechanisms underlying global conflict.

KOCHANSKA, GRAZYNA, PROFESSOR, PSYCHOLOGY, 19 YEARS OF SERVICE, FALL SEMESTER

Professor Kochanska studies why some children become prosocial, rule-abiding, and conscientious, whereas others become disruptive, antisocial, and callous - a key developmental psychology question, and one with immense implications for individuals, families, and the society. She will complete two ongoing projects: a study of children from infancy to school age, and an experimental study of a parenting intervention. In both, she collects reported, behavioral, genetic, physiological, and brain imaging data on children, parents, and family relationships. Professor Kochanska will (a) submit an application for a new large grant to the National Institutes of Health, (b) publish reports in scholarly journals, (c) directly involve students in several projects, (d) incorporate new data and methodologies in her social development courses, and (e) develop an effective, theoretically informed, evidence-based parenting intervention for Iowa's low-income, diverse, high-risk mothers of toddlers.

KOLEN, MICHAEL J., PROFESSOR, PSYCHOLOGICAL & QUANTITATIVE FOUNDATIONS, 13 YEARS OF SERVICE, FALL SEMESTER

Professor Michael J. Kolen will develop a draft of the new third edition of the book *Test Equating, Scaling, and Linking: Methods and Practices* during his Fall 2011 semester Professional Development Award. Test equating, scaling, and linking methods are statistical methods that are widely used with scores on many standardized tests in education and psychology. The third edition will incorporate changes to the field based on new conceptualizations, research on methodology, new practical guidelines, incorporation of technology in testing, and recent changes in educational policy. This book will be used as a text in a graduate course at the University, as a textbook for workshops, as a reference for professionals working in the field, and to motivate dissertation research at the University.

LEDOLTER, JOHANNES, PROFESSOR, MANAGEMENT SCIENCES, 32 YEARS OF SERVICE, HALF TIME FOR ONE YEAR

Much data are collected in the form of time series. Objectives for the analysis of time series data include the visualization and estimation of trends, the early detection of unusual measurements and trend changes, the modeling of relationships among several such series, and the prediction of future values. One outcome of this research will be the revision of a graduate-level textbook on Statistical Methods for Forecasting to include recent developments on methods and models for the analysis of financial time series. Another objective is to develop routine surveillance tools for medical time series (such as daily number of appointments running late and weekly infection rates); control chart techniques that signal changes quickly will help hospital administrators detect potential problems in a timely manner. A third task deals with improved statistical inference procedures for analyzing duration data of medical procedures.

LEWIN, ELLEN, PROFESSOR, ANTHROPOLOGY/GENDER, WOMEN'S & SEXUALITY STUDIES, 13 YEARS OF SERVICE, SPRING SEMESTER

Research on lesbian, gay, and transgender (LGBT) life in the US has paid scant attention to religiosity and to the specific challenges facing the African-American LGBT community. Professor Lewin will use ethnographic methods to study the Fellowship, a coalition of churches serving primarily Black LGBT populations, with spiritual and liturgical practices are grounded in Pentecostal traditions central to Black spiritual experience in the US. She will travel to congregations and Fellowship meetings around the US to observe worship services, study key writings of the denomination, and will interview pastors, denominational leaders, and members with diverse identity and social positions. The research will benefit the University by enhancing Professor Lewin's curricular breadth, enabling her to develop new courses relevant to American cultures, and to design courses that could be offered jointly with African American, American, and Religious Studies.

***MACGILLIVRAY, LEONARD R., ASSOCIATE PROFESSOR, CHEMISTRY, 10 YEARS OF SERVICE, FALL SEMESTER (CONTINUING)**

Professor MacGillivray will synthesize materials that address major problems in synthetic chemistry and materials science. The research is expected to lead to new understandings in enzymology, applications in medicine and biology, and flexible electronic media. The results will be incorporated into proposals for the National Institutes of Health, National Science Foundation, and Department of Energy. Collaborations within the University of Iowa and with peer institutions will be developed. The work will involve training of undergraduate and graduate students, as well as postdoctoral fellows.

MARRA, KIMBERLEY B., PROFESSOR, AMERICAN STUDIES, 21 YEARS OF SERVICE, FALL SEMESTER

Professor Marra will write a chapter of her book "Fashioning the Thoroughbred Ideal: Show Women and Show Horses on New York Stages, 1865-1930," a cultural study of how human interactions with horses both empowered women and enduringly shaped dominant race, class, gender, and sexual ideologies in the period when women entered the sport of riding in large numbers for the first time in the United States, and horses were still abundant in city and country as creatures of practical necessity and show. The chapter will analyze the social and performance dynamics at the National Horse Show at Madison Square Garden, then considered the inaugural event of the social season and one of several highly visible public arenas in which women and horses were on display that the book examines. Professor Marra will also use this material to enrich her courses in the curriculum of the newly merged units of American Studies and Sport Studies, as well as her performance history courses in Theatre Arts.

MATTES, TIMOTHY E., ASSOCIATE PROFESSOR, CIVIL-ENVIRONMENTAL ENGINEERING, 6 YEARS OF SERVICE, SPRING SEMESTER

Professor Mattes will investigate the assimilation and recycling of dissolved organic and inorganic matter by marine bacteria. This project has considered environmental importance as marine microbes directly impact global climate change by greatly influencing global biogeochemical nutrient and carbon cycles. The main challenge with investigating marine microorganisms is that many resist cultivation in a laboratory setting. Therefore, Professor Mattes will use sophisticated molecular-scale microbiology techniques to study these microbes in their natural environment. This project will be conducted in a laboratory at the University of Washington, School of Oceanography. It is expected to yield at least one journal article and one grant application to the NSF. The exposure to new topics and lab techniques will benefit Professor Mattes' graduate students and students that take his courses in environmental microbiology and environmental biotechnology.

MCALLISTER, BRYANT F., ASSOCIATE PROFESSOR, DEPARTMENT OF BIOLOGY, 8 YEARS OF SERVICE, HALF TIME FOR ONE YEAR

This Professional Development Award will provide the opportunity for Bryant McAllister to gain experience applying new sequencing technologies. Working at the Vetmeduni Vienna, he will gain direct experience in the application of high-throughput sequence generation/analyses for population genomic studies. This represents the most modern approach to reveal initial changes that have arisen on the young X chromosome of *Drosophila Americana*, which is a major research focus of his. Dr. McAllister will also deliver a graduate seminar course on the "Consequences of Sex" within the newly established Vienna Graduate School of Population Genetics. Offering this course to a new and unique group of students in Vienna will provide the opportunity to further refine and expand the material. Moreover, delivery of the course to a new group of students will allow him to further synthesize the material into a common theme, which supports a long-term career goal of writing a scholarly book in this area.

MOUNT, MICHAEL K., PROFESSOR, MANAGEMENT & ORGANIZATION, 30 YEARS OF SERVICE, SPRING SEMESTER

Motivation and work performance are jointly influenced by the attributes of people and the characteristics of jobs. Two major research models that have been used to examine these two sets of factors are the Five-Factor Model of personality traits and the Job Characteristics Model, respectively. However, a major deficiency in the research is that most studies have examined each set of effects relatively independently of the other. In this project, Professor Mount will develop and empirically test a model called the Theory of Purposeful Work Behavior, which integrates the joint influence of personality traits and job characteristics in predicting motivation and work performance. He also expects to develop a practical guide that professionals and students can use to select individuals and to design jobs to optimize job satisfaction and performance. This project is expected to result several journal articles and a grant from the Society of Human Resource Management.

OESMANN, ASTRID, ASSOCIATE PROFESSOR, GERMAN, 13 YEARS OF SERVICE, SPRING SEMESTER

The state of Iowa is famous for its commitment to art and literature. This is partly due to the work of writers and painters who have worked outside of universities, but it is also an outgrowth of the University of Iowa's success in fostering an environment in which graphic artists, creative writers and critical thinkers have been able to work together and stimulate one another. The PDA would fund one semester in which Astrid Oesmann will contribute to that tradition by completing her book manuscript "Facing Trauma: Masks, Politics, and the European Avant-garde" for publication. The book is a comparative study of how masks were used in various European cultures during World War I and after, providing a critical analysis of a time and place where criticism and artistic production intersected to shape the modern world. It would also further the development of new classes that will contribute to the growing field of international humanities at the University of Iowa.

O'HARA, MICHAEL W., PROFESSOR, PSYCHOLOGY, 30 YEARS OF SERVICE, FALL SEMESTER

Clinical depression experienced by women during pregnancy and after childbirth is a serious mental health problem that is common and has long term negative consequences for mothers and children. Professor O'Hara has devoted the past 30 years to studying this problem and developing interventions to effectively treat depressed mothers. This work has been conducted all over the State of Iowa and has had a broad impact on public health policy. Professor O'Hara will use the semester afforded by the Professional Development Assignment to make substantial progress on a new book that will describe his research and that of his colleagues and provide a new integrative analysis of what is called "perinatal depression." This work will have a significant impact on his undergraduate and graduate teaching, supervision of graduate students, and will make an important scientific and public health contribution in this critical area of women's health.

PEATE, DAVID W., ASSOCIATE PROFESSOR, GEOSCIENCE, 7 YEARS OF SERVICE, FALL SEMESTER

Professor Peate will set-up methods for analysis of inorganic elements at trace levels (parts per million or less) in various types of environmental materials using a new ICP-MS instrument. He will apply these methods to novel projects related to understanding the origins of volcanic rocks and reconstructing records of environmental change from sedimentary rocks. The overall project is expected to result in several journal articles, grant proposals to NSF and ACS-PRF, and improved laboratory exercises for undergraduate classes. It will be of benefit to the University because the analytical methods established have broader applications that will be made available to the wider University research community, in disciplines ranging from Environmental Engineering to Medicine.

PETERS, JOHN DURHAM, PROFESSOR, COMMUNICATION STUDIES, 24 YEARS OF SERVICE, SPRING SEMESTER

Professor Peters will write a major scholarly book on the long historical horizon of digital media. The book grows out of his ongoing research and teaching on revolutions in communication. Building on several already published articles, the book makes a synthetic analysis of the historical precedents and unanticipated consequences of digital communication. It argues that the new techniques of data-organization and data-sharing, from Google and Twitter to Facebook and text-messaging, resemble older practices of counting and accounting that have always been found in complex societies. There is much hype about so-called "new media"; this book provides a more measured historical and philosophical treatment. This book will cement the UI's claim to be a world center for media studies. Research for it will flow directly into Peters's teaching, which ranges from large introductory courses to doctoral seminars. It will also help Iowans better understand the times in which we live.

PORTER, JEFFREY L., ASSOCIATE PROFESSOR, ENGLISH, 11 YEARS OF SERVICE, SPRING SEMESTER

The distinctive stories on public radio today may seem to have come out of nowhere, but in fact they have a long, if forgotten, history. In his second book, "They Ruled the Air: The History and Practice of Radiophonic Literature," Professor Porter explores the influence of literature on broadcast radio, from the 1930s to the present. During the grant period, he will produce a completed book manuscript, a journal article, a conference paper, and a new undergraduate course on "The Radio Documentary." The first study of literature's vital role in radio and sound art, his book will advance the study of literary-based digital media and will contribute to the University of Iowa's nationally regarded writing culture.

RAYMOND, MARGARET, PROFESSOR, LAW, 15 YEARS OF SERVICE, SPRING SEMESTER

This project is a study of "reading the law" as a vehicle for licensing attorneys. Historically, many lawyers trained through law office study rather than by attending law school; this has become a rare, disfavored, and in many states prohibited vehicle for entry to the profession. The project will analyze how reading the law became marginalized, what is happening in those jurisdictions that permit it, and whether more states should consider an appropriately constrained law office study option as one vehicle for training lawyers. In light of concerns about the cost of legal education, analysis of alternatives to law school is both relevant and timely. This research will enable me to add consideration of alternative pathways into the profession to my Professional Responsibility course, and will focus attention on the College of Law as an innovative contributor to the state and national conversation about access to the profession and the ethical responsibilities of lawyers.

RIEZMAN, RAYMOND G., PROFESSOR, ECONOMICS, 34 YEARS OF SERVICE, SPRING SEMESTER

Professor Riezman will study the effect of international trade and direct foreign investment on countries that have abundant supplies of surplus labor. In the last fifty years there have been significant changes in the degree of urbanization across countries. The broad aim of this project is to construct a model that explains the role that international trade and foreign direct investment have on the degree of urbanization. The main questions to be addressed are do trade policies promote or discourage urbanization? Is there a difference in the way that import policies and export policies work? Do policies designed to encourage investment speed up the urbanization process? The results of this research will be shared with scholars and students at the university who are interested in international and development issues. In addition, findings from this research will be disseminated and discussed in my graduate and undergraduate classes in International Economics.

SCHUH, KATHY L., ASSOCIATE PROFESSOR, PSYCHOLOGICAL & QUANTITATIVE FOUNDATIONS, 10 YEARS OF SERVICE, SPRING SEMESTER

Professor Schuh proposes writing a book that will be the synthesis of a 10-year research strand in which she has studied a specific learning process—student knowledge linking—of upper-elementary students. Her research, including qualitative data from eight classrooms as well as a survey study of 20 classrooms, has focused on how fifth- and sixth-grade students integrate what they are learning in their classrooms with what they already know, thus linking in- and out-of-school learning. The synthesis of these studies requires reporting in a book-length monograph that is typical for this type of large-scale research effort. A number of articles will provide the foundation for many of the book chapters. The project will result in a much needed concrete description of this specific learning process at a foundational and practical level. It will help educational researchers and K-12 teachers better understand the learning process that is posed from many contemporary descriptions of learning.

SLABAKOVA, ROUMYANA, PROFESSOR, LINGUISTICS, 12 YEARS OF SERVICE, HALF TIME FOR ONE YEAR

Professor Slabakova will write a book entitled *Generative Linguistics in the Service of Language Teaching*. The book will be based on her theoretical model of the acquisition process called The Bottleneck Hypothesis. The practical aim of the monograph will be to show that there are parts of the grammar (e.g., meaning) that are relatively easier to acquire and others (sounds, word endings) that would benefit from explicit explanation and extensive practice in the language classroom. The book will be a valuable tool for language teachers and will be used to teach an Iowa undergraduate course (103: 157 Linguistic Theory and SLA). Slabakova will also study the acquisition of English by Basque native speakers who learned Spanish as adults or as children. The effects of their second language Spanish on the acquisition of English as a third language will be examined. These multilingual participants will be tested in the Basque region of Spain.

SOUAIAIA, AHMED, ASSOCIATE PROFESSOR, RELIGIOUS STUDIES, 6 YEARS OF SERVICE, SPRING SEMESTER

Professor Souaiaia will examine religion and politics in the Islamic world. The project focuses primarily on the research essential for his book-length study of religion, rebellion and legitimacy in Islamic discourse. Professor Souaiaia is currently under contract with SUNY Press for publication of a book entitled *Anatomy of Dissent in Islam*. In addition, Professor Souaiaia will use the research findings to create a new course dealing with these same important themes. Finally, Professor Souaiaia will continue his work as the managing editor of the new scholarly publication that he founded, *Journal of Islamic and Judaic Multidisciplinary Studies*.

***SPENCER, JOHN P., ASSOCIATE PROFESSOR, PSYCHOLOGY, 13 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 UI (31:216) and in a Dynamic Field Theory Summer School hosted at UI each summer.

STERN, FREDERICK, PROFESSOR, MECHANICAL ENGINEERING, 27 YEARS OF SERVICE, FALL SEMESTER

Professor Stern will conduct focused accelerated research to achieve the next-generation computational fluid dynamics (CFD) tools; experimental methods for local flow measurements in the IIHR Wave Basin; and stochastic uncertainty quantification, all of which are essential for Iowa to maintain its internationally recognized leadership role in ship hydrodynamics and continued Office of Naval Research funding. Also, participation in the Naval Engineering Education Consortium will be increased. The research contributes to teaching via hands-on student projects; M.S., Ph.D. and postdoctoral projects; and faculty development via achievement of next-generation ship hydrodynamics research. At this critical transitional period to high-fidelity, massively parallel, two-phase flow CFD tools, IIHR Wave Basin, and stochastic uncertainty quantification, an accelerated larger than usual research effort is absolutely required in comparison with the usual teaching, research and service allocation.

STROYAN, KEITH, PROFESSOR, MATHEMATICS, 37 YEARS OF SERVICE, FALL SEMESTER

We propose to spend fall 2011 doing research in visual depth perception. Part of this time will be spent at North Dakota State University developing experiments with a collaborator. In 2008 we gave new mathematical predictions and experimental verification of the role of smooth eye pursuit in depth perception. The need for some extra retinal signal was also shown neurologically in 2008 and experiments in 2009 have verified our prediction that pursuit is used in the brain to perceive depth. We recently extended the motion/pursuit theory to the horizontal viewing plane and will perform related experiments with NIH support granted for five years beginning in 2010. We will also develop the mathematics of three-dimensional optic flow with pursuit. Our work on depth perception could help citizens of Iowa for example by better understanding soldiers' errors while driving with night vision goggles (that restrict eye pursuit) or people driving while intoxicated (that impairs eye pursuit).

SULS, JERRY M., PROFESSOR, PSYCHOLOGY, 21 YEARS OF SERVICE, FALL SEMESTER

People often decide on the basis of physical sensations whether they are ill. Researchers have identified physiological and psychological factors affecting interpretation of symptoms, but the most recent scientific reviews do not incorporate recent findings from psychosomatic medicine, neuroscience and clinical psychopathology. The applicant proposes to conduct a comprehensive review of scientific literature on psychological and social factors affecting perception and recall of physical symptoms. The review has potential for publication because it would be a distinctive integration of several streams of research, would provide the foundation for a grant application, inform teaching of graduate and undergraduate students and improve understanding of factors that facilitate or discourage the use of the health care system.

**TOLBERT, CAROLINE J., PROFESSOR, POLITICAL SCIENCE, 4 YEARS OF SERVICE⁴,
SPRING SEMESTER**

The division between small and large population states is as old as the founding of our nation. Of the debates at the Constitutional Convention, the most controversial was over allocation of seats in Congress. Over the past two hundred years dramatic population growth gives CA a population of nearly 40 million compared to WY with less than 500,000. Yet federal electoral rules guarantee every state equal representation in the Senate, while the Electoral College allocates voting power to elect presidents to the states by the size of their congressional delegation, further distorting representation in favor of small states. The conventional wisdom is that large states have more influence in national politics. But a more careful examination reveals this may not be true. This book sheds new light on how state-based federal structure influences political trust, public opinion and support for election reform. As a small population state, Iowa citizens may benefit from the current system.

**UDAYKUMAR, H. S., PROFESSOR, MECHANICAL ENGINEERING, 11 YEARS OF SERVICE,
SPRING SEMESTER**

The applicant will develop computational techniques to perform multiscale simulations of biofluids phenomena, specifically the operation of heart valves. Models for cell-scale dynamics will be integrated with organ-scale models to provide enhanced fidelity in capturing physical behavior of complex systems. Methods for seamlessly integrating multi-scale models into large-scale computations on massively parallel computer architectures will be devised. The applicant will also complete the writing of a monograph in the research area of computational modeling. The semester leave will enable the author to launch a cutting-edge research initiative that will lead to funding from NIH, DOD and other agencies; it will lead to new research that will be incorporated into teaching at all levels. Thus, the University and state will benefit from enhanced knowledge, expertise and resources accruing from the semester's effort.

**VALENTINO, RUSSELL, PROFESSOR, CINEMA & COMPARATIVE LIT, 16 YEARS OF
SERVICE, SPRING SEMESTER**

The premise of *From Virtue to Virtual* derives from a tradition in the history of ideas that linked virtue to property ownership, which was displaced by the rise of commercial culture. It looks at representations of virtue in Russia and the US from the 18th to the 20th centuries, exploring how heroic ideas of virtue were transformed by the rise of commercial culture, in other words, what happened to courage when prudence became the dominant mode of masculine public behavior. It asks why Russian social thinkers resisted the notion that prudent actors such as businessmen and administrators might be considered heroic, especially by contrast to the acceptance of commerce as a drive belt for progress in the US. Finally, it explores the shift from virtuous property ownership to body-less virtuality and what this means for masculine character today. The project builds on the core GE course "Major Texts of World Literature," into which content from the project will be incorporated.

***WHITE, SUSAN C., ASSOCIATE PROFESSOR, ART & ART HISTORY, 10 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

⁴ Will have met the 10 semester requirement prior to taking the leave; approved per SUI policy.

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.

WINN, BRYON S., ASSOCIATE PROFESSOR, THEATRE ARTS, 16 YEARS OF SERVICE, SPRING SEMESTER

Professor Winn is submitting this Professional Development Assignment for the spring semester of 2012. His objective is to expand his expertise beyond traditional theatre models and investigate the many facets of contemporary Entertainment Design. He will continue his exploration of convergence technologies, serve as designer on a number of large-scale corporate events, continue to foster international exchanges, work with one of the leading lighting designers in live concert lighting design, and continue his strong relationship with new play development at a major regional theatre. This proposal will benefit students through increased exposure to contemporary technologies, and by expanding their potential career opportunities. Additionally, it will provide the foundation for the development of a new course in Entertainment Design.

YOUNG, MARK A., ASSOCIATE PROFESSOR, CHEMISTRY, 21 YEARS OF SERVICE, FALL SEMESTER

Professor Young will develop a new experimental methodology to evaluate the role of atmospheric particulate matter in global climate and human health and the links with atmospheric chemistry. During the period of the development award, he will finalize the design and construction of a novel instrument capable of rapidly determining the size and chemical composition of single micron-sized particles in the ambient atmosphere. The completed instrument will be applied to a study of the interaction of mineral dust particles with solar radiation, a critical determinant of global climate change. Future proposed work includes studies of the toxicity of engineered nanomaterials and monitoring biological particulates in workplaces, such as agricultural facilities. The project will bring unique scientific capabilities to the University and keep it at the forefront of research in critical areas such as climate change, nanotechnology, and public health.

IOWA STATE UNIVERSITY

BRUNA, KATHERINE, ASSOCIATE PROFESSOR, CURRICULUM AND INSTRUCTION, 7 YEARS OF SERVICE, SPRING SEMESTER

Professor Bruna will spend spring semester of 2012 in Oregon. She is a leading authority on new immigrant education experiences and will spend the assignment working with colleagues at Oregon State University and University of Oregon to build relationships with these and other faculty around interests in the Latino experience in demographically-transitioning communities. Also, she will join ISU colleague Dr. Greder on her field work in Oregon and Washington, as well as on visits to immigrant-sending communities-of-origin in the state of Michoacan in Mexico. She will build a grant team for comparative research on Latinos in new immigrant communities. This PDA will benefit Iowa State University in increased connections, as well as building Curriculum & Instruction coursework related to Latino cultural and linguistic diversity in schools, classrooms, and communities.

CANFIELD, PAUL, DISTINGUISHED PROFESSOR, PHYSICS AND ASTRONOMY, 14 YEARS OF SERVICE, FALL SEMESTER

Professor Canfield will spend the fall semester of 2011 working with other specialists in condensed matter physics at the Universities of Ljubljana, Karlsruhe, Madrid, and Genova. He will present seminars and laboratory classes on the design, discovery, and synthesis of novel materials with the objective to increase the flow of new materials into development. The goal is to spend six to eight weeks abroad to teach basic concepts to as many students as possible and to maximize the number of people working on the discovery and design of novel materials. This, in turn, will garner closer ties to researchers in order to create or improve collaborations that may lead to student exchanges and more graduate students coming to ISU. Dr. Canfield had a previous FPDA in FY2000, which led to expanded research and collaboration opportunities, and the establishment of a new capability at a research facility in France.

CERVATO, CINZIA, PROFESSOR, GEOLOGICAL AND ATMOSPHERIC SCIENCES, 9 YEARS OF SERVICE, SPRING SEMESTER

Professor Cervato will spend spring semester of 2012 at the University of Genova, Italy. She is an authority on education for Science, Technology, Engineering and Math (STEM), and will work on training secondary school teachers at the University with the goal of producing a major curriculum renovation. She will extend her network of science education collaborators. And she will present a series of seminars for students and faculty at the University of Genova and other Italian universities to introduce them to the progress of science education research in the U.S., and the importance of science literacy across disciplines.

CURRAN, PAULA, ASSOCIATE PROFESSOR, ART AND DESIGN, 17 YEARS OF SERVICE, FALL SEMESTER

Professor Curran will spend fall semester of 2011 at the University of Wisconsin-Madison and the University of Illinois-Urbana. She plans two projects for her PDA. The first is to create an edition of 10 artists books, based on an essay she has written. She plans to print the book at the letterpress facilities at the University of Wisconsin-Madison and assemble and bind the book in her home studio. The second project will involve time spent at the University of Illinois-Urbana, working with design professors and students, and students in the graduate writing program to produce Ninth Letter, a national award-winning art magazine. Also, she will observe Professor Steve Kostell, director of Soybean Press letterpress art studio at the University of Illinois-Urbana. This PDA will benefit ISU in much the same way as her previous FPDA in 2002 – through increased skills that will inform her classroom instruction, open possibilities for interdisciplinary collaboration, and a

completed project that can be entered into juried, international, national and regional book arts exhibitions.

FRANKEL, DAVID, ASSOCIATE PROFESSOR, ECONOMICS, 7 YEARS OF SERVICE, FULL YEAR

Professor Frankel will spend the 2011-12 academic year in Massachusetts working with macroeconomic theorists at Boston University and the Massachusetts Institute of Technology. He will be part of a research group working together to provide new ideas of global game theory that do not yield recurring crises when subjected to realistic shocks. He will attend research seminars in economic theory and macroeconomics and interact with leading researchers that may lead to collaborative research projects on crises and global games. His Boston experience will lead to increased publications and improved teaching effectiveness at Iowa State University.

GENTILE, DOUGLAS, ASSOCIATE PROFESSOR, PSYCHOLOGY, 7 YEARS OF SERVICE, SPRING SEMESTER

Professor Gentile will travel to the National Institute of Education and Nanyang Technological University in Singapore while on assignment. He is an established researcher that works on the effects of video games on youth. He previously began a joint research project in Singapore, and now he will continue work with the research team to analyze data of a four-year longitudinal study on the effects of video games on 3,000 Singaporean youth, and an associated project on cyberwellness and cyberbullying. The resulting journal articles and a trade book on the effects of video games will benefit Iowa State by increased international collaboration, increased public awareness of ISU research, and the potential for increased sponsored funding.

GREDER, KIMBERLY, ASSOCIATE PROFESSOR, HUMAN DEVELOPMENT AND FAMILY STUDIES, AND EXTENSION TO FAMILIES, 9 YEARS OF SERVICE, SPRING SEMESTER

Professor Greder will spend spring semester 2012 in Oregon, Washington and Mexico. She will further analyze Latino/non-Latino data from a program, "Rural Families Speak" and begin to analyze new "Rural Families Speak about Health" data. These are multi-state studies focused on health and well-being of rural low-income families. She will prepare manuscripts and presentations as well as online training for Extension professionals and graduate students based on her findings. She will travel to the Mexican communities where immigrants in Iowa originated to increase her awareness of Mexican cultural values and beliefs and community context. She will collaborate with colleagues in Washington and Iowa on manuscript and grant writing, and identify applications for ISU Extension programming related to Latino youth, families and schools.

KAWALER, STEVEN, PROFESSOR, PHYSICS AND ASTRONOMY, 21 YEARS OF SERVICE, FALL SEMESTER

Professor Kawaler will travel to the Kavli Institute for Theoretical Physics at the University of California, Santa Barbara. While there, he will organize a 12-week symposium of astrophysicists to establish a new basis for examining data from the U.S. Space program. The program *Asteroseismology in the Space Age* will run from September to December, with a large international workshop to be held in October. Dr. Kawaler is a leader in the Kepler Asteroseismic Investigation and he is able to share this fascinating research with ISU students in the classroom. Previous sabbaticals took place in Fall 1995, Spring 2002, and Fall 2007.

LUTZ, JACK, PROFESSOR, COMPUTER SCIENCE, 23 YEARS OF SERVICE, SPRING SEMESTER

Professor Lutz will spend the spring semester of 2012 at the California Institute of Technology and the University of Cambridge to publicize research done at Iowa State and to forge new collaborations for research funding. He will be in California in January and February to collaborate with Caltech scientists to extend his research on molecular programming and nanoscale self-assembly. The rest of the semester he will participate in a special program at the Isaac Newton Institute for Mathematical Sciences to conduct research on the theory of computing, partly in collaboration with other participants in a program commemorating the 100th birthday of Alan Turing, the English mathematician who founded theoretical computer science. Professor Lutz had previous FPDAs in 1990, 1997, 2001, and 2006. These were productive in terms of publications, research funding, collaborations and curriculum.

LUTZ, ROBYN, PROFESSOR, COMPUTER SCIENCE, 19.5 YEARS OF SERVICE, SPRING SEMESTER

Professor Lutz proposes a spring semester 2012 PDA to extend techniques she has developed for analyzing the safety of a system. In January and February, she will be at the California Institute of Technology working on argument chains that link evidence to goals for safety-critical systems. From March to May, she will be at the University of Limerick developing experimental techniques to manage safety case evidence for evolving systems. This work will benefit Iowa State by increased opportunities for grant funding, and up-to-date applications and examples available for coursework in the Department of Computer Science. Professor Lutz had a previous PDA in 2006 that resulted in increased publications and collaborations.

MUNKVOLD, GARY, PROFESSOR, PLANT PATHOLOGY, 4 YEARS OF SERVICE, FALL/SPRING SEMESTER

Professor Munkvold will spend six months in Italy while on PDA. While there, he will conduct research on seed pathology of maize with leading mycotoxin experts at the Università Cattolica del Sacro Cuore in Piacenza, and at the Istituto di Scienze delle Produzioni Alimentari in Bari. He will attend meetings with the Food and Agriculture Organization in Rome to strengthen the ISU-FAO partnership and promote the efforts of the U.S. National Seed Health Systems. The work will strengthen mycotoxin risk assessment models that can be adapted for use in the United States.

NORDMAN, DANIEL, ASSOCIATE PROFESSOR, STATISTICS, 5 YEARS OF SERVICE, SPRING SEMESTER

Professor Nordman will spend spring 2012 at the Texas A&M University and Sandia National Labs in Albuquerque, New Mexico. In Texas, he plans to conduct research, explore and create new research proposals, and integrate lecture material for a new undergraduate statistics course on resampling methods to fill a departmental need. This work will also help to promote graduate research in this academic area at ISU. In New Mexico, he will collaborate with computer scientists to analyze random graphs and networks, and to develop Bayesian statistical methods for detecting "structures" in random graphs and relational data.

NUSSER, SARAH, PROFESSOR, STATISTICS, 18.5 YEARS OF SERVICE, FULL YEAR

Professor Nusser will spend the 2011-2012 academic year in Washington, D.C., Colorado and New Zealand. While in Washington, D.C., she will work with the National Cancer Institute researchers on the physical activity assessment project and with NASS researchers on the area sample design project. At Colorado State University, she will collaborate on sample design and modeling research targeted at integrating rangeland field surveys using high resolution imagery. In New Zealand, she will visit Massey University as an exchange with a colleague who has visited Iowa State multiple times. Following several terms in an administrative capacity, Dr. Nusser will now have the

opportunity to gather information for new approaches to teaching survey statistics and methodology courses to undergraduate and non-major graduate students. As a result of the assignment, she will have renewed relationships with research groups that are affiliated with her research interests.

PETERSON, THOMAS, PROFESSOR, GENETICS, DEVELOPMENT AND CELL BIOLOGY, 17 YEARS OF SERVICE, FALL/SPRING SEMESTER

While on PDA, Professor Peterson will spend six months at meetings in England and the Netherlands, and he will conduct research at Kansas State University. As a result, he will gain new skills in cytogenetic and genomic analyses of transposition, develop new collaborations with key researchers, and develop new research projects suitable for federal funding, as well as complete editing of book chapters for *Plant Transposable Elements*. He had a previous PDA in 2004.

REILLY, PETER, DISTINGUISHED PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 36 YEARS OF SERVICE, FALL SEMESTER

Professor Reilly will spend fall semester of 2011 at the University of Queensland in Brisbane, Australia. The University of Queensland has the strongest chemical engineering department in the country. He will present seminars and help students while focusing on writing publications related to the Engineering Research Center (ERC) at ISU. The continued success of the ERC is important for the department, college and university. He had two previous PDAs which were productive; he produced 19 journal articles from those leaves, as well as two foreign exchange programs.

SACKS, PAUL, PROFESSOR, MATHEMATICS, 29 YEARS OF SERVICE, FULL YEAR

Professor Sacks will spend the academic year in the United Kingdom, Turkey, Germany, and Texas. He will spend two months as a Visiting Fellow at the Isaac Newton Institute for Mathematical Sciences in Cambridge, England, and participate in a special program that will include many of the world's leading experts in the field. He will focus on research collaborations during shorter stays at Dokuz Eylul University in Izmir, Turkey, and at the University of Texas, Arlington. Also, he will develop a graduate-level mathematics textbook. This assignment will benefit Iowa State through special opportunities to interact and collaborate with professional colleagues and a new text. He had a previous PDA in fall 2001 that resulted in publications and collaboration with eminent researchers.

SPRY, PAUL, PROFESSOR, GEOLOGICAL AND ATMOSPHERIC SCIENCES, 27 YEARS OF SERVICE, SPRING SEMESTER

Professor Spry will travel to Italy and Greece and the Universities of Florence and Athens to extend a strong, ongoing collaboration on minerals with new research and publications on the origin and structures of metal tellurides, using deposits in those areas as sources. This PDA will benefit Iowa State in the form of continued collaboration in areas where current and former ISU students have conducted research, as well as the potential for additional publications and research funding.

STROHBEHN, CATHERINE, ADJUNCT ASSOCIATE PROFESSOR, APPAREL, EDUCATIONAL STUDIES AND HOSPITALITY MANAGEMENT, 24 YEARS OF SERVICE, SPRING SEMESTER

Professor Strohbehn's proposal is to spend three months in Texas and Iowa to prepare an evidence-based "Guide to Sustainable Procurement" that will help consumers and businesses grasp the concept of sustainability in food production for eggs, meats, produce and dairy. She plans the work as an Extension publication which will reach a broad audience. This product will benefit the State of Iowa, as well as consumers and businesses in general.

TAN, XIAOLI, ASSOCIATE PROFESSOR, MATERIALS SCIENCE AND ENGINEERING, 8 YEARS OF SERVICE, SPRING SEMESTER

Professor Tan will spend spring semester 2012 at the Technical University at Darmstadt, Germany, and the National Institute of Materials Science, Japan. He will expand his academic skill set and establish close international collaborations through visits to prestigious universities and research institutions. His international research will benefit several efforts at Iowa State, including those in wind energy and biorenewable energy. Professor Tan has conducted research funded by the National Science Foundation and as a result of this project he hopes to secure additional grants.

WALTON, BARBARA, ASSOCIATE PROFESSOR, ART AND DESIGN, 17 YEARS OF SERVICE, SPRING SEMESTER

While on PDA, Professor Walton will work to expand her investigation and research on alternative artist materials, including soy-based encaustic wax which is a sustainable renewable resource that can replace traditional artist materials. The traditional artist materials are in danger of becoming scarce or may not be environmentally sound. Professor Walton's proposal is an ideal next step to her work in collaboration with colleagues in the discipline. A recent presentation at an international conference has garnered considerable interest and attention and she is planning product development and collaborative research. Rarely is an artist in the forefront of product development; her research brings attention to the importance of collaboration between arts and science, and the opportunity for product development.

WANG, TONG, PROFESSOR, FOOD SCIENCE AND HUMAN NUTRITION, 10.5 YEARS OF SERVICE, FALL/SPRING SEMESTER

Professor Wang will spend six months focused on five projects at Arizona State University in Tempe, at ConocoPhillips in Houston, and in Hainan, China. Two months will be at the Chinese Academy of Tropical Agricultural Sciences in a visiting professorship appointment to develop nutritionally enhanced tropical fat and oils. One month will be spent in China at the Huazhong Agricultural University to further develop undergraduate education collaboration and faculty/staff research exchange programs. Another month will be spent at the ConocoPhillips research center working with the biofuels research group to further establish funding and collaboration for microalgae fractionation research. The remainder of the PDA will involve visiting laboratories of national prominence in algae research, participating in laboratory activities at Arizona State University, and further developing research/art techniques with an ISU professor in the College of Design. The outcome will be increased research funding and collaboration with other institutions and industry; expanded research visibility and collaboration in China; and formal undergraduate education collaboration with Chinese institutions that will lead to more students coming to Iowa State. Dr. Wang successfully completed a PDA in 2006.

ZARECOR, KIMBERLY, ASSISTANT PROFESSOR, ARCHITECTURE, 5 YEARS OF SERVICE, FALL SEMESTER

Professor Zarecor will spend several months in Ostrava, Czech Republic to complete research for her next book project. This qualitative study explores the effects of post-1989 housing policies on Czech urban development and neighborhood life. She will use three cities in the Ostrava region as case studies, and focus on large-scale developments built with industrial methods between 1950 and 1990. Her scholarly work in the past five years has focused on housing in Czechoslovakia from 1945-1960. She will be affiliated with the Department of Architecture at VSB-Technical University in Ostrava and the Department of Art History at Ostrava University. This scholarly research will provide international exposure for Iowa State University expertise.

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

CHIN, MARTIN, ASSOCIATE PROFESSOR, CHEMISTRY AND BIOCHEMISTRY, 11 YEARS OF SERVICE, FALL SEMESTER

Synthesis and Testing of a New Diruthenium Complex for the C-H bond cleavage of n-octane

I am requesting a Professional Development Assignment (PDA) to make and develop a bimetallic ruthenium compound that will be capable of breaking the C-H bond of an *n*-octane molecule. The research will be conducted at UNI in the fall of 2011. The outcome of the research would aid in the development of a catalyst that can transform methane into methanol in a single process. This economic transformation of methane into methanol will allow us to utilize current domestic natural gas as a transportation fuel. The research will also be a part of my application to the National Science Foundation (NSF) for an extension to my current NSF grant. The NSF proposal will support the research activities of UNI undergraduates, area high school teachers and local high school students. Funding of the NSF proposal will help in the recruitment of students to UNI's science programs.

COOLEY, JENNIFER, ASSOCIATE PROFESSOR, MODERN LANGUAGES, 11 YEARS OF SERVICE, SPRING SEMESTER

Nuevo amanecer: Weaving a New Beginning

I propose to create a book-length study that traces the creation of the *Nuevo amanecer* weavers' cooperative. This is a group comprised of Guatemalan women from Postville, Iowa, who sought creative means to integrate traditional practices (weaving, cooking, sewing, storytelling) from their Mayan past into their daily lives in Iowa as a means of economic and personal survival. The cooperative emerged in the aftermath of the May 2008 Immigration and Customs Enforcement raid at the Agriprocessors meatpacking plant. The book will be unique in various ways: a) It will document the reflections of populations whose voices have yet to be heard in the growing body of analysis about Postville, (women, indigenous people, Spanish-speakers); b) The narration will be voiced by testimonials of the people who lived the events; and c) The book will use the ICE raid as a starting point but will link local responses to the raid to the larger issues (such as social inclusion). These issues affect communities across the U.S. and Central America that are intertwined due to the transnational movement of people, goods and cultural practices across borders. Finally, d) this publication will be bilingual (Spanish and English) and will appeal to reading publics in various countries who seek to engage in informed dialogue about the human impact of immigration policies. This publication will benefit UNI in its endeavors to serve as a regional hub for the analysis of issues related to immigration. However, the book will have unique qualities that will allow it to impact readers in a very profound manner. The personal stories that serve as the backbone of the report will engage readers in individual reflection about their own role in creating inclusive communities in their hometowns, and on our campus, where meaningful discussions about diversity are just beginning to unfold.

FABOS, BETTINA, ASSOCIATE PROFESSOR, COMMUNICATION STUDIES, 9 YEARS OF SERVICE, FALL SEMESTER

An Interactive History of 20th-Century Hungary

This creative project aims to contribute to the emerging field of interactive visualization. My goal is to visualize the history of 20th-century Hungary—from the Depression and World War II through the rise of communism and the Hungarian Revolution of 1956—with image still, photographic animations, interactive maps, film and video footage, and integrated links, and make the visualization accessible as a public online project. I plan to work with primary visual resources from open access digital archives, as well as images and videos from my own collection, and in doing so visualize a significant moment of Central European history. The project also enables me to creatively address to areas of scholarly inquiry. First: What is the future of the book in the age of

digital media? And second: why do we need an openly accessible creative commons in the age of an increasingly commercialized and privatized Internet? I aim to respond to both questions by creating a model for interactive digital “books” and disseminating this work via the Internet and the Open Society Archive (OSA), a division of the Central European University (CEU) in Budapest. This project will benefit UNI in that it will be a public project linked internationally to high-profile institutions (OSA, CEU). As a public project, it will be a model for scholars (UNI and otherwise) who work with archival materials (specifically, photographs) and want to contextualize these materials and join the creative commons, sharing significant scholarship with the world.

FEATHERSTONE, RICHARD, ASSOCIATE PROFESSOR, SOCIOLOGY, ANTHROPOLOGY & CRIMINOLOGY, 8 YEARS OF SERVICE, SPRING SEMESTER

From the Halls of the Academy to the Streets of the City: Introducing Crime Analysis in a Medium-Sized County Sheriff's Office

For this semester PDA I plan to conduct crime analysis work with the Black Hawk County Sheriff's Office. I will use my academic and practical training to demonstrate how criminal analysis can reduce crime and improve disorder problems within the county. I will study how local law enforcement agents perceive and respond to the presence of a crime analysis program. I will also test whether crime analysis techniques can be used to accurately predict burglary. This project will benefit UNI in at least three ways: 1) It will improve and expand partnerships between local criminal justice agencies and university programs. 2) It will provide data sources and increase job opportunities for UNI students pursuing training in criminology and related fields. 3) It will promote positive public relations and academic exposure for UNI's new program in crime mapping and analysis.

HAWBAKER,⁵ BECKY, INSTRUCTOR, EDUCATION, 12 YEARS OF SERVICE, SPRING SEMESTER

Institutions of higher learning have an implicit need for faculty with terminal degrees. As Price Lab School is transformed into the RDDD school for the state and as UNI positions itself as a national leader in K-12 education, UNI needs faculty who understand the day-to-day realities of teaching but are also prepared to be active researchers who publish and disseminate their work widely. Completion of my Ph.D. at the University of Iowa will prepare me to contribute to the R&D mission of the lab school, to better develop UNI's Professional Development School, and to teach university courses that prepare our future teacher.

HITLAN, ROBERT, ASSOCIATE PROFESSOR PSYCHOLOGY, 8 YEARS OF SERVICE FALL SEMESTER

Toward a Better Understanding of the Psychobiological Responses to Social Exclusion across Caucasians and Hispanics

The current PDA application builds on recent research infrastructure within the department of psychology: a social and behavior psycho-neuro-endocrinology laboratory. This laboratory allows for the collection and analysis of saliva via salivary assay for the assessment of various biological substrates including testosterone and psychological stress response hormones (cortisol, alpha-amylase). Until recently, the research examining social exclusion has primarily been limited to obtaining self-report outcome measures which can be unreliable. Thus, one of the ultimate goals of the PDA project is to develop a psychobiological model of social exclusion to better understand how people respond to perceptions and actual experiences of being excluded by others. Using Social Identity and Social Preservation theories as theoretical foundations, I would like to write-up two manuscripts, based on existing data collected over the past 18 months, to examine psychobiological responses linked to social exclusion (e.g., including hormone fluctuations, psychological threat, perceived similarity, intergroup attitudes – both implicit and explicit). Second, research investigating

⁵ Denotes a terminal degree proposal.

various aspects of social exclusion among minority groups is severely lacking in the literature. As a result, I plan to utilize existing research collaborators at a predominately Hispanic institution, the University of Texas at El Paso (UTEP), in designing and implementing a series of research studies to assess coordinated psychobiological responses as the result of social exclusion among Hispanics. Due to the labor intensive nature of this type of research, I would need to travel to UTEP for several weeks during the PDA to train my collaborators on appropriate study protocols. The University will benefit by increased recognition, their willingness to support collaborations with traditionally minority institutions and potential for increased minority student interest in UNI.

JOHNSON, MARY, PROFESSOR, ART, 11 YEARS OF SERVICE, FALL SEMESTER

Developing Patinas for Copper-based Metals to be used in Fabricating a New Series of Brooches

As an artist and metalsmith, I have primarily fabricated jewelry and small sculpture from sterling silver. Wishing to explore the broad range of colors and surface treatments possible through the use of *patinas* (colored surface treatments) on copper alloys, I will expand my technical repertoire to include copper, brass, and nickel. The time provided by the Professional Development Assignment would be used to test a wide variety of patinas on these metals, and then fabricate a new series of a dozen large brooches (pins) featuring these surface treatments. In this series of brooches, my research will be combined with the narrative issues that are my particular hallmark in the creative arts. I will continue exhibiting these new and innovative works at the national and international level, which will reflect very well on the Department of Art at UNI. In addition, all of the research done into these patinas will be made available to the Metals/Jewelry and Sculpture students in the Department, disseminated through copies of my research findings, lectures and exhibits.

LI, JIAN, ASSOCIATE PROFESSOR, SOCIOLOGY, ANTHROPOLOGY & CRIMINOLOGY, 9 YEARS OF SERVICE, SPRING SEMESTER

Rural-to-Urban Migration and Its Major Socioeconomic Impacts: An Ethnographic Case Study in a Mountain Village in Rural Southwest China

Today, more than 200 million Chinese peasants have left their home villages for jobs in cities across China. In this project, I will examine the major socioeconomic impacts of such a massive rural-to-urban migration upon a farming community in rural Southwest China since the 1990s. Anchored in Guanlong Village in Sichuan, China, my study will scrutinize five aspects of the selected community: demography, economy, political organization, health, and quality of life, with an emphasis on how the emigration in recent decades has altered such aspects and what those changes mean to local people. The purpose of this research is to investigate: (1) how such an unprecedented population movement affects China's agricultural production, rural community, and rural people's livelihood; (2) how the rural people view and adapt to their rapidly-changing socioeconomic conditions; and (3) what impacts such a transformation has on the sustainability of China's overall economic development. This project will require seven months' residence in China. I will be living in Guanlong Village in Sichuan, China for approximately six months, conducting ethnographic fieldwork in the village. I will devote about one month to library research at Xiangnan University in Chenzhou, China. Dr. Li Jinghua, Director of the University Administrative Affairs of Xiangnan University, has agreed to provide institutional assistance for my research project in China. Results of this research will reach an international audience in both the U.S. and China, which will help raise UNI's national and international profile. While in China, I will give a university-level presentation on my research to faculty and students at Xiangnan University. Based on this project, I also plan to give several presentations to faculty and students at UNI. In addition, I will present my research results in several professional conferences, including the annual meetings of the American Anthropological Association and the Society for Applied Anthropology. Building upon the data from this project, I plan to write several journal articles, which I anticipate will be published in *Human Organization* and *Culture & Agriculture*, the flagship journals in applied anthropology. Also, I plan to write a monograph on Chinese peasant society based on the materials and insights from this research. Finally, doing ethnographic research for an extended period of time in China will increase my knowledge of

contemporary Chinese society and benefit my teaching, particularly in the Non-western Cultures, China, and CNS (Culture, Nature, and Society) classes in the Liberal Arts Core curriculum.

O'LOUGHLIN, JIM, ASSOCIATE PROFESSOR, ENGLISH LANGUAGE AND LITERATURE, 7 YEARS OF SERVICE, SPRING SEMESTER

The Cord: A Speculative Fiction Short Story Cycle

The Cord is a work of literary science fiction, or speculative fiction. It consists of a cycle of interrelated short stories that all take place within or on a space elevator that connects to a station orbiting the Earth. The concept of a space elevator has been a recurring theme in science fiction, and recent advances in nanotechnology suggest that the engineering requirements of such a project could be met in the near future. Though *The Cord* makes creative use of a technological development, like much speculative fiction, this work is not primarily about the mechanics of new technology. Rather it charts out an invented social history following the construction, launch and maturity of the space elevator project. Over the course of more than a century, different stories follow families and individuals facing the opportunities and conflicts such a project would create. For example, individual stories follow Micronesian immigrants whose home was lost to rising ocean levels looking for work constructing the space elevator, a devout Muslim engineer questioning aspects of his faith once living in space, a rebellious teenager whose whole life has been spent on the station, and an American scientist who has married into a family living on the station. One partial section from this collection, "Dead Zoned," has been published in the science fiction magazine, *Neo-Opis*. What I believe makes this project unique is its investment in history, both the invented history of the space elevator and the actual history that informs my envisioning of this future moment. Incidents in the collection draw upon a range of precedents, including the construction of the Transcontinental Railroad, the early history of Catholicism in America, hand injuries among early Jazz bass players, and recent developments in social networking. This project will benefit UNI through offering an intervention in a popular genre, and by allowing me to model for students how to write fiction that draws on a range of influences and approaches.

NOH, JIHWAN, ASSOCIATE PROFESSOR, MATHEMATICS, 6 YEARS OF SERVICE, FALL SEMESTER

Where do Prospective Secondary Mathematics Teachers gain the Mathematical Knowledge Needed for Teaching?: An International Collaboration

This proposed project is a part of a larger study looking at secondary mathematics teachers' mathematical knowledge needed for teaching and its relationship with characteristics and kinds of learning opportunities during their teacher preparation program in Korea and the US. The focus of the project during the assignment period is to study Korean pre-service secondary teachers and their teacher preparation programs. The mathematical content of the study is the rate of change in the domain of Algebra and Function. Three cohorts of approximately 300 Korean pre-service mathematics teachers from 10 universities will be selected for a mathematical task survey; one at the entry and one at the exit level of teacher preparation, and one as they enter/exit their mathematics methods course. A parallel study like this study will be conducted for US pre-service teachers in the semester that follows the assignment period. As UNI is putting much time and effort into reforming its teacher preparation program, a large scale quantitative study like this project and learning from approaches used in other educationally-high-performing country will inform UNI (as well as the field) on the characteristics of mathematics teacher education program that provide quality learning opportunities for students, a more empirical approach to studying the effectiveness of the teacher education program, and specific learning opportunities during coursework that may impact understanding of mathematics.

POLEKSIC, ALEKSANDAR, ASSOCIATE PROFESSOR, COMPUTER SCIENCE, 5 YEARS OF SERVICE, FALL SEMESTER

Novel Algorithms for Protein Structure Similarity Detection

Advances in modern drug discovery are driven strongly by the development of computational methods for comparing the three-dimensional structures of proteins. However, determining the proteins' shape similarity is a computationally challenging problem, due to an infinite number of ways to position two proteins in space. To find a reasonably accurate structural match in a timely manner, current state of art computational methods for detecting protein structure similarity examine only a small portion of the space of all possible proteins' spatial positions. Although the existing methods are fast, the solution they return is never guaranteed to be even close to an optimal solution. I propose to develop efficient and accurate algorithms for protein structure matching, capable of doing focused (as opposed to ad-hoc) search. More specifically, by building upon my recently published work on a theoretical solution to protein structure matching problem, I plan to develop computer programs capable of exploring the space of proteins' spatial orientations with a "fine-tooth comb" and generating a structural match of two proteins of any desired and upfront specified accuracy. This project will help promote UNI as one of the US centers for interdisciplinary scientific research.

SCHNABEL, JoANN, PROFESSOR, ART, 20 YEARS OF SERVICE, SPRING SEMESTER

Creation of Art for Public Installation

As a contemporary artist I have worked within this evolving framework of ceramics by exploring conceptual approaches in tandem with technical innovations. My recent work has taken me into the arena of public art projects, creating ceramic works of art that are on permanent public display. These large-scale projects are a culmination of years developing clay forms that are both responsive to my environment, a personal evolution of techniques and a challenging endeavor. I am applying for a Professional Development Assignment to create a public art project and further my artistic career. This project will benefit the University of Northern Iowa through national exposure of the artwork created and the artist's association with the University. This recognition also points out the high level of accomplishment by a UNI faculty member. As the only faculty teaching ceramics, my accomplishments directly serve as a role model, creating new opportunities, creative experiences and visual art career options. Having artwork commissioned and permanently installed would greatly increase the viewing audience bring higher visibility to the university. A plaque will accompany the artwork with my name, title and acknowledgement of support from the University of Northern Iowa making this project possible.

WALDRON, JENNIFER, ASSOCIATE PROFESSOR, HEALTH, PHYSICAL EDUCATION AND LEISURE SERVICES, 7 YEARS OF SERVICE, FALL SEMESTER

Predictors of Hazing, Negative Initiation, and Positive Initiation Rituals in Sports

Hazing, defined as humiliating, degrading, and abusive behaviors required of someone joining a group, in sport is an *open* secret. That is, many people know that these behaviors are occurring but few are discussing them. A psychosocial foundation helps to frame why athletes would engage in these behaviors. Specifically, engaging in hazing helps athletes solidify their athletic identity and gain the respect and acceptance of teammates. Yet, research has only started to examine the phenomena of hazing in sport. Recent, national data sets suggest that approximately 75% of college athletes and 50% of high school athletes have experienced hazing (Allan & Madden, 2008; Hoover, 1999; Hoover & Pollard, 2000; Madden & Allan, 2008). However, these data sets are only descriptive in nature and do not statistically examine predictors of athletic hazing, which is one of the purposes of the proposed study. Therefore, the current study, framed within the psychosocial context of the sport ethic and social-approval goal orientation (Waldron & Krane, 2005a; 2005b), will examine the influence of sex, sport type, level of competition (high school or college), athletic identity, and social approval/norm on the extent of and type of hazing, negative initiations, and positive initiations experienced by athletes. Specifically for the professional development

assignment, I intend to recruit participants, collect quantitative data, and analyze and interpret the data. High school and collegiate athletes will complete a survey instrument measuring the aforementioned variables. Three logistic regression analyses will be conducted to answer the research question. The results from the proposed study will shed light on who is at risk for engaging in aggressive and violent initiation experiences. From the results, it is expected that prevention programs can be created to minimize harmful and dangerous hazing practices and encourage positive initiation rituals. This work will contribute to the improvement of the University of Northern Iowa by allowing me to continue to develop knowledge, expertise, and evidence-based practice within the area of rituals, initiations, and hazing in sport. Specifically, conducting this proposed work is compatible with the UNI strategic plan, especially G1.Objective 1 and G2.Objective 1 (providing rigorous and relevant undergraduate and graduate education), because my research informs my teaching and vice versa. I often assign my published research as readings for class and use specific examples from my research when I teach sport psychology, sport sociology, research methods, and statistics. Finally, as a professor who is an active researcher, I can help students understand the importance of using evidence-based practice in their future careers as movement professionals.

WALTERS, JAMES C., PROFESSOR, EARTH SCIENCE, 35 YEARS OF SERVICE, FALL SEMESTER

Sorted Patterned Ground Phenomena of South Central Alaska

Sorted patterned ground forms are common features of the periglacial environment on the south side of the central Alaska Range. Beginning in 1982 and continuing through 1992 with brief visits in 1993, 1996-2003, and 2008, I have been monitoring the degree of activity of sorted circles at eight different sites. Although these studies have increased our knowledge of the processes and rates of formation of patterned ground, there still remains no generally accepted model that attempts to explain how these processes act together over time to produce the observed features. The proposed investigation would continue the monitoring begun in earlier years, but allow for observations to be made in the fall, a time during which the patterns are especially active due to frost-action processes. This investigation will consist of field observations and measurements along with laboratory study of sediments for particle sizes and soil engineering characteristics and determination of clast movement rates from repeat photography. Based on field and lab data a model of sorted patterned ground formation will be developed. A study of this nature, with the years of observations and data I have, should provide me with national and international recognition in the field of periglacial geomorphology and should improve my ability to obtain funding to continue with projects of this nature and/or to develop new projects in the field. This project would also bring recognition to UNI since I will be consulting with many researchers from groups in Alaska such as the U.S. Army Cold Regions Research and Engineering Laboratory, the US Geological Survey, the Alaska Division of Geological and Geophysical Surveys, and the University of Alaska at Fairbanks. In addition, anticipated presentations at professional society meetings and publications in national and international journals will also bring recognition to UNI.

ZAN, BETTY, ASSOCIATE PROFESSOR, CURRICULUM & INSTRUCTION, 16 YEARS, SPRING SEMESTER

Web-Based Resources for Early Science and Engineering Education

The purpose of the proposed project is to identify, gather, and make available on the web video exemplars of high-quality early childhood practices in the fields of science and engineering that will be used in outreach and professional development efforts. These efforts will target early childhood teachers (pre-k through 2nd grade) and child care providers, both degreed and nondegreed, at both the preservice and inservice levels. This work is critical to supporting early childhood educators who play a key role in preparing, inspiring, and nurturing young children to enter the science, technology, engineering, and mathematics (STEM) pipeline and become the STEM workforce leaders of the future. Enhancing the ability of early childhood educators to engage children at this important stage in children's development will assist them in shaping the next generation of STEM leaders. This

project addresses Goal 3 from UNI's 2010-2015 Strategic Plan to "Lead the state and nation in pre K-12 education" In addition to enhancing UNI's reputation nationally, the products developed as a result of this project will be used in UNI's undergraduate teacher preparation program, contributing to the preparation of UNI early childhood education graduates and their ability to teach early childhood science and engineering.

2009-2010 PROFESSIONAL DEVELOPMENT ASSIGNMENT REPORTS

UNIVERSITY OF IOWA (* DENOTES FACULTY SCHOLAR, † DENOTES GLOBAL SCHOLAR)

Reports are presented from 87 faculty members on developmental awards during 2009-10. Each faculty member was on award with pay for one semester unless otherwise indicated. The actual (estimated) cost for the program for 2009-10 was \$318,487 (\$194,300 in estimated faculty replacement costs incurred by departments and colleges, plus \$124,187 for research-related expenses of the Faculty and Global Scholars incurred by the Provost's Office).

Of the 87 faculty members with assignments in 2009-10, 38 are full professors and 49 are associate professors, 41 took the award in the fall semester, 35 in the spring semester, and 11 took a full year or spread the award over two semesters. There were 21 Faculty Scholars and 3 Global Scholars.

The following faculty member(s) deferred developmental assignments awarded for academic year 2009-10 and will take them at a later time: Patricia Jo Action; R. Balakrishnan; and Leonard Sandler.

The following faculty member(s) deferred awards from previous years and took developmental assignments in academic year 2009-10: Mary Adamek; Kathryn Chaloner; Ronald M. Cohen; Jian Huang; John Logsdon; Yasar Onel; Philip Round; and Leslie A. Schwalm.

ADAMEK, MARY, CLINICAL PROFESSOR, MUSIC, SPRING SEMESTER-DEFERRED FROM SPRING 09

Over 6 million students with disabilities are educated each year in US schools. Many of these students participate in some sort of music education or music therapy services. At this time, there is only one textbook to address the needs of music professionals in the schools and that text was in need of updating. This PDA was undertaken to update Music in Special Education (2005), by Adamek and Darrow, published by the American Music Therapy Association. The new second edition of Music in Special Education will be published in September 2010. The second edition includes updated information from the original edition as well as new chapters on music therapy research in schools, including students with disabilities in beginning band, and issues related to the families of students with disabilities. This essential text will prepare effective future music educators and music therapists for working in today's schools.

APRILE, THOMAS R., ASSOCIATE PROFESSOR, ART & ART HISTORY, FALL SEMESTER

Professor Aprile made six sculptures in wood and poured styrene for a project called the Meticulous Placement of What Remains. He made most of the work in Iowa as the two residency fellowships were denied. The sculpture will be exhibited in two one person shows at Sweet Briar College in Virginia and Kirkwood Community College in Iowa in 2011. Aprile's project was inspired by his drawings of storage-like structures piled high with discarded furniture suspended on rectangular shafts that empty their contents on to a field. He built these structures as models for larger projects, but also sculptures in their own right. His new sculpture will enhance his national and international profile and recruit students to study sculpture at the University of Iowa. He continues to demonstrate the diverse ways that an artist expresses his personal/universal vision by creating new forms and possibilities that will benefit his students, the university and the state of Iowa.

BARBOSA, MARIA JOSE, ASSOCIATE PROFESSOR, SPANISH & PORTUGUESE, FALL SEMESTER

Professor Barbosa worked on "Literature at the Intersections of Language, Culture, and History," an interdisciplinary book-project that addresses the role language plays in empowering, as well as undermining, human beings' capability to adapt and thrive in specific cultural environments and uncertain historical periods (she focuses on migration and immigration). In addition to conducting library research, she drafted the Introduction and Chapter One. She used the first weeks of this research period to revise the final version of a book on Afro-Brazilian poetry, *Recitação da Passagem*. She had finished this project in the summer and needed to implement required revisions to have it published by December 2009.

***BOEHMKE, FREDERICK J., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, SPRING SEMESTER**

Professor Boehmke studied how organized interests influenced bureaucratic policy outputs. His research focused on the interaction between the legislative and administrative branches and how organized interests chose their lobbying targets. He gathered and analyzed 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, which allowed 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.

BOGCESS, THOMAS F. JR, PROFESSOR, PHYSICS & ASTRONOMY, FULL YEAR

Professor Boggess continued work on his Army contract aimed at developing large arrays of infrared light-emitting diodes for thermal scene projectors. He also prepared a proposal to broaden the scope of this program by developing arrays that emit at two independently controllable wavelengths. In addition, he completed the installation of a new ultrafast laser system and used this system to measure the fundamental electronic properties of novel nanostructured semiconductors. These experiments represent a major milestone, as they are the first ultrafast optical experiments in his laboratories since they were devastated by the flood of 2008. Results from this research will enrich Professor Boggess' teaching of undergraduate and graduate courses in solid-state and optical physics. Other specific outcomes include two publications in major scientific journals and participation in a Department of Defense Multidisciplinary University Research Initiative proposal.

BOOS, FLORENCE, PROFESSOR, ENGLISH, SPRING SEMESTER

During her assignment last spring, Florence Boos completed a four-hundred-page draft of a book manuscript, *Art, Ethics and History: The Early Writings of William Morris*, the first extended study of the early development of a major Victorian poet, artist and social activist. She also edited five of Morris's partly or entirely unpublished essays, revised three articles scheduled for publication, and wrote four new articles devoted to various aspects of Morris's life and work. During a three-week research trip to England in March she also transcribed unpublished documents for the Morris Online Edition, and in April she hosted the annual convention of the Midwest Victorian Studies Association. In May she gave an invited talk to the Congress of the Humanities and Social Sciences at Concordia University in Montreal, and in June she assembled a thirty-two page semi-annual newsletter for the William Morris Society of the United States.

CARRILLO ROWE, AIMEE M., ASSOCIATE PROFESSOR, RHETORIC, SPRING SEMESTER

Professor Carrillo Rowe revised a current book manuscript in preparation for publication and conducted initial research, outlining, and reading for a new book project. The current book, *Answer the Call: Suspended Mobilities in Indian Call Centers* examines how call center agents virtually migrate across the globe. The new book, *Pasando Tiempo: Queer Times and Color Lines in Xicana Performance*, traces contemporary performance to colonial histories.

CHALONER, KATHRYN, PROFESSOR, BIostatistics, SPRING SEMESTER-DEFERRED FROM FALL 08

Professor Chaloner took a Professional Development Assignment in Spring Semester 2010 for research, course development, and proposal preparation. Research included development of adaptive dose seeking designs for clinical studies: in these designs, as information accrues the dose is changed. These designs therefore respond to ethical concerns about using all information available as soon as possible to avoid harm, but also present statistical challenges for analysis. Other research included developing statistical methods for analysis of data related to research in microbiology and infectious diseases. Several publications resulted from her research and a manuscript has been submitted. She also prepared a proposal for renewal of her predoctoral training grant in statistics for problems in microbiology, audited a course in microbiology, revised the course "Statistics in Microbiology", developed new material for the course "Statistical Methods in Clinical Trials" and advised Ph.D. students.

CHIBNIK, MICHAEL S., PROFESSOR, ANTHROPOLOGY, HALF TIME FOR ONE YEAR

Professor Chibnik wrote a book that compares the ways in which anthropologists and scholars in other disciplines – especially economics – analyze decision-making. *Anthropology, Economics, and Choice*, will be published by the University of Texas Press in fall 2011. The potential audience for the book includes professional anthropologists, sociologists, cultural geographers, economists, and cognitive psychologists, and students in upper-level undergraduate and graduate courses. The findings described in the book will be incorporated into Professor Chibnik's classes and presented at research conferences at the University of Iowa and elsewhere.

CHOO, CHUNGHI, PROFESSOR, ART & ART HISTORY, SPRING SEMESTER

Professor Chunghi Choo used Silent Metal Forming techniques to produce a body of creative works in hollowware, sculpture, jewelry, flatware, and other art objects. Silent Metal Forming is a technique that uses one single, unbroken sheet of metal, cut and shaped into three dimensional objects by bending, rolling and folding—mostly by hand—with little to no use of tools or soldering and no noise pollution. This simple metalsmithing method was also aided by cutting edge technologies and allowed Professor Choo and her students to produce, one of a kind designs for multiples. Choo explored using different metals and will develop Silent Metal Forming using other materials to create fresh art forms for exhibitions, publications and photos of her work will be included in the collection of the Smithsonian Institute of American Art archives. She will teach her students about the new discoveries she made on her professional development assignment and inspire them to create expressive personal art work.

***CLUBB, DARE, ASSOCIATE PROFESSOR, THEATRE ARTS, FALL SEMESTER**

Professor Clubb directed a staged reading of Heinrich Ibsen's *John Gabriel Borkman* with first-tier professional actors at the Lang/Bocanegra Theater in New York City, collaborated with world-renown director Robert Wilson on a workshop of his experimental play *Light Leaves* at the Watermill Institute on Long Island, and co-directed a production of August Strindberg's *A Dream Play* at Jawaharlal Nehru University in New Delhi, India. While in residence as a fellow at the Jawaharlal Nehru Institute for Advanced Studies, Professor Clubb researched Indian theatrical forms including the Ram Lila, Therukoothu, Yakshagana, Theyyam, Pandav Lila, and Kathakali in north and south India,

explored Indian works of dramatic theory with artists and scholars in New Delhi and Mysore, and drafted a new theater piece growing out of his research. Work conducted during the grant period will enrich ten courses Professor Clubb teaches at the University of Iowa

COHEN, RONALD M, ASSOCIATE PROFESSOR, ART & ART HISTORY, HALF TIME FOR ONE YEAR-DEFERRED FROM SPRING 08

Painting from Classical Ruins Ronald Cohen's professional development award enabled him to spend a significant period of study, painting and drawing in Italy, Greece, and France. Cohen painted and sketched directly from classical sites, focusing special attention on visual setting, palette and light. The outcome of his research is a body of landscape, still life, and allegorical paintings, which were exhibited at the SACI institute in Florence Italy. He will bring the knowledge gained from his research to his classroom teaching at the University of Iowa this year.

CONSTANTINESCU, SERBAN G., ASSOCIATE PROFESSOR, CIVIL-ENVIRONMENTAL ENGINEERING, SPRING SEMESTER

Professor Constantinescu carried out research related to flow past river training structures which are key elements in water resources management. He collaborated with researchers at the host institution (VAW Institute, ETH Zurich) on using a joint approach based on numerical simulations and experimental techniques to study the physics of local scour processes around hydraulic structures. During the same time Dr. Constantinescu wrote and submitted several journal papers and continued his collaboration with other groups working on this topic. He also wrote several chapters for a book on the use of eddy resolving techniques in computational hydraulics. The second part is devoted to applications and will include several examples from Dr. Constantinescu's papers dealing with eddy resolving simulations of flow past hydraulic structures. The material developed for a course Dr. Constantinescu taught at VAW on the same topic was extended toward a new graduate level course at the University of Iowa.

CONYBEARE, JOHN A, PROFESSOR, POLITICAL SCIENCE, FALL SEMESTER

Professor Conybeare carried out two research projects on multinational corporations and the politics of foreign direct investment. One was an investigation into why countries interfere with inflows of foreign direct investment that take the form of mergers and acquisitions. The other was a study of the factors that cause international corporate alliances to be successfully negotiated and brought to completion. Both of these projects have been accepted for publication in referred professional journals. Material from both studies is being incorporated into classroom teaching this semester (Spring 2010).

COOHEY, CAROL A., ASSOCIATE PROFESSOR, SOCIAL WORK, SPRING SEMESTER

Professor Coohy examined the causes and consequences of parental supervisory neglect and how child protective services responded to it, using state of Iowa and national data. Inadequate supervision consists of leaving children and adolescents home alone, not watching them closely enough, and leaving them with inadequate substitute caregivers, such as too young siblings. It comprises the single largest group of maltreated children in the state of Iowa. This research is important because inadequate supervision is a common cause of child fatalities and because children who are inadequately supervised are more likely than adequately supervised children to have problems in school, use substances and commit delinquent acts. The findings from this research can be used to further refine child maltreatment risk assessment tools and prepare social work students to work with Iowa's vulnerable children and their families.

+COX, JEFFREY L, PROFESSOR, HISTORY, SPRING SEMESTER

Professor Jeffrey Cox devoted the spring semester of 2010 to research for a book on the contrast between Europe and America entitled *European Religion/American Religion: Why the Difference?* As the European nations and the United States have followed different paths in world affairs recently, many Europeans have looked on in bemusement at the importance of popular religion in American politics, and in particular at the willingness of American political leaders to resort to religious rhetoric that Europeans find either quaint or menacing. Professor Cox's work in the British Library in London concerned (1) the timing of the secular intellectual challenge to religion that emerged in the eighteenth century, (2) the compulsory Christian worship services that were provided in British Schools after the Education Act of 1944, and (3) surveys of public opinion on religion in the 1940s. He is now at work comparing public opinion and religious education in Europe with the United States.

CUNNING, DAVID, ASSOCIATE PROFESSOR, PHILOSOPHY, HALF TIME FOR ONE YEAR

Professor Cunning conducted research on a project entitled "Eight Interpretive Puzzles in the Philosophy of Spinoza." The research topics included free will, individualism, explanation in the sciences, the relationship between mind and brain, happiness, and stress management. He read the relevant literature and wrote a new 40-page paper that is currently under review, along with two new drafts. In other areas of early modern philosophy, he completed a book and three additional papers, and he submitted a prospectus to edit a volume of papers, *The Cambridge Companion to Descartes' Meditations*. He is planning a conference at the University of Iowa where all of the contributors will share their work, and members of the public will be welcome. Finally, Cunning's research on Spinoza resulted in an outline for a first-year seminar. The published work and the conference will help to contribute to the outstanding reputation of the University of Iowa, and the new seminar will benefit students.

+DAVIES, WILLIAM D, PROFESSOR, LINGUISTICS, SPRING SEMESTER

Professor Davies traveled to Indonesia and videotaped storytellers performing folk tales and historical narratives of the Madurese, the third largest ethnic group in Indonesia, a country of increasing importance to the U.S. in the current global political environment. Native speaker collaborators transcribed the videos and Davies translated the texts into English and did linguistic analysis. The 20 videos plus the associated texts, which will be presented in Madurese, English, Indonesian, and a linguistically-rich transcription designed for presenting language data, will comprise the initial entries in a multimedia, multilingual collection, to be housed in the SUI Iowa Digital Library. The collection, freely accessible to all interested people via the internet, will make available for the first time primary cultural and linguistic information not widely available about the Madurese, a group understudied by scholars.

***DURHAM, MEENAKSHI G., ASSOCIATE PROFESSOR, JOURNALISM & MASS COMMUNICATION, FALL SEMESTER**

To investigate women's relationships with their bodies in a media-saturated environment, Dr. Durham began developing interview questions for women she plans to interview in conjunction with this project, based on the scholarly literature in this area. She has made initial contacts with prospective interviewees, and will proceed with the interviews when she has received IRB approval for this research (which is pending). She is also working on a book proposal to submit to a scholarly press in 2010. During the semester, she submitted an article relating to this work to the refereed journal *Popular Communication* and a chapter for an edited book, *Audience Studies* (ed. R. Parameswaran, to be published by Blackwell in 2010). She also gave several scholarly talks on her previous work on girls' sexuality and the media at various universities, notably the Motorola Lecture on Gender and the Media at the University of Michigan.

EHRSTINE, GLENN, ASSOCIATE PROFESSOR, GERMAN, SPRING SEMESTER

Prof. Ehrstine conducted research on late medieval German Passion and Corpus Christi plays, examining how contemporary devotional practices for the commemoration of Christ's passion shaped audience reception. He drafted three chapters of his related book, *Staging Salvation: Devotional Spectatorship in Early German Theater*, completed one essay for publication, and gave scholarly papers on his findings at the Freie Universität Berlin and the Universität Gießen. He also completed a translation of the first Protestant Easter Play (1542), whose aborted performance produced statements by Martin Luther and other prominent Protestant theologians on the role of theater in the new faith. One month of the assignment period was spent at the Universität Tübingen with funding from the German Academic Exchange Service (DAAD). The research will benefit his teaching on German theater, and new materials collected in Tübingen will improve his undergraduate language and culture courses.

ENLOE, JAMES G, ASSOCIATE PROFESSOR, ANTHROPOLOGY, SPRING SEMESTER

Professor Enloe analyzed animal bones at the Grotte du Bison, Arcy-sur-Cure, France, an archaeological cave site occupied from 60,000 to 30,000 years ago. At the end of this period, when the last Neanderthals overlapped in time with modern humans, their technology showed great innovation, a transition from simple Middle Paleolithic flake tools to more sophisticated Upper Paleolithic blade tools. Analyses of spatial distribution of animal bones indicate exclusive control of the cave for the first time, and a concentration on a single species, reindeer, in contrast to a more diverse fauna hunted by other carnivores in earlier occupation levels of the cave. Professor Enloe also made substantial progress on publications for the sites of Pincevent and Verberie, occupied by Upper Paleolithic modern human hunter-gatherers 12,000 years ago. These projects enhance teaching undergraduate and graduate courses, involve students in research, and raise the international profile of the university.

+ESTIN, ANN L, PROFESSOR, LAW, FALL SEMESTER

Professor Estin completed the research and writing for six chapters of a treatise on international family law. These chapters address (1) transnational family litigation; (2) marriage, partnership and cohabitation law; (3) divorce and separation; (4) financial aspects of divorce and separation; (5) parental rights and responsibilities; and (6) international child abduction. Her treatise, which will also include chapters on child support obligations and international adoption, is intended primarily as a handbook for judges and lawyers handling cases that raise these complex international issues. In addition to working on the book manuscript, she developed a new blog to collect and share resources on international family law.

***FILIOS, DENISE K., ASSOCIATE PROFESSOR, SPANISH & PORTUGUESE, SPRING SEMESTER**

In spring 2010, Professor Denise Filios continued work on a book entitled *Living History: The Muslim Conquest of Spain in Spanish and Moroccan Foundational Narratives*. This book examines representations of the Muslim conquest (711 C.E.) in Spain and Morocco in the Middle Ages and in the present, focusing on how these accounts reflect the writers' attempt to make political, ideological, and religious use of the conquest in order to negotiate relationships between (and within) Spain and Morocco. She conducted research in libraries in London and Madrid, gathering primary and secondary materials, and drafted two chapters examining variant accounts of the events of 711 in early Islamic chronicles. She also developed new course materials for her undergraduate teaching. In Spring 2011 she will continue the project, focusing on the later development of stories of the conquest in Iberian and Egyptian historiography.

FORSYTHE, ERIC, PROFESSOR, THEATRE ARTS, FALL SEMESTER

Professor Forsythe completed his collection of new translation/adaptations of four older French comedies for contemporary audiences. He distributed the plays to professional and academic theatres throughout the US, as well as to Smith & Kraus, the noted publisher of dramatic works, making these great plays more accessible for American audiences. He acted the lead in a new play about poet Wallace Stevens, *Man with Blue Guitar*, developed at the famed Asolo Theatre in Sarasota, FL. His performance and input into the development of the script serve to enhance appreciation for one of America's greatest poets. Forsythe also made some twenty professional voice recordings of radio and TV commercials; DVD voice-overs; and testing for children and adults with reading and other learning disabilities in Minnesota, Illinois and New York. The testing work is crucial in helping to "mainstream" people with developmental disabilities throughout the US.

FREEMAN, JOHN H., PROFESSOR, PSYCHOLOGY, FALL SEMESTER

Professor Freeman conducted experiments to examine how developmental changes in brain physiology underlie the development of memory. The activity of populations of neurons was recorded within the hippocampus, a brain region known to be essential for memory in humans and other species, in developing rats as they were trained in a learning task. Developmental changes in neuronal activity during learning were substantial and corresponded to the development of memory. The findings of this study provided new insights into the mechanisms underlying memory development. Graduate and undergraduate students participated in this project and thereby received valuable research training. The results of this project added to the content of several of Professor Freeman's courses.

***FRIESTAD, GREGORY K., ASSOCIATE PROFESSOR, CHEMISTRY, FALL SEMESTER**

Dr. Gregory Friestad's research is in the area of new synthetic methods for application in drug discovery and synthesis of natural products. The Assignment enabled enhanced mentoring of graduate students in starting three new projects in asymmetric synthesis of biologically active oxygen-containing compounds. In Year 2 this new research effort progressed toward synthesis of the C27-C40 fragment of tetrafibricin (potential cardiovascular drug). Silylative ring-opening of enol ester epoxides, a new method for preparation of alpha-silyloxyaldehydes was achieved, with potential for enhancing drug discovery and development. Dr. Friestad wrote three invited book chapters, which will go to press in 2010. He also served as Chair of the 44th Annual Midwest Regional Meeting of the American Chemical Society, hosting over 500 technical presentations and over 800 attendees in Iowa City.

GENG, MAXWELL L., PROFESSOR, CHEMISTRY, FALL SEMESTER

Under the support of this PDA, Professor Geng studied the spectroscopic signatures of cells and tissue for cancer diagnosis and probed molecular transport in nanopores. He developed two-dimensional correlation spectroscopy to resolve signatures of tissue based on correlation with chemical separations. The wide-ranging applications of nanoporous materials depend on a fundamental understanding of the molecular transport inside the nanopores. He is exploring the surface structure of nanopores with Raman spectroscopy, to probe the transport processes that control chemical and biomedical applications of these nanostructures. Professor Geng has incorporated the research results into lectures in Analytical Chemistry II (4:112) and in future lectures of Spectroscopy (4:208). The incorporation of the research results into course instructions at the University of Iowa will help educate our students into the most knowledgeable and technologically prepared citizens.

***GIBSON, CRAIG A., ASSOCIATE PROFESSOR, CLASSICS, SPRING SEMESTER**

Professor Gibson conducted research leading to two book chapters on late-ancient Greek education. One discusses how Libanius and other rhetoricians developed composition exercises to encourage students to pursue higher education by emphasizing its rewards and dissuading them from bad habits. This study explains one way in which the next generation worked to attain the status of *pepaideumenoi* ("fully educated men"). The second chapter discusses how the rhetorical curriculum asked students to analyze brief mythical narratives and then argue that they were true or false. This study helps explain how educated pagans and Christians reconciled the mythical traditions learned in childhood with the enlightened philosophical and religious beliefs of adulthood. This research will improve his teaching of later Greek literature and Classical mythology.

***GLASS, LOREN D., ASSOCIATE PROFESSOR, ENGLISH, FALL SEMESTER**

Professor Glass used his Fall 2009 Faculty Scholar Award to conduct research at the Grove Press Collection at Syracuse University and conducted interviews in New York City with former Grove Press president Barney Rosset, as well as his managing editor, Fred Jordan, and his secretary, Judith Schmidt. He was also able to present portions of his project on examining the relationship between modernism and obscenity in the 20th century US at a POROI seminar at the University of Iowa and at a meeting of the Post-45 Collective at the University of Missouri. He also submitted an article based on one of his chapters to PMLA. Response to his project has been unanimously positive in these venues.

GLOER, JAMES B., PROFESSOR, CHEMISTRY, FALL SEMESTER

Professor Gloer's research program involves studies of targeted types of fungi as sources of natural products that may be useful in the development of new pharmaceuticals and/or agrochemicals. The main purpose of the Assignment was to provide time needed to generate applications for renewed/continued NSF and NIH funding for this research, and to work on relevant publications. Activities during this period included publication of three papers, preparation efforts on three other manuscripts, and continued supervision of eight graduate students. A proposal for a 3-year renewal of his NSF grant was prepared and submitted, while preparation of a renewal proposal for his NIH grant was initiated. Other activities included service on an NIH review panel and a 10-day trip to give invited presentations at symposia in Korea. All of these activities directly or indirectly benefit the applicant, the students, the Department, the College, and the University

***GOBAT, MICHEL, ASSOCIATE PROFESSOR, HISTORY, SPRING SEMESTER**

Professor Gobat used his Spring 2010 Faculty Scholar Award to make significant progress on a book project that traces the rise and fall of the United States' first overseas empire. This empire was built in Nicaragua during the 1850s by William Walker and his band of nearly 10,000 U.S. colonists. Gobat wrote a book chapter that explores how the Walker episode pushed Latin American states to create the largest anti-U.S. alliance in the continent's history. He also wrote a paper on the racialized origins of the idea of "Latin America;" he presented this paper at the Central American History Congress held in Nicaragua in July 2010. Finally, in Spring 2010 Gobat undertook research trips to Spain, Costa Rica, and France in order to collect archival materials. This material is not only for the book but will also be incorporated into his undergraduate lecture course on U.S.-Latin American relations, two new undergraduate courses, and a projected document reader for use in college courses.

GREENOUGH, PAUL R, PROFESSOR, HISTORY, SPRING SEMESTER

Dr. Paul Greenough spent his PDA period in archives in Washington DC and Baltimore MD researching US government epidemic control programs from 1951 to 1985. Specifically, he reconstructed the role of field or investigative epidemiologists from the US Centers for Disease Control, who helped to design and implement global campaigns against smallpox, polio and malaria. He spoke about his project at three conferences and completed two essays on the topic; the essays when combined form a chapter for a manuscript, "Medical Detectives from Atlanta: The Epidemic Intelligence Service of the US Centers for Disease Control, 1951-1985." This research will also be incorporated into two undergraduate courses, "The History of Public Health" and "The History of Global Health." Dr. Greenough attended two other conferences, and he completed an environmental history essay on the dispersion of a common crow between India, and Africa.

HAMILTON, DAVID B., PROFESSOR, ENGLISH, FALL SEMESTER

Professor Hamilton spent the fall semester on three projects. 1) Reading primary and secondary texts for his course in Modernist Poetry (8:240) that he is now, in the spring semester, teaching. 2) Completing a book of poems that has since been submitted to one potential publisher. 3) Working on "Another River," the featured project of his PDA proposal. This work remains incomplete since, of the three projects noted here, it is the most wide-ranging and difficult.

HAVENS, TIMOTHY J., ASSOCIATE PROFESSOR, COMMUNICATION STUDIES, HALF TIME FOR ONE YEAR

The primary product of Professor Havens leave was a scholarly book that provided the first and only investigation of African American television trade. The main argument of the book was that, as international syndication markets have become central to funding domestic production, both the diversity of programs featuring African Americans and the diversity of their uses abroad have shrunk. Professor Havens spent several weeks in Los Angeles researching at the Warner Bros. archives and interviewing television distributors. This book is under contract with New York University Press. This research will benefit both graduate and undergraduate classes, including Media Industries (enrollment 100), African Americans and Television (enrollment 15), Race and Media (graduate-level), and Critical Television Studies (graduate level)

***HOCHSTRASSER, JULIE B., ASSOCIATE PROFESSOR, ART & ART HISTORY, FALL SEMESTER**

Contemporary globalization has focused recent scholarly attention on processes of cultural interaction that actually began long ago. In the seventeenth century, trade drove the Dutch to every continent on the globe, and the visual arts generated at both sides of these many exchanges are of high interest for the study of such early modern cultural interactions; yet traditional specializations have prevented scholars from approaching this material as interactively as the history suggests. With her faculty Scholar Award, Professor Hochstrasser has been exploring this art from both sides of these contacts, to reframe its study with a less Eurocentric perspective and forge new ways of thinking about global visual culture from the early modern period to today. She has published several articles in this period and has completed work on a major book.

HUANG, JIAN, PROFESSOR, STATISTICS & ACTUARIAL SCIENCE, FULL YEAR-DEFERRED FROM FALL 08

Professor Huang spent about 50% of his time working on three projects/papers initiated during his Professional Development Award year and participating in writing an NIH R01 grant with his collaborators at Yale University. He spent the other 50% of his time revising seven manuscripts already in progress. These manuscripts have now been published or accepted for publication.

JOHNSON, DOROTHY, PROFESSOR, ART & ART HISTORY, SPRING SEMESTER

In the spring semester of 2010, Professor Johnson conducted research in libraries, archives, museums, medical institutes, and private collections in Paris in order to reconstruct the intersections of art with the natural sciences including biology, medicine and psychiatry in the late 18th and early 19th-centuries. She uncovered a great deal of new material that demonstrated the extent to which French artists collaborated with colleagues in the natural sciences. She presented aspects of this research at a symposium held at the Institut Historique Allemand in Paris. New material was incorporated into a book forthcoming in spring, 2011 with the University of North Carolina Press. She is using this new research in two current courses and in courses planned for spring and fall, 2011.

JOHNSON, NORMAN L, PROFESSOR, MATHEMATICS, FALL SEMESTER

Professor Johnson has been working on a four-volume set of texts on finite geometry. The first text settled a problem that had been open for thirty-five years, which completely describes the “nets” that are covered by affine subplanes. The second and third volumes deal with a type of affine plane called a “translation plane,” providing a foundation text and a handbook of all known models. Each translation plane corresponds to a “spread of a vector space”, which is a set of “lines” as subspaces that form an exact cover of the points. A “parallelism” is a set of spreads that form an exact cover of the possible subspace-lines. The fourth and final volume of this series was completed during the award period and is a complete analysis of the known parallelisms with the accompanying theory. This text “Combinatorics of Spreads and Parallelisms,” will be the only volume of its kind and provides a variety of new directions for research. In particular, seventy open problems are included.

KALDJIAN, LAURIS C., ASSOCIATE PROFESSOR, INTERNAL MEDICINE, OTHER

In his book-length manuscript project, Dr. Kaldjian has analyzed ancient and modern sources to develop a framework of practical wisdom in medicine that integrates medical ethics, goals of care, conscientious practice, and professional obligations to society. His work was also supported by a grant from the John Templeton Foundation through the University of Chicago’s *Defining Wisdom* Project (2008-10). He has signed a book contract with *Cambridge University Press* and published an article (“Teaching Practical Wisdom in Medicine Through Clinical Judgment, Goals of Care, and Ethical Reasoning”, *Journal of Medical Ethics* 2010;36:558-562). His work has provided the rationale for a new Ethics & Professionalism Seminar (*Patient, Physician, and Society*), expected to start in July, 2011, to help fourth-year medical students at the University of Iowa engage the complexity of values arising from the moral commitments and interests of patients, medical professionals, institutions, and society.

KERNS, ROBERT J, ASSOCIATE PROFESSOR, PHARMACY, FALL SEMESTER

Professor Kerns focused his effort on graduate student training & advancing collaborative research studies and advancing research funding with researchers at the University of Iowa, University of Minnesota, and University of Medicine & Dentistry of New Jersey. This effort included research planning meetings with current and new collaborators toward obtaining preliminary data for new research directions, writing new grant applications, and preparing research manuscripts. Research projects were advance in areas of the design, synthesis and testing of new antibiotic derivatives against drug-resistant Staph infections, drug-resistant Tuberculosis and drug-resistant Leishmania species (parasitic threat to US civilian and military personnel traveling/deployed in tropical climates). Two new collaborations were also initiated in the area of anti-oxidants in diabetes and visual impairment. Activities also provided for updating and enhancement of teaching and lecture materials.

KHANDELWAL, MEENA R, ASSOCIATE PROFESSOR, ANTHROPOLOGY, FALL SEMESTER

Associate Professor Khandelwal revised and submitted two papers during Fall semester. She also continued researching women's experiences of emerging sexual liberalism and romantic courtship in urban India. Finally, Professor Khandelwal began work on a new interdisciplinary project that investigates the rapidly increasing flow of charitable funds from Indian communities in the U.S. to development organizations in India. She read current literature on philanthropy, communicated with two collaborators, wrote a grant proposal, and prepared to attend a January conference on the topic in India. The knowledge gained from these activities furthers her research on gender in India and on Indian diaspora and strengthens her ability to teach on both topics.

***KOHEN, AMNON, ASSOCIATE PROFESSOR, CHEMISTRY, SPRING SEMESTER**

Bioterrorism takes advantage of the multi-drug-resistance developed by most pathogens when exposed to antibiotics. Professor Kohen has applied his expertise in DNA bio-synthesis and Molecular-Enzymology to study the mechanism of a new class of antibiotic drugs targets. During the Spring of 2010 he discovered that mechanism of the biosynthesis of one of the DNA bases (thymine) in various NIH priority pathogens, is substantially different from that in humans. After published several critical findings in the journal Nature last year, Prof. Kohen continues to publish new developments in international journals. Following the outcome of the studies conducted through the Scholars Award period Kohen's team will apply this knowledge to the design and synthesis of intermediates and potential antibiotic drugs.

LAI, BRIAN H., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, SPRING SEMESTER

What explains the type of commitments within an international military alliance? Professor Lai examines this question by looking at variation in commitments and institutions across alliances, arguing that the choice of commitment is a conscious effort to address two competing problems: being drawn into conflicts and credibly demonstrating commitment to defend an ally. This theory was tested on the types of commitments and institutions across all alliances since the 19th century. Archival research on major American alliances was also conducted. Two journal manuscripts and part of a book manuscript were completed during the award period. This research will bring visibility to the University through its scholarly contribution and its incorporation into the classroom, including Professor Lai's classes on American foreign policy. This will provide students with access to cutting edge research in international relations.

LANDSMAN, MIRIAM J., ASSOCIATE PROFESSOR, SOCIAL WORK, HALF TIME FOR ONE YEAR

Professor Landsman extended her program of research on the child welfare workforce and on family-centered child welfare services. She examined the critical issue of staff retention in the Iowa Department of Human Services, using longitudinal data gathered through a five-year federal grant. She conducted a study of leadership training for child welfare supervisors through the National Child Welfare Workforce Institute. Professor Landsman also received two new significant federal grants: a five-year, \$4,750,000 award to implement a National Resource Center for In-Home Services, and an experimental study to test a model of strengthening family connections for children placed in foster care. These activities further promote Professor Landsman's research agenda and her teaching in the School of Social Work's child welfare specialization.

LEVINE, MARK A., ASSOCIATE PROFESSOR, CREATIVE WRITING, SPRING SEMESTER

Mark Levine used the time afforded by his PDA to make significant progress towards a new book of poems. Levine's new poems explore elemental boundary states along which the traditions of lyric poetry constitute itself: human and animal, verbal and non-verbal, rational and impulsive, growth and decay. The grant has enhanced not only Levine's accomplishment as a poet, but also his understanding of poetry and his range and insight as a teacher.

LEWIS, THOMAS E., PROFESSOR, SPANISH & PORTUGUESE, SPRING SEMESTER

Professor Lewis's project investigated the representation of social class in selected fictional works from the perspective of the cognitive sciences. His research explored processes of perception and empathy--as well as interactions of emotion and cognition generally--as they occur in fiction. The originality of the project resides in its application of social neuroscience to analyze the passage from unconscious to conscious awareness of class identity formations. Professor Lewis completed an essay within the award period and established the groundwork for an extended research program. The university is benefitting because the project represents the introduction of cognitive science into Hispanic literary and cultural criticism. Students have benefitted because the project has led to the revision of two existing courses and the creation of one new course. The state will benefit because the results will contribute to understanding aspects of public citizenship.

LOGSDON, JOHN, ASSOCIATE PROFESSOR, DEPARTMENT OF BIOLOGY, OTHER-DEFERRED FROM SPRING 09

Dr. Logsdon was a long-term PDA scholar at the National Evolutionary Synthesis Center (NESCent), an NSF-sponsored research center in Durham, NC. The main project for this award was to conduct research for and begin writing a book on the evolution of sexual reproduction. The book, initially planned for an academic readership, is now aimed for a popular audience. While working on-site at NESCent, Dr. Logsdon made progress on the book, including a detailed outline and book proposal. He also gave a number of seminars and participated broadly in numerous NESCent activities and meetings. Multiple grant proposals were submitted and one was funded (NSF). Final editing of a symposium volume was completed and published in *Journal of Heredity*. A book review was published in *Science*. The activities conducted by Dr. Logsdon at NESCent will promote his research and teaching efforts in evolutionary biology and provide many future opportunities for collaboration and outreach.

LOMAX, MICHAEL E., ASSOCIATE PROFESSOR, INTEGRATIVE PHYSIOLOGY, FALL SEMESTER

Professor Lomax examined the Philippine experience in billiards and the sport's rise as a global enterprise. He conducted an extensive review of the literature on sport and globalization and Philippine history collected several primary sources on Philippine pool players and the history of billiards. He also constructed an analytical framework to conduct oral interviews of Philippine pool players. These activities will promote his research effort to analyze the ways in which the emergence of several Philippine pool players to an elite level contributed significantly to billiards evolving into a global enterprise.

LU, JIA, ASSOCIATE PROFESSOR, MECHANICAL ENGINEERING, FALL SEMESTER

Professor Lu received a PDA for the Fall semester of the academic year 2009-2010. The original plan was to expand research activities in the tissue mechanics area. Due to the coming of a collaborative research opportunity that aligns well with an emerging area in computational mechanics, Prof. Lu decided to gear the activities toward this new direction. During the PDA, Prof. Lu completed the computational infrastructure necessary for the collaborative project and finished the core technical development. The work has generated two journal publications. The assignment provided the opportunity for Prof. Lu to expand international collaboration by visiting a foreign university and giving a short course there. The PDA will also benefit Prof. Lu's teaching at all levels. The computer program written during the assignment will be directly used in a graduate course for the next offering in Spring 2011.

***LUTGENDORF, SUSAN K., PROFESSOR, PSYCHOLOGY, SPRING SEMESTER**

Professor Lutgendorf used her second Faculty Scholar period to continue learning techniques and approaches involved in a genomic approach to tumor biology. She audited two courses, Introduction to Molecular Epidemiology and Genetics and Epidemiology and continued a tutorial with a colleague at the National Cancer Institute. She has been involved in several experimental studies using these approaches. These activities are enabling her to extend her cancer research program into models utilizing gene expression, and provide broader understanding of pathways by which stress can influence cancer growth. Additionally, these activities are enhancing her biobehavioral cancer research program, her collaborations both locally at the Holden Comprehensive Cancer Center and nationally, and related supervision of undergraduate and graduate students, and will broaden her teaching.

***MACGILLIVRAY, LEONARD R., ASSOCIATE PROFESSOR, CHEMISTRY, FALL SEMESTER**

Professor MacGillivray performed research in the field of organic solid-state chemistry. Crystalline solids surround us in everyday life (e.g. pharmaceuticals, semiconductors) and the focus of the research of Professor MacGillivray is to devise new ways to control the properties of solids. In particular, Professor MacGillivray attempts to use organic solids as media to synthesize molecules and to achieve high mobilities of electric charge. Consequently, the work of Professor MacGillivray bears direct relevance to organic synthetic chemistry, green chemistry, and molecular electronics. For Fall 2009, a major focus was to control optical properties, in the form of fluorescence, of molecular materials and learn to develop means to measure movements of electric charge in solids. Four journal publications, two grant applications, and enhanced materials for education resulted from the work of the FSA.

MARGULIS, CLAUDIO J., ASSOCIATE PROFESSOR, CHEMISTRY, FALL SEMESTER

Industry and academics are in the process of developing new classes of solvents and processes that can achieve different properties than those currently used in laboratories. The aim is obtaining different solvent environments in which to do new chemistries and to generate a new class of cleaner environmentally friendlier solvents. A breakthrough is the invention of room-temperature ionic liquids (RTILs). With RTILs we may be facing a new "solvation paradigm" in which the existence of classes of persistent local environments can be used to induce chemical and photochemical selectivity. Professor Margulis is working on theoretical tools to facilitate the understanding of how one can control the outcome of chemical reactions using light sources. In particular during this PDA period Prof. Margulis has been working on the result of photo-ejecting electrons into RTILs.

MCLEESE, DONALD G., ASSOCIATE PROFESSOR, JOURNALISM & MASS COMMUNICATION, FALL SEMESTER

Professor McLeese explored the profound and interrelated ways in which technology continues to transform journalism, the arts and arts journalism. The consumption and production of journalism and art have changed radically in recent years, creating a divide that is as much generational as technological. In popular music, critics continue to review albums while digital downloads of individual tracks now dominate consumption. Television critics must determine the proper criteria for evaluating "reality TV," and arts sections that ignore the "art" of video games seem out of touch with contemporary culture. Blogs, podcasts and social networks have become central to the cultural dialogue. Results from research conducted during leave include one book (and another under contract), a lead article in an academic journal and significant shifts of focus in a number of journalism courses.

***MCLEOD, KEMBREW, ASSOCIATE PROFESSOR, COMMUNICATION STUDIES, SPRING SEMESTER**

Kembrew McLeod's long-term research program focuses on ways intellectual property considerations impinge on the scholars and artists. He is in the process of completing a book and documentary project on the subject. McLeod's current project examines one significant area that has been troubled by copyright. In the 1980s, African-American hip-hop musicians began 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 an innovative musical-cultural form. The culmination of McLeod's Faculty Scholar project will be a book titled *Creative License: The Law and Culture of Digital Sampling*.

***MITCHELL, SARA B., ASSOCIATE PROFESSOR, POLITICAL SCIENCE, SPRING SEMESTER**

Professor Mitchell analyzed the efficacy of the International Court of Justice (ICJ) by examining 1) which countries accepted the ICJ's jurisdiction and why, and 2) what effect jurisdictional acceptance had on interstate negotiations. She argues that variance in domestic legal institutions explained why civil law states are more likely to recognize the ICJ's jurisdiction than common or Islamic law states. Further, she demonstrated that the mere threat of being sued in the ICJ produces more frequent and efficient agreements “out of court”, and that overly pessimistic views of the ICJ may be unwarranted.

MUHLY, PAUL S., PROFESSOR, MATHEMATICS, FALL SEMESTER

Professor Muhly developed a new direction to his research program that is devoted to the analysis of operator algebras based on free algebras and related constructs. In particular, he made important progress on the two central problems posed in his 2008 Prospectus for a PDA. He exposed the results of this research in two national meetings of mathematicians and in seminars at the University of Iowa. They played a central role in the NSF grant application, *Operator Algebra from Function Theory on Matricial Domains*, that he wrote. Further, they form the basis of the course, Topics in Analysis, 22M:303, that he is teaching this Spring; they have launched three Ph.D. thesis projects and influenced two others; and they have supplied his future sections of the course, Introduction to Linear Algebra, 22M:027, with numerous challenging exercises.

***MUMFORD, KEVIN, ASSOCIATE PROFESSOR, HISTORY, FALL SEMESTER**

Few historical events have transformed the American landscape of the past fifty years more than the rise of the civil rights movement in the 1960s and of gay liberation in the 1970s. Yet the people whose lives converged and intersected at the center of these struggles—the men who were both black and gay—remained largely hidden from history. Professor Mumford's project contributed to major investigations across the social sciences and humanities into identity, by studying the invention of a black gay identity, 1940-1990s. Drawing on oral history, popular culture, biography, and politics, this book project will open new discussions across communities for greater harmony.

OLIVEIRA, SUELY P., PROFESSOR, COMPUTER SCIENCE, FALL SEMESTER

Professor Oliveira visited Universidade de São Paulo in Brazil. Prof. Oliveira's main interest during the visit was clustering and classification algorithms. Prof. Oliveira's background in Numerical Analysis provides her with the optimization foundations for working on her recent algorithms, while her visit to USP strengthened her background in statistical analysis. While her previous work was directed at protein networks, at USP Prof. Oliveira started using her algorithms for genetic fingerprinting. In addition, familiarity with some of Brazil's agricultural problems provides many realistic tools and results which can be useful in US agriculture in general. From her experience co-teaching a course in classification with applications to biology and agriculture at USP, she is now

better prepared for teaching a similar course at the University of Iowa, and has already offered to teach a Computer Science course on this topic.

ONEL, YASAR, PROFESSOR, PHYSICS & ASTRONOMY, FALL SEMESTER-DEFERRED FROM SPRING 09

Professor Onel carried out his research project on high energy physics (particle physics) at CERN, Geneva, Switzerland. He participated in start-up of the Large Hadron Collider (LHC) project and tested and commissioned his detector HF-Forward Calorimetry for the CMS (Compact Muon Solenoid) Collaboration. He designed and built components of this detector in UI Physics machine shops. He contributed to construct analysis tools with his graduate students who play an integral part in this calibration of his detector as well as focusing on validating the timing of the sub-detectors in the hadronic calorimeter of the CMS detector. This is an important aspect in the preparation for new physics discovery as several key components of the detector rely on small timing differences to discriminate between various types of collision events. These activities will promote his research effort in particle physics and have refreshed his teaching skills in particle physics and modern physics courses.

PEEPLES, TONYA L., ASSOCIATE PROFESSOR, CHEMICAL & BIOCHEMICAL ENGINEERING, SPRING SEMESTER

Professor Peeples conducted research in sustainable biotechnology and developed diversity programs. She secured appointment in the Obermann Center to facilitate project activity. She submitted research paper and made significant progress on completion of a second. The PDA enabled Prof. Peeples to engage program officers at the National Science Foundation in Chemical, Bioengineering, Environmental, and Transport Systems (CBET) as well as in Human Resource Development (HRD). She laid groundwork for several grants for research and science, technology, engineering and mathematics (STEM) education. Since Spring 2010, she has submitted two proposals (sustainability and STEM education). Two large proposals for STEM education and research infrastructure in which Professor Peeples is a faculty participant (LSAMP and EPSCoR) have also been submitted. Additional efforts to advance biotechnology and sustainability research and to impact STEM diversity are in progress.

***PENNY, H. G., ASSOCIATE PROFESSOR, HISTORY, FULL YEAR**

Professor Penny investigated how Germans generated and used ideas about 'the American Indian' over the last two hundred years and analyzed how this fascination has been received among Native Americans. The study seeks to explain Germans' special relationship to modernity while engaging problems critical to the humanities in general: the often contradictory interconnections between culture and race, the manner in which some non-Europeans appropriate and redirect European discourse on human difference, and the ways in which stereotypes emerge and die.

PRINEAS, JOHN P., ASSOCIATE PROFESSOR, PHYSICS & ASTRONOMY, FALL SEMESTER

Professor Prineas focused and expanded his research program in semiconductor materials for mid- and long-wave infrared optoelectronics. Professor Prineas made progress developing high power mid- and long-wave light emitting diodes for thermal and chemical sensing applications; obtained a new grant on a novel approach to processing photodiode detectors to limit sidewall leakage; formed industrial (optoelectronic) partnerships with IQE and ASL Analytical; and applied for new optoelectronics grants. He improved his management structure of the complex molecular beam epitaxy facility for growing semiconductor heterostructures, including creating a MBE recharge center. He is proposing a one credit first year seminar on ten technologies that have changed the world.

REITZ, JOHN C., PROFESSOR, LAW, FALL SEMESTER

Professor Reitz worked chiefly on two different papers. He substantially completed his portion of a co-authored study on the U.S. law governing public-private partnerships, the kinds of major government contracts in which private contractors carry out significant government functions. The paper was published in the summer of 2010, and he has incorporated the lessons from his portion of the paper about how current law fails to protect public interests into his course on administrative law. With respect to a second paper comparing the role that law plays under the western ideal of the rule of law and under the ideal of the administrative state in modern China, he chiefly conducted research and revised an extensive outline. He incorporated insights from this paper into his course on comparative law and gave lectures based on the revised outline at several Chinese universities in the summer of 2010.

RETHWISCH, DAVID G., PROFESSOR, CHEMICAL & BIOCHEMICAL ENGINEERING, FALL SEMESTER

Professor Rethwisch worked with colleagues in the College of Education, ISU and UNI to strengthen STEM education research in Iowa. This builds upon his role as Affiliate Director of Project Lead the Way (PLTW) in the State of Iowa. PLTW is a pre-engineering program taught at the high school and middle school level that is intended to increase the interest of students in STEM careers. The primary objective was to assess the effect of the PLTW curriculum on student performance and career choices and the impact of PLTW courses on students' career choices. Benefits of this assignment include stronger relationships between Regent institutions and expected educational research articles in peer reviewed journals. We have also submitted a proposal to the Department of Education I3 program and the NSF EPSCoR proposal. These provide the basis to prepare additional proposals that will be submitted to agencies including the NSF, US Dept of Education, and the Kern Family Foundation.

RIGAL, LAURA, ASSOCIATE PROFESSOR, AMERICAN STUDIES, FALL SEMESTER

Professor Rigal consulted archives in Philadelphia, New Jersey, Washington D.C. and the Iowa State Historical Society to complete the final two chapters of her book, "Picturing Entitlement: Rhetorics of Expansion in American Visual Culture, 1776-1900". This book is a study of the relationship between major works of American visual art and the history of U.S. territorial and industrial expansion. Her research resulted in the publication of one journal article, one book review, one publishing contract with Wiley-Blackwell (for an essay in a collection); and the revision/resubmission of another essay in a collection. Her efforts also produced a new graduate course in English, a new undergrad seminar in American Studies/Sustainability, and new visual material for PowerPoint (and other IT) classroom and conference presentations.

RODGERS, VINCENT G., PROFESSOR, PHYSICS & ASTRONOMY, SPRING SEMESTER

Today's observations in physics only partially agree with theory. String theory hopes to improve this by incorporating gravity and the other known forces. This is called gauge/gravity correspondence. Theoretical studies in the gauge/gravity duality conducted by Professor Rodgers included new string theoretic solutions that may be compared with experiments. This work was part of an international collaboration with Mexico and India. Other work related complex nuclear interactions to the theory of knots in three dimensions using certain knot invariants. This work was in collaboration with City College of New York.

ROUND, PHILLIP, ASSOCIATE PROFESSOR, ENGLISH, FALL SEMESTER-DEFERRED FROM SPRING 09

The first book-length study of its kind, "Removable Type: Histories of the Book in Indian Country, 1653-1880" traces the relationship between American Indians and printed books during the period 1653 to 1880. "Removable Type" uncovers the communal, regional, and political contexts for Native peoples' use of books, significantly expanding current knowledge about the material culture of books and print in Native American societies.

SCHLUTTER, MORTEN, ASSOCIATE PROFESSOR, RELIGIOUS STUDIES, FALL SEMESTER

Morten Schlütter significantly advanced his book project "The Evolution of the "Platform Sutra" and the Changing Notions of What Zen Should Be". The Platform Sutra is a key scripture of Chinese Chan Buddhism (a.k.a. "Zen"). Several versions of the text are extant, spanning the early formation of Chan in the 8th century to its mature form in the 13th century. Through an examination of how the Platform Sutra changed, the book provides a new perspective on the evolution of Chan. Schlütter also co-edited, and wrote a chapter for, a volume of essays on the earliest version of the Platform Sutra, now under review at Columbia University Press. Schlütter further presented papers at two conferences in China: "On the Evolution of the Platform Sutra" at a symposium at Zhongshan University in Guangzhou, and "Illness, Self-healing, and Dying in Song-dynasty Chan," at a conference at the People's University in Beijing. He also undertook a research trip to China and Japan, and wrote two book reviews.

SCHMIDT, FRANK L, PROFESSOR, CBUS-MANAGEMENT & ORGANIZATION, FALL SEMESTER

The two main purposes of the assignment were (1) to determine how well measures used in the behavioral and social sciences actually measure the dimensions (i.e, "constructs": traits, attitudes, etc) that they are assumed to measure; (2) to demonstrate the conditions under which measures of any two such supposedly different underlying dimensions are actually measures of the same dimension. These are critical questions across many disciplines, including management and psychology. The findings (1) showed that most measures used are substantially related to the constructs or dimensions they are intended to measure and (2) suggested the possibility that many supposedly distinct dimensions or constructs are redundant with each other (e.g., job satisfaction and organizational commitment). The latter finding indicates that the development of simpler, more parsimonious explanatory theories may be possible.

SCHWALM, LESLIE A., ASSOCIATE PROFESSOR, HISTORY, FALL SEMESTER-DEFERRED FROM FALL 08

Professor Schwalm initiated two new research areas during her Fall 2009 Professional Development Assignment. She completed a new article manuscript, investigating the impact of ideas about race on the delivery of medical care during the Civil War to former slaves and black soldiers. She also completed extensive research documenting the post-Civil War civil rights movement in the North. Professor Schwalm also applied for and won an International Programs Major Proposal Award, to supplement funding from the Obermann Humanities Center, to support a major fall 2010 symposium of national and international scholars on gender and the global history of slavery.

***SIDEL, MARK, PROFESSOR, LAW, FALL SEMESTER**

During this semester of the Faculty Scholar award, Professor Sidel published two books: Regulation of the Voluntary Sector: Freedom and Security in an Era of Uncertainty (Routledge, 2009); and The Constitution of Vietnam: A Contextual Analysis (Hart, 2009). He continued his research on human trafficking and involuntary servitude, a modern form of slavery in the United States, and completed a full draft of his book on that topic. During the Faculty Scholar term Professor Sidel also served as President of the International Society for Third Sector Research (ISTR), the international academic

society focused on civil society, the nonprofit sector and philanthropy, and served as Chair of the Nonprofit and Philanthropic Law Section of the Association of American Law Schools (AALS). He lectured in China, Vietnam, Taiwan and elsewhere on these themes.

SMALL, GARY W., PROFESSOR, CHEMISTRY, SPRING SEMESTER

Professor Small's work focused on two applications involving the use of infrared light to detect and quantify chemicals. He used infrared light to probe living tissue in a rat animal model to determine blood glucose levels. The goal of this work was to develop a nocturnal hypoglycemic alarm that diabetics can use to monitor their glucose levels noninvasively and continuously while sleeping. In the research performed, a successful analysis of the collected infrared data was demonstrated. He also worked collaboratively with scientists from the U. S. Environmental Protection Agency in response to the recent oil spill in the Gulf of Mexico. An imaging sensor mounted on an aircraft detected the infrared light emitted from the surface of the water and Professor Small developed computer algorithms to analyze the resulting data and detect the presence of oil. He successfully tested an artificial neural network classification model to recognize oil automatically in the collected images.

***SPENCER, JOHN P., ASSOCIATE PROFESSOR, PSYCHOLOGY, SPRING SEMESTER**

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 summarized the theoretical approach (volume 1) and provide a hands-on tutorial with computer software to learn how to develop neural network models within this framework (volume 2). The proposed books solidifies 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 UI (31:216) and in a Dynamic Field Theory Summer School hosted at UI each summer.

SRINIVASAN, PADMINI, PROFESSOR, COMPUTER SCIENCE, SPRING SEMESTER

Professor Srinivasan extended her research on algorithms for analyzing Blog data and also developed new research problems in biomedical informatics. She continues to address these new problems in collaboration with her students and colleagues. These developments are in the area of text mining applied to gene occurrence identification, to the annotated biological web of data and towards bridging text collections from Ayurveda and Western medical research. She has several papers accepted for publication or currently under review and has also submitted a proposal to NSF. These activities will enrich her research effort in text retrieval and text mining while also advancing her teaching methods in courses related to Databases and Web Mining. Her Ph.D. students also stand to benefit by collaborating on the new problems defined and contributing to ongoing research papers and proposals.

STECOPOULOS, HARILAOS, ASSOCIATE PROFESSOR, ENGLISH, FALL SEMESTER

Professor Stecopoulos made significant progress on two major projects, the first on hemispheric drama, the second on U.S. cultural diplomacy. He researched Tennessee Williams' Mexican connections and studied U.S. cultural policies. He also completed an invited essay on hemispheric drama. Stecopoulos' research will enable him to offer Iowa students new interdisciplinary courses.

STEWART, DAVID E., PROFESSOR, MATHEMATICS, FALL SEMESTER (July-Dec 2009)

Prof. Stewart developed and extended theories for understanding discontinuous dynamics and applications. A central part of this work was development of a book (under contract) on "Dynamics with inequalities: impacts and hard constraints", which collects and extends much of the work on dynamics with inequalities. In addition, Stewart worked with researchers in signal processing on modeling the glottis in order to accurately identify voice pathologies directly from voice signals; with researchers in robotics on simulation methods; and with researchers in dynamical systems on fractal dimensions on attractors. The research undertaken represents a substantial advance in Stewart's research program, while pointing out the importance of sensitivity analysis and practical applications of these problems.

STROHMER, GERHARD O., PROFESSOR, MATHEMATICS, FALL SEMESTER

During the Professional Development Assignment, Professor G. Strohmer finished a paper on the stability of some ecological equilibria, now submitted for publication, and studied systems of gas balls (modeling gaseous stars) rotating around a point. He expects to publish several papers about the latter investigations. He also carried out some revisions of a manuscript on fluid mechanics. He spent much of the semester at the Max Planck Institute for Applied Mathematics in Leipzig, Germany. He gave a number of lectures there and at other German universities about the results of his research.

STROMQUIST, SHELTON, PROFESSOR, HISTORY, SPRING SEMESTER

Professor Stromquist wrote significant portions of a book arguing that the municipality was a vital but neglected aspect of a new labor politics that emerged across the industrializing world of the early twentieth century. Historians' preoccupation with the nation-state and the absence of transnational comparative scholarship has contributed to this deficit. The book identifies a striking congruence in the origins and development of local labor politics transnationally between 1890 and 1920. The research draws on municipal records, personal manuscripts, newspapers, pamphlets, and official party records in seven countries. In addition to the five (of nine) chapters he wrote, he also published a review essay and has two research essays in press. He submitted a major grant proposal. He did further research in Ireland (Dublin) and the UK (London, Manchester and Bradford). He is revising three undergraduate courses and one graduate course based on his research for this project.

THOMAS, GEB W., ASSOCIATE PROFESSOR, INDUSTRIAL ENGINEERING, FALL SEMESTER

To expand his research emphasis from space robotics to terrestrial automation, Professor Thomas planned to develop an automated farming prototype. However, before his assignment, an opportunity to develop hardware and software to study the transmission of hospital infections presented itself. He divided his time between both projects. He now has a working, automated hydroponic growing system in his lab. He also led the design and construction of 200 wireless devices for monitoring hand hygiene compliance. These devices were used in an experiment last summer and will be used again in late November. The collaboration with members of the Department of Computer Science and the College of Medicine and has led a pipeline of proposals and publications which are emerging from this summer's experiment and related hardware opportunities.

***VECERA, SHAUN P., PROFESSOR, PSYCHOLOGY, SPRING SEMESTER**

Normal aging produces changes in cognitive processes, including visual attention. Aging deteriorates the extraction of visual information from the environment. Given the health consequences of aging, Professor Vecera investigated the operation of attention in both normal and accelerated aging (e.g., mild cognitive impairment). Research from Spring 2010 indicates that older individuals with cognitive decline and a reduction in their 'useful field of view' (UFOV) show

impairments in visual attention, specifically in the ability to disengage attention from its current locus. Because the UFOV predicts performance on demanding visual tasks such as driving, the current results indicate that declines in attention have consequences for everyday performance in older individuals. The results point to specific cognitive processes--attentional disengagement--that could be targeted in rehabilitation.

VENG-PEDERSEN, PETER, PROFESSOR, PHARMACY, FULL YEAR

Very low birth weight, critically ill, anemic neonatal infants receive multiple (RBC) transfusions, resulting in risk of infections and other complications. Professor Veng-Pedersen investigated the drug erythropoietin to optimally stimulate the production of RBCs to eliminate transfusions and associated risks. This work has been incorporated into a very large multi-university, Program Project Grant submitted to NIH, resulted in two accepted papers and meeting abstracts. He investigated an improved utilization of modern computer central processing units (multi-core CPUs) for reducing the very excessive computation time often encountered in modern population pharmacokinetics/pharmacodynamics analysis. He developed a mathematical/computer algorithm for optimizing drug treatment, direct benefit to EPO treatment of anemic neonates and resulted in a manuscript for submission. Results from Auckland and Uppsala are being incorporated into a UI graduate level course Advanced PK/PD 046:229.

***WHITE, SUSAN C., ASSOCIATE PROFESSOR, ART & ART HISTORY, SPRING SEMESTER**

Professor White completed a series of 6 large paintings on canvas, many works on paper and a number of painted Plexiglas installations. These recent pieces are being exhibited at the Center for Contemporary Art in Wilmington Delaware, The Kenise Barnes Gallery in NY as well as Olson Larsen Gallery in Des Moines and Simpson College in Iowa. In 2011 she will also be exhibiting at the John Davis Gallery in Hudson NY and at the Cheryl McGinnis Gallery in NYC. Professor White has also been awarded a series of three commissions in Long Island at a newly built Law School and two private commissions in Los Angeles and NYC. Traveling throughout Spain and Morocco allowed Professor White the opportunity to make gallery contacts and collect visual resource for her painting.

WILCOX, JONATHAN, PROFESSOR, ENGLISH, SPRING SEMESTER

Professor Wilcox researched and began writing a book on Anglo-Saxon literature titled *The Letter Made Flesh: An Extreme Material Reading of the Word in Anglo-Saxon Culture*. He used the semester of the assignment to define the precise range of the book, to formulate a prospectus, and to write one chapter, which will also see publication as a major journal article. In addition, he worked up a lecture that responds to the discovery of the Staffordshire Hoard, a headline-making discovery of treasure made in central England in 2009, which he delivered both internationally and in the state of Iowa. He also crafted an essay on the significance of *Beowulf* and Old English literature within a postcolonial context. In addition to seeing publication, all this research will inform his teaching of Old English literature in both undergraduate and graduate courses.

WILDER, DAVID G., ASSOCIATE PROFESSOR, BIOMEDICAL ENGINEERING, FALL SEMESTER

Professor Wilder pursued goals related to studying and explaining the effects on the human spine of the combination of vibration, posture, mechanical impact, and sudden load. This included: a) conducting research, b) service, c) continuing his service to develop international standards on human exposure to vibration, d) creating and giving a presentation related to human vibration exposure on behalf of the U.S. Federal Railroad Administration, e) submitting a proposal to create a Center of Excellence in Vibration Research at the University of Iowa, and f) submitting several proposals related to human vibration and posture as requested by the U.S. Army. Insights from these activities were incorporated into: "Human Response to Vibration," a new, graduate level

course in the College of Engineering and into: "The Biomechanics of a Good, Swift Kick in the Butt," a new, First-Year Seminar offered in the University of Iowa Honors program.

WILSON KIMBER, MARIAN, ASSOCIATE PROFESSOR, MUSIC, SPRING SEMESTER

Marian Wilson Kimber undertook research for a book, *In a Woman's Voice: Music and Recitation in American Cultural Life*, exploring the intersection of music and poetic recitation in performances and compositions by women, ca. 1850-1945. She traveled to 12 libraries and archives in Boston, Chicago, Ohio, and Virginia, to examine rare musical works, manuscripts, sound recordings, newspaper clippings, scrapbooks, women's literary society and music club minutes, concert programs, and other historical materials. She took ca. 2500 photographs of these sources for future study. Wilson Kimber drafted 135 pages of the book, which is the first consideration of the role of women in the development of the musical genre, melodrama, and of its relationship to contemporary elocutionary practices. Wilson Kimber's book provides a new understanding of women in American concert life, informing her seminars on musicology, nineteenth-century music, American music, and women composers.

***WINET, JON, ASSOCIATE PROFESSOR, ART & ART HISTORY, FALL SEMESTER**

During the summer and fall of 2009, Professor Winet conducted research in three linked areas: the role of the arts in civic engagement and community building; technology development and locative devices, Apple's iPhone in particular; and the potential to promote awareness of social issues through the development of "World Cup Global Health," a series of New Media projects focusing on the summer 2010 World Cup. The time afforded by the Faculty Scholar Award resulted in a number of projects completed and in progress in all three areas.

YE, YANGBO, PROFESSOR, MATHEMATICS, SPRING SEMESTER

Professor Yangbo Ye conducted research in analytic number theory, a central field in mathematics studying integers using analytical methods. His research focused on resonance of automorphic forms. Automorphic forms are non-Euclidean wave forms with deep arithmetic information. Their resonance spectra describe their vibration nature. Professor Ye obtained resonance spectra for certain automorphic forms for the 2x2 and 3x3 linear groups. One research paper was published in a research journal, and two will be submitted for publication soon. The research results were presented in national and international conferences. The research contributed to the leading role of the university and state in mathematical research, and helped the university to attract best students. It also helps Professor Ye's current and future graduate students on their Ph.D. thesis research.

IOWA STATE UNIVERSITY (Seven of the 41 professional development assignments approved for 2009-2010 were either cancelled or postponed to 2010-2011. The reports included on pages 59-61 beginning with Andrews are new as of December 7, 2010.)

ADAMS, DEAN, ASSOCIATE PROFESSOR, ECOLOGY, EVOLUTION & ORGANISMAL BIOLOGY

Professor Adams's PDA consisted of intensive morphological data collection and analysis, primarily using the herpetology collections of the Museo di Storie Naturale (University of Florence, Italy). More than 3,000 Italian lizards and 600 Italian salamanders were quantified and the data was used in a comparative evolutionary context to test hypotheses of adaptation. The research has addressed the link between the micro-evolutionary adaptations and macro-evolutionary trends in morphological diversification. The result of his work is strengthened ties with European collaborators and enhanced research and teaching programs at ISU.

ATHREYA, KRISHNA, PROFESSOR, MATHEMATICS

Professor Athreya conducted research on probability theory with colleagues at the Indian Institute of Science and at ISU while on assignment during the 2009-10 academic year. He completed a total of six papers resulting from the research. This assignment allowed him an international collaboration experience and as a result, has increased the department's visibility and expertise in the discipline.

CHANDRA, ABHIJIT, PROFESSOR, MECHANICAL ENGINEERING AND AEROSPACE ENGINEERING

Professor Chandra spent the academic year visiting several international locations for collaboration on a research project. During his visit to the Fraunhofer Institute in Germany, he collaborated on multi-physics modeling of the chemical/mechanical planarization process, participated in advanced glass molding of optical parts, and taught short courses on design of CMP process to participants from European industry. During two months at IIT-Madras and Jadavpur University in Kolkata, India, he focused on damage-free machining of ceramics and collaborated with faculty. During three months at the Technical University of Denmark in Lyngby, he worked on life prediction of orthopedic implants. One journal publication based on these collaborations has been submitted and three are pending.

DICKSON, JAMES S., PROFESSOR, ANIMAL SCIENCE

Professor Dickson completed workshops at the University of Maryland, College Park and reviewed several texts as proposed in the PDA application. He was in Ames for the second half of the assignment focusing on the development of additional skills and knowledge in risk assessment, which is an important part of new food safety laws. The National Pork Board funded two grants involving risk assessment components (and totaling \$101,345) as a result. He was also invited to speak at several conferences about risk assessment, giving six presentations from November 2009 to September 2010. Following the assignment, Professor Dickson incorporated educational materials into a new class "Risk, Benefits, Science and Policy with Food Safety" and he conducted international outreach in planning a USDA fellowship/food safety risk assessment for two weeks in fall 2010 with six members of the Ministry of Health in Beijing.

DINSMORE, STEPHEN J., ASSOCIATE PROFESSOR, NATURAL RESOURCE ECOLOGY & MANAGEMENT

Professor Dinsmore spent a portion of his PDA in Ames during fall semester 2009, in addition to visiting North Carolina State University in September 2009. He focused on manuscript development and, of the 11 manuscripts he developed, three have been published, one is in press and seven are under review. He completed grant proposals, including an Iowa Department of Natural Resources project for \$150,000 that started in October 2010 and a successful EPA grant proposal where the ISU share is \$135,906 beginning in January 2011. While at North Carolina State University, he gave

a departmental seminar and guest lectures in two classes. During the professional development period, he continued to provide mentoring for five graduate students.

DUFFY, MICHAEL, PROFESSOR, ECONOMICS

The assignment allowed Professor Duffy to greatly improve and extend his knowledge of Iowa farmland ownership issues which in turn has allowed him to respond to individual, institutional, media, governmental and private industry queries. Farm succession to the next generation, absentee ownership, soil conservation and other land related issues can only be effectively addressed with a clear understanding of all aspects of land ownership and the changes that are occurring. The project resulted in a revised publication, "Farmland Ownership and Tenure in Iowa."

FROELICH, AMY, ASSOCIATE PROFESSOR, STATISTICS

While on PDA, Professor Froelich completed the design and development of lesson plans and activities for JMP applets to teach statistical concepts in introductory statistics courses. A resulting paper was accepted for presentation at an international conference in April 2010. Another PDA goal was to further her research program in Statistics education. That research resulted in two manuscripts, one invited book chapter, and one book review. ISU students are benefitting from a well-designed and researched set of activities and lessons on learning difficult concepts in introductory statistics.

HORTON, ROBERT, DISTINGUISHED PROFESSOR, AGRONOMY

Professor Horton spent spring semester of 2010 in China, collaborating on research with Chinese scientists, post-docs and students at the Institute of Soil and Water Conservation in Yangling, the Institute of Atmospheric Physics in Beijing, and China Agricultural University in Beijing. He focused on soil, water, plants and climate of the China Loess Plateau, and the effect of biochar. Accomplishments as a result of this professional development include fruitful collaborations, where he provided expertise in soil physics to help solve major environmental soil and water problems of the Loess Plateau. In addition to collaborations, he has now published 14 journal articles based on the research, with four in press and another eight submitted. The direct international experience will be incorporated into the courses he teaches at Iowa State. He will continue collaborations with the Chinese scientists that may lead to new research relationships.

JOLLS, KENNETH, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING

Professor Jolls spent fall 2009 in professional development in the Department of Chemical and Environmental Engineering at the University of Oviedo in Spain, where he was the official representative of Iowa State University for the 10-year summer foreign study program, the International Summer Course in Chemical Engineering. This year, Iowa State sent 11 students for the program. While in Spain, he developed new and maintained existing experiments in the Oviedo laboratory, presented lectures in two of the Spanish Chemical Engineering Department courses, prepared manuscripts for submission to a journal, as well as beginning the planning for an application for a 2011-12 Fulbright Scholar Award to continue laboratory development in Spain.

LEONARD, KATHY, PROFESSOR, WORLD LANGUAGES AND CULTURES

The PDA was taken to complete a book manuscript titled, "*Fists of Steel, Tears of Silver: An Anthology of Bolivia's Mining Literature Featuring Women.*" The book is a short story anthology containing narrative from the genre called "literature minera," or mining literature. Now back in the ISU classroom, Professor Leonard has incorporated the research about culture as well as languages into her courses. The relevance of the topic this semester allowed discussion of video clips of the Chilean miners being pulled from the earth as the students discussed in depth the life of miners in Latin America. One of the stories from the anthology has already been published in English translation and numerous project photographs have been published to date – each publication brings distinction to the department and university.

LESLIE, THOMAS, ASSOCIATE PROFESSOR, ARCHITECTURE

For his PDA, Professor Leslie proposed to complete on-site and archival research in support of a book project entitled "*Crystalline Cages: The Technical Evolution of the Chicago Skyscraper 1871-1934*" at Northwestern University. He also participated in an innovative cross-disciplinary curricular program at Northwestern linking architecture and engineering, and drafted significant elements of the book manuscript. Visits to the Chicago History Museum and the Art Institute of Chicago allowed him to prepare digital versions of plans and elevations for buildings that will illustrate the book. Connecting with engineering faculty has enriched his understanding of pedagogical methods for structural design and engineering which he has already incorporated into his teaching at ISU. The project, which has also included a series of public lectures, will provide valuable exposure to the Architecture program at ISU.

LIEBERMAN, GARY, PROFESSOR, MATHEMATICS

Professor Lieberman studied the qualitative behavior of solutions of elliptic and parabolic differential equations while on assignment during Spring 2010. He completed a manuscript that has been accepted for publication in the *Journal d'Analyse Mathématique*. This assignment allowed him the opportunity to work with several renowned leaders in the field, and has provided increased visibility to the department and university as he was invited to be the keynote speaker at an international conference and he gave several invited lectures in Australia and New England.

LONG, LING, ASSOCIATE PROFESSOR, MATHEMATICS

Professor Long had a productive year while on sabbatical and this in turn has greatly energized her scholarship. She co-organized a workshop at the American Institute for Mathematics in Palo Alto, California. She wrote two grant proposals – one for \$145,000 was funded by the NSF. She was invited to visit several international institutes, such as the National Center for Theoretical Sciences, Taiwan. She greatly expanded her outside collaboration and since has five joint papers submitted. She has written one single-author paper. She discussed with colleagues strategies for both undergraduate and graduate courses, which is benefitting ISU students. Overall, the PDA has resulted in enhanced collaborations and increased visibility for the Department of Mathematics.

MARINER, FRANCIS, ASSOCIATE PROFESSOR, WORLD LANGUAGES AND CULTURES

The archival and library research conducted while in Paris allowed Dr. Mariner to refocus a book project based on 17th Century France and the acting and writing career of Charles Varlet de La Grange. Dr. Mariner also made progress on other related scholarship such as writing articles and preparing conference presentations. The faculty member reports that the assignment and the three-month immersion in the target culture and language have made a positive impact on his teaching, particularly in the literature and civilization classrooms he routinely instructs.

MESROPOVA, OLGA, ASSOCIATE PROFESSOR, WORLD LANGUAGES AND CULTURES

Professor Mesropova's assignment facilitated research and writing of her book, "Humor in Transition: Russian Monologue Comedy." This manuscript analyzes the socio-political and cultural conflicts, values and tropes that shape the satirical tonality of Russian monologue comedy. Her work is the first comprehensive scholarly analysis of the neglected genre. She was able to travel to St. Petersburg, Russia to conduct several interviews with prominent satirical writers and performers, to work with archival recordings of Soviet comedians, as well as meet with Russian colleagues who work in the field of Russian cultural studies. The result is that she was able to undertake a substantial contribution to the scholarly field of Slavic Studies while enhancing her teaching of contemporary Russian culture.

MONROE, JOHN, ASSOCIATE PROFESSOR, HISTORY

For the first two months of the assignment, Professor Monroe assisted in the preparation of a French translation of his book, *Laboratories of Faith*, to be published by the Presses Universitaires de Bordeaux. Few American monographs on French history are actually translated for publication in France, so this has been a significant project. The assignment also allowed him the opportunity to write an article for publication in the prestigious journal, *American Historical Review*. The work has been invaluable for his career and helped to establish an international reputation for him and the institution.

NG, SIU-HUNG, ASSOCIATE PROFESSOR, MATHEMATICS

Professor Ng had a productive professional development assignment during academic year 2009-2010. He submitted three papers that were accepted by highly regarded journals – *Communications in Mathematical Physics*, *Israel Journal of Mathematics*, and the *Journal of Algebra* – and two grant proposals. In addition, he attended two conferences and presented professional talks in four different countries. Enhanced collegial relations have resulted. These PDA activities have also directly promoted the visibility of ISU and are fruitful to the recipient's graduate teaching at ISU.

NIEHM, LINDA S., ASSOCIATE PROFESSOR, APPAREL, EDUCATIONAL STUDIES, AND HOSPITALITY MANAGEMENT

Professor Niehm was based in Ames with periodic trips to selected U.S. universities with entrepreneurship programs and centers, including Purdue, Michigan State and Belmont University during fall semester 2009. She gathered information for the feasibility of a College of Human Sciences Center for Entrepreneurship and sought funds for entrepreneurship research and educational programming, including sources of start-up funds for a CHS entrepreneurship center, and development of online course offerings related to entrepreneurship. Two courses were offered online for the first time during Summer 2010 and are being updated and refined per results of the pilot test. Professor Niehm is a leader on a variety of entrepreneurship committees and is involved in the ISU entrepreneurship initiative. The CHS entrepreneurship center is part of a larger start-up proposal that is in development through collaboration with the Pappajohn Center for Entrepreneurship.

RICHARDS, CHARLES, ASSOCIATE PROFESSOR, ART AND DESIGN

While on assignment, Professor Richards developed text and preliminary rough drawings for *Lulu's Magic Wand*, a children's illustrated story. The assignment came at a critical time when the faculty member's creative work had shifted from producing and exhibiting gallery work toward publishing books for young readers and their parents. He has shared the sketches from the book project with students in his drawing fundamentals course to enrich the curriculum. The professional accomplishments from this leave will contribute to strengthening the reputation of the department and the institution as a whole.

RINEY-KEHRBERG, PAMELA, PROFESSOR, HISTORY

The PDA provided an opportunity for Professor Riney-Kehrberg to bring six small writing projects to completion and to make significant progress on a major project, the book manuscript titled "*The Nature of Childhood: An Environmental History of America's Children, 1865-2005*." She continued to chair four graduate students' theses/dissertations to completion during the assignment. Additionally, this faculty member prepared a new course, Topics in Agricultural History: America Eats, which enrolled 40 students this semester. The completion of each writing project will bring credit to Iowa State University and the Department of History.

ROBINSON, DANIEL, PROFESSOR, EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Professor Robinson was able to focus on a significant amount of data accumulated over past years during this PDA during Fall 2009. The data will be published in relevant journals such as the Journal for Veterinary Education and Clinical Briefs (the official publication of the NAVC). His leave resulted in additional articles submitted for review that focus on the use of psychological type in veterinary medicine. He is using this enhanced knowledge on psychological type and its applications in higher education to conduct campus workshops, and to share new found knowledge with other type practitioners on campus who conduct leadership development workshops for students, staff and faculty.

DERRICK K. ROLLINS, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING AND STATISTICS

Professor Rollins spent spring semester 2010 in Santa Barbara, California to collaborate with researchers in glucose modeling for type 1 diabetics. This training will enable Iowa State faculty to run clinical trials at Iowa State University. In May, Rollins started a clinical study under an NIH grant and data collection is nearly complete. A new study will be started soon with a Juvenile Diabetes Research Foundation grant. Two articles are being produced from the work with the collaborators at the University of California at Santa Barbara and the Sansum Diabetes Institute. The collaboration with medical professionals is important to the ability to conduct research and obtain funding for Iowa State University research.

RUSSELL, DANIEL W., PROFESSOR, HUMAN DEVELOPMENT AND FAMILY STUDIES

Professor Russell was at the University of Ireland-Galway during spring semester 2010. There, he worked with researchers from the Center for Child and Family Research on several intervention studies they are conducting with young children and adolescents and he presented workshops on research methods and statistics to faculty and staff. He also analyzed data from the Family and Community Health Study (FACHS) being conducted at ISU and developed proposals for additional funding for the FACHS investigation. This, in turn, led to a keynote address at the International Society of Stress and Anxiety Research meeting in August 2010. The value of the assignment includes enhanced visibility of research being conducted at ISU in Ireland and in other countries. The assignment led to the submission of several proposals for research funding at ISU and will enable a large new research project being conducted in Ireland jointly by NUI-Galway and ISU.

SANDOR, JONATHAN, PROFESSOR, AGRONOMY

The purpose of this PDA was to focus on research and writing about long-term soil change in agriculture. Professor Sandor wrote a book and related papers on anthropogenic soil change, and visited Arizona State University to incorporate data on ancient agricultural soils into models of human-environmental interaction for a joint NSF proposal. His research project will contribute to the areas of natural resource conservation and sustainable agriculture to which ISU is committed. The positive response to his research has enhanced the reputation of ISU as an institution that takes a diverse approach to the betterment of agriculture and environmental quality. In addition, his book will contribute to the scientific knowledge and to solving problems about agriculture land use and the environment.

STEWART, BRIAN L., ASSOCIATE PROFESSOR, AGRICULTURAL AND BIOSYSTEMS ENGINEERING

Professor Stewart spent eight months of professional leave at the Federal University of Vicosa in Vicosa, Minas Gerais, Brazil where he represented Iowa State University as a Fulbright scholar. He presented eight invited lectures and published seven journal articles, with another submitted and under review. He organized and led a two-week study abroad trip and course and organized an international symposium. He developed a new course module. He was invited to become an

adjunct faculty member there so he can advise future graduate students at the Brazilian university. This may lead to increased numbers of graduate students coming to ISU. He learned about different agricultural practices, varying in technology and scale, which will inform his teaching at Iowa State, including leading the study abroad trip in the future.

SUBRAMANIAM, SHANKAR, ASSOCIATE PROFESSOR, MECHANICAL ENGINEERING

Professor Subramaniam spent spring semester 2010 at the University of Florida, Gainesville and the National Energy Technology Laboratory in Morgantown, West Virginia. He advanced his research on modeling and simulation of multiphase flow with scientists at the lab and the Department of Mechanical Engineering. Accomplishments from the professional leave include analyzing theoretical underpinnings of the research and conducting research. He presented research results to the 2010 International Conference on Multiphase Flow at Tampa, Florida where he won "best paper" award out of 400 entries. That work is being prepared for a journal publication. He has been invited to speak for the prestigious petascale computing competition. Interactions at international conferences and workshops lead to new collaborations, new grant proposals and research projects, which benefits the department and university.

VALENZUELA, NICOLE, ASSOCIATE PROFESSOR, ECOLOGY, EVOLUTION & ORGANISMAL BIOLOGY

The primary objective of the PDA was to explore functional and evolutionary explanations for the changes in turtle chromosome number and their association with transitions in sex determining mechanisms. The research has informed our understanding of the evolutionary processes known to occur in mammals and if these can be extended to reptiles. Her research was conducted collaboratively with researchers at the University of Florence, Italy and she further collaborated with international scientists from the UK, Germany and Russia. She anticipates the publication of a number of very high impact papers in evolutionary genomics as a result of her PDA work, and also prospects for additional extramural funding.

ANDREWS, JAMES, PROFESSOR, HISTORY

Professor Andrews spent spring semester 2010 at the Davis Center for Russian Studies/Harvard Archival Library, conducting research for his current book project "Modernity's Metropolitan: History of Moscow Subway." The professional development assignment was invaluable as a way to lay the groundwork for this monograph. He was able to establish valuable connections with faculty and staff at Harvard University, where he has been encouraged to apply for a prestigious visiting fellow position. The assignment also allowed him to undertake research in support of competitive research grants to the Kennan Institute in Washington, D.C., and the Guggenheim.

AVALOS, HECTOR, PROFESSOR, PHILOSOPHY AND RELIGIOUS STUDIES

Professor Avalos spent the academic year locally focused on completing the second volume of a trilogy on health care in the ancient Near East, a groundbreaking research project which includes the health care systems of the Hittite civilization of ancient Turkey and Phoenicia. This book manuscript is under contract with a publisher for 2012. He also completed a manuscript on slavery and biblical scholarship, which is a new area of research for Professor Avalos. The value of this professional development assignment was the opportunity it afforded for completion of two scholarly manuscripts and the further development of a new disciplinary research focus.

Butler, Travis, Associate Professor, Philosophy and Religious Studies

Professor Butler spent the academic year in Ames developing a book manuscript and three associated papers on the ethical and epistemological theories defended in Plato's *Phaedo*. One paper is under review and the other two will be submitted in summer 2011. The value of the professional development assignment was allowing Professor Butler to focus on writing most of a book manuscript, something that without a research assignment would have otherwise taken several

years. Prompt publication of the research articles will help raise the profile of Professor Butler's research contributions, which will help publication prospects for his book. The research conducted during this time period also improved the content of his ancient philosophy survey course, which is his primary teaching responsibility.

FERNANDEZ-BACA, DAVID, PROFESSOR, COMPUTER SCIENCE

Professor Fernandez-Baca spent spring semester 2010 at the University of Arizona, Tucson collaborating on a joint research project in phylogenetic tree construction sponsored by the National Science Foundation (NSF). The aim of the research project is to develop a database of more than a billion trees that includes a substantial amount of the known species. The research conducted at the University of Arizona falls in the scope of a relatively new area called "phyloinformatics." During the research leave, he completed four manuscripts, of which two have been published and two are scheduled to appear. He also prepared manuscripts related to five areas of this research project. These will be submitted once the software is completed and tested. The value of the professional development assignment is enhancement of ISU's already solid reputation in the new field of computational phylogenetics. It has also opened the path to new external funding opportunities. Finally, involvement in this project has led to new and exciting research opportunities for talented students at ISU.

HOLLANDER, DAVID, ASSOCIATE PROFESSOR, HISTORY

Professor Hollander spent the academic year conducting research and writing a book manuscript, which has been submitted to a publisher. He was named Economy editor for Blackwell's Encyclopedia of Ancient History due to be published in November 2011. Professor Hollander is responsible for more than 250 individual entries in this prestigious publication. In addition, he has recruited authors, translated two entries from Italian, reviewed and edited submissions, arranged illustrations and consulted with other editors. He also authored an original essay for another book project and published a book review. He was invited to give three scholarly presentations, both national and international. The professional development assignment was invaluable to Professor Hollander and Iowa State University because through it, he was able to complete the monograph and serve as editor for a major project that developed his international reputation via interaction with scholars in Europe, Israel, Canada and Australia, as well as the United States. The knowledge gained through this project on economic history will enrich both his scholarship and his teaching.

LAWARE, MARGARET, ASSOCIATE PROFESSOR, ENGLISH

Professor LaWare spent the academic year traveling to university archives in the United States to work on a book project on Women's Commencement Speeches at Women's Colleges. Most of the assignment was spent researching and collecting speeches from archives at Smith College, Mount Holyoke and Radcliffe. The value of the assignment was in providing time for Professor LaWare to travel to college archives to spend time conducting detailed research. She began writing the initial chapters of this book as well as two article manuscripts that will be sent out for review and publication this year. The research assignment provided her with more real-world examples to use in her teaching on gender, communication and public speaking. The experience provides clearer context of place and the historical situation, which will benefit students in her classes.

MARQUART, DEBRA, PROFESSOR, ENGLISH

Professor Marquart spent the spring semester of 2010 in Ames, Cyprus and Greece working on two book projects. She worked on a novel-in-progress, which entailed submitting portions of her work to a literary agent for review. An award winning writer, Professor Marquart was able to accept invitations to read at 11 institutions and to present five scholarly papers at conferences during the period of her PDA. Furthermore, Professor Marquart completed/revised three essays for publication and drafted four essays for submission to journals. The assignment allowed her to refocus her energy and undertake new scholarly directions. The value of the assignment includes the solid

connections Professor Marquart made with many artists/writers and professors in Cyprus and Greece, connections which can be used to develop a future study abroad course for ISU students. The assignment may also result in student recruitment because Professor Marquart's reading and presentations provided contact with countless young students of writing, many of who expressed an interest in the MFA program in Creating Writing and Environment at Iowa State. Active publishing and delivery of lectures and invited readings is key to the continued increase of quality applicants for the MFA program.

ORAZEM, PETER, UNIVERSITY PROFESSOR, ECONOMICS

Professor Orazem spent the academic year in Ames, Ohio, Washington, D.C., and Chicago, conducting research on the Slovenian Diaspora, generating manuscripts and applying for research grants. He completed and published one journal article and has another five in various stages of review. He also prepared two scholarly papers that were accepted for presentation in November 2010. He was a co-organizer and discussant for a conference at the Center for Global Development in Washington, D.C. Also during the assignment, he initiated work on entrepreneurship, energy efficiency, and economic development projects that simply would not have been possible without a course release. The value to Iowa State University is increased vigor in an entrepreneurship research agenda that is paying off in publications and may soon generate external funding. Another value is the participation in two large interdisciplinary grant proposals, with the potential for a third.

SCHWEINGRUBER, DAVID, ASSOCIATE PROFESSOR, SOCIOLOGY

Professor Schweingruber spent the academic year in Ames developing a sociological study of how religion impacts the career paths of faculty at public universities, with a special focus on Christianity. His research incorporated several important theoretical issues within the field of sociology. He presented two papers from the project at professional meetings and will present two more in 2011. The work accomplished on the project during the professional development assignment should result in several publications, likely three or four published articles and one book. He also co-authored a book chapter for an undergraduate theory reader and worked on another paper for submission to a scholarly journal. The value of the professional development to Iowa State University is increased research productivity that contributes to both the scholarly literature in sociology as well as to the practical operations of public universities. The research assignment also provided opportunities for Professor Schweingruber to connect research to benefit his teaching. As a result, he has reorganized the popular Introduction to Sociology course he teaches, which will have a positive impact on more than 600 students each academic year.

SINGH, RAJESH, ASSOCIATE PROFESSOR, ECONOMICS

Professor Singh spent the academic year engaged in research and outreach in India. He gave numerous research presentations at three Indian universities: Garhwal University, Kumaon University and Doon University. His outreach was multifaceted. He provided consulting for the creation of a new business school in India, which included collaboration with ISU faculty in the College of Business. He also assisted a graduate university with the creation of a Department of Economics. These activities have identified potential avenues for future collaborations between universities in India and Iowa State. His experience with grassroots details will help provide valuable data for courses he teaches at ISU. Professor Singh also completed two manuscripts during the research assignment that have been published in research journals in his discipline.

UNIVERSITY OF NORTHERN IOWA

The University of Northern Iowa provided a summary of the activities and results of the following Professional Development Assignments (PDAs) that were awarded for the 2009-2010 academic year. Two of the PDAs were deferred to a future academic year at the request of the faculty, with the approval of the University. The 18 completed PDAs have to date (November, 2010) resulted in 15 published peer-reviewed journal articles and 1 in progress, 14 presentations at scholarly meetings and 1 scheduled, 2 published books, 4 completed plays and book manuscripts, and 5 more book manuscripts in progress, 6 book chapters or commentaries, 10 other types of articles in press, 5 completed exhibitions of creative work and 3 more scheduled, 4 presentations to the public or at other universities, 1 pilot test of a curriculum, 1 grant proposal, 1 special issue of a journal co-edited, and 5 UNI courses substantially modified as a direct result of the PDA. Two of the professors who completed PDAs were recipients of 2010 Regents' Awards for Faculty Excellence. The faculty are grateful for the dedicated time to pursue their scholarship and creative activity and have returned to their teaching and scholarly activity with new ideas and renewed enthusiasm.

AMIN, SHAHINA, ASSOCIATE PROFESSOR, ECONOMICS, FALL 2009

Professor Amin's PDA was deferred to the Fall 2010 semester.

ATKINSON, KENNETH, ASSOCIATE PROFESSOR, PHILOSOPHY & WORLD RELIGIONS, FALL 2009

Professor Atkinson undertook the first critical study of the historical methods of the ancient Roman historian Josephus (37-100 A.D.). The research resulted in a major book manuscript and several articles that offer an entirely new chronology of the Greek and Roman periods in the Middle East that alter our understanding of the historical development of Judaism and Christianity. Professor Atkinson presented his findings at a special conference on Judaism in the Mediterranean Context in Ravenna, Italy, and at the national meeting of the Society of Biblical Literature in Atlanta.

BARNES, HOWARD, ASSOCIATE PROFESSOR, DESIGN, TEXTILES, GERONTOLOGY & FAMILY STUDIES, SPRING 2010

Professor Barnes' PDA was deferred until Spring 2012.

CLOHESY, WILLIAM, PROFESSOR, PHILOSOPHY & WORLD RELIGIONS, SPRING 2010

Professor Clohesy studied the work of Michel Foucault and Hannah Arendt as part of an effort to establish a theory of *civic* power for non-governmental and non-profit organizations in civil society. He found that a three way comparison of Liberal theories of power with those of Foucault and Arendt provides him with the argument for the theoretical portion of a planned book on civil society. With the theory section in place, the applied essays he planned to include in the book will fall in line thematically, so that the planned book will no longer be merely a collection of essays but a unified study in which each chapter forms a part of a single argument. Due to the work done during the PDA, Professor Clohesy is now at work on a book proposal for *Democracy by Other Means: Philosophical Studies of Civil Society* to be submitted to Indiana University Press.

COLBURN, RICHARD, PROFESSOR, ART, FALL 2009

Professor Colburn continued his long-term photographic exploration of the rural upper Midwest. Beginning in May of 2009 and concluding at the end of the year he traveled nearly 20,000 miles photographing events as well as the quotidian moments of daily life in the region. At the same time he continued with a series of photographs of schools that have closed as a result of declining populations on the region. The question addressed during this time was how best to describe the life of these communities. In the fall he developed a website for his photographs which was quite useful in explaining the project and providing a location for people to view his previous work. During the assignment he followed his usual practice of alternating travel with darkroom work. This routine

provided time to evaluate work in progress and to incorporate those evaluations in subsequent work. Photographs made during the PDA were included in two exhibitions. One was a solo exhibition at Wartburg College in Waverly, Iowa. The other was the annual Iowa Artists Exhibition at the Des Moines Art Center. There was a catalog published that included all five of the photographs in the exhibition. Three additional exhibitions that will include work made during the PDA are upcoming. Two are solo exhibitions. One is at Simpson College in Indianola, Iowa, and the other is at The Lyric Center for Arts in the Iron Range community of Virginia, Minnesota. The other is a large group show that will include six photographs at the Nicolaysen Art Museum in Casper, Wyoming.

CYPHERT, DALE, ASSOCIATE PROFESSOR, MANAGEMENT, FALL 2010

Professor Cyphert conducted investigations of decision-making discourse in rural communities in Tama, Howard, Pottawattamie, and Shelby Counties with three papers presented thus far: a comparison of epideictic rhetoric in Harlan and Cresco print media demonstrated the values of small business communities to be contradictory to those of the media portrayals of capitalistic values ("Economic Epideictic: The Virtuous Business Owners of Main Street, USA", in Snyder, Lisa G. (Ed.) *Chicago Proceedings 2010*, Association for Business Communication, Chicago, IL), economic development funding sources were found to require the discursive creation of a rhetorical community in Tama County ("Making Connections: Community Identity, Public Sphere and Sustainable Economy" presented to the National Communication Association), and community conflict was found to show characteristics of conflict within family businesses ("One Big Happy Family: Conflict Resolution on Main Street" with Alissa Wagner, presented to the Iowa Communication Association). Additional publications are now in progress, consulting relationships have been made with two communities, and partnerships are being explored for grant-supported extensions of the research.

DESOTO, M. CATHERINE, ASSOCIATE PROFESSOR, PSYCHOLOGY, FALL 2009

Professor DeSoto disseminated her research on the causes of autism in children by publishing two articles in peer-reviewed journals (in *Acta Neurobiologica Experimentalis* and in *Neurotoxicology*), preparing and submitting a book proposal, and making a presentation at a conference with student co-authors.

FREEDMAN, SUZANNE, ASSOCIATE PROFESSOR, EDUCATIONAL PSYCHOLOGY & FOUNDATIONS, SPRING 2010

Professor Freedman piloted a forgiveness education curriculum with 52 high school juniors attending NU High School. Forgiveness education included learning about what forgiveness is and is not from a psychological perspective, discussions about situations and contexts that may require forgiveness, benefits associated with forgiveness, and information regarding how to forgive. Results illustrated that students benefitted from the forgiveness education in multiple ways. Specifically, students illustrated greater knowledge of forgiveness and the specific steps involved in forgiving and reported learning different ways of dealing with their anger. Almost all of the students reported being more willing to use forgiveness in the future as a result of learning about it and they reported feeling confident in their ability to forgive. Students also illustrated greater feelings of hope and decreased anger in general on post-test assessments compared to pre-test assessments. Results were presented at the College of Education Research Forum held at UNI in October and are being written up for publication. It is also expected that additional presentations will occur at national conferences.

HOFFMAN, DONNA, ASSOCIATE PROFESSOR, POLITICAL SCIENCE, SPRING 2010

Professor Hoffman conducted research on whether presidential campaign rhetoric actually informs the electorate about the responsiveness and leadership capacity of the candidates. Nomination acceptance speeches were found to offer the public a cue that can be used, much like an audition, as a window into what successful candidates pursue and accomplish. Nominees have been responsive to most of the macro electoral changes that have occurred over the last sixty years and the successful candidates prove to be largely sincere in the policies they advocate before they are

elected. Successful candidates actually do pursue a large measure of the things they say they will pursue. This is a particularly important finding in an era in which the American public is more detached from and cynical about politics, politicians, and the promises they make. From this research, I have presented two conference papers (one at a regional conference and one at a national conference). In addition, Lexington Books (a division of Rowman & Littlefield) has shown interest in the book manuscript once it is completed.

HOGANCAMP, RANDY, ASSOCIATE PROFESSOR, MUSIC, FALL 2009 AND SPRING 2010

Professor Hogancamp spent the year writing and editing a book titled *Pedagogical Perspectives in Percussion: Educational Essays*. The book contains sixteen chapters ranging from Philosophy of Teaching Total Percussion to Percussion Articulation to Percussion Maintenance and Repair with charts, tables, and musical examples. Also included are seven Appendices with lists of solos and methods in the areas of keyboard percussion, timpani, snare drum, drum set, and multiple percussion as well as musical examples of World Percussion from Africa (Ghana/Ewe and Guinea/Malinke) and Japan (Taiko). The book has been published as a CD by Really Good Music (reallygoodmusic.com) and was favorably reviewed in the November 2010 issue of *The Percussive Notes*, the official publication of The Percussive Arts Society.

LANGE, ERIC, ASSOCIATE PROFESSOR, THEATRE, SPRING 2010

Professor Lange extended and shared his expertise in the area of theatrical lighting during his PDA. He attended the Broadway Lighting Master Class in New York, executed the lighting design for two productions at universities (for Lorca's *Blood Wedding* at Trinity University and for the musical *Cabaret* at the University of Colorado-Boulder), worked with students, and investigated curricular and pedagogical approaches to theatre lighting at other institutions to enhance the teaching and curriculum in lighting design in UNI's Theatre program.

MACLIN, KIM, ASSOCIATE PROFESSOR, PSYCHOLOGY, FALL 2009

Professor Kim MacLin, 2010 recipient of a Regents' Award, completed 4 chapters of her and her co-author Otto MacLin's book *Psychology and Law* to be published by Worth as an undergraduate textbook. She also completed a chapter published by Oxford University Press, presented research in Dublin, Ireland, finalized a monograph on schematic properties of conversation, conducted diversity training for WRC new employees, was an invited speaker for Mississippi State University-Meridian and University of Central Missouri on using eyetracking to uncover perceptual aspects of race discrimination via video conferencing, and converted two courses to hybrid format (part online, part in person).

MACLIN, OTTO, ASSOCIATE PROFESSOR, PSYCHOLOGY, FALL 2009

Professor Otto MacLin, 2010 recipient of a Regents' Award, completed a comprehensive literature review, software development, and pilot work for revision of an NSF proposal on studying a cognitive mechanism (MacLin & MacLin, 2011) involved in detecting the presence of perceptual cues that act as racial markers which cause the faces of other-race member to be processed differently from same-race faces. He also presented research in Dublin, Ireland on perceptual aspects of race detection in faces, completed a chapter on race perception and racial categorization published by Oxford University Press, completed final revision and editing of 3 peer reviewed articles published in *Law & Human Behavior*, *Visual Cognition*, and *Perception*, all with student co-authors, gave an invited talk on eyewitness identification to the Waterloo Chapter of Kiwanis, was a co-author on a paper on perceptual expertise presented in Toronto, Canada, held weekly lab meetings with graduate and undergraduate students, and converted 3 courses from traditional format to a hybrid format (part online, part traditional).

MAY, DAVID, PROFESSOR, GEOGRAPHY, FALL 2009

Professor May wrote sections of six chapters for a monograph that summarizes collaborative work over eight years at four Late Paleoindian sites in Ash Hollow, Nebraska. His contributions included a reconstruction of landscape evolution, a summary of radiocarbon dating in the drainage basin, and detailed reconstructions of the formation and burial of the sites. The monograph is being edited by Matthew G. Hill (Iowa State University, Anthropology Department). The tentative title is "Clary Ranch: A Late Paleoindian Locality in Western Nebraska." The book is slated to be submitted to the University of New Mexico Press sometime in 2011.

RAWWAS, MOHAMMED, PROFESSOR, MARKETING, SPRING 2010

Professor Rawwas obtained data from 4,500 small and large wholesalers in Hyogo and Osaka prefectures in Japan. These wholesalers represented an array of general merchandisers and specialty wholesalers dealing with textile, apparel, agricultural, animal, poultry and aquatic products, food and beverages, building materials, chemicals, minerals and metals, machinery, motor vehicles, and electrical equipment, furniture, drug and toiletries, and others. Multiple regression analysis revealed that the supplier's service to wholesaler, the supplier's offerings to the wholesaler, and buyer's service to the wholesaler did contribute to the enhancement of the performance of the small wholesalers. The three factors explained 20% of the small wholesaler's performance. However, supplier's service to wholesaler and the wholesaler's intra logistics activities contributed to the enhancement of the performance of large wholesalers. Both factors explained 12% of the large wholesaler's performance. MANOVA and MDA revealed that large and small wholesalers differed with respect to supplier's service to wholesaler, the supplier's offerings to the wholesaler and the wholesaler's intra logistics activities. Preliminary results were presented at the Western Decision Science Institute and the manuscript is currently under revision with the Industrial Marketing Management journal.

ROSELL, SARAH, ASSOCIATE PROFESSOR, MODERN LANGUAGES, SPRING 2012

Professor Rosell conducted research to finish and submit a manuscript. This work presents the new generation of Puerto Rican women playwrights (both from the island and the Diaspora), and critically examines their works in light of postcolonial theories. It focuses primarily on the notions of identity (sexual, racial, transnational/transcultural), and gender construction. It will be the first scholarly work to open the door to research on this new generation of Puerto Rican playwrights at the same time as it contributes to Caribbean, Latino literature, and Women's Studies. The book is already out of print (November 2010) and also part of it will be presented at the X Congreso Internacional de Literatura Hispánica, in Dominican Republic, in April 2011.

SIDDENS III, PAUL, ASSOCIATE PROFESSOR, COMMUNICATION STUDIES, SPRING 2010

Professor Siddens researched and wrote an original play called The Summoning that was based on the English allegorical morality play The Summoning of Everyman that was written in the mid 1400's. He conducted research on the original script, updated the language of the original script to contemporary English, revised the characters and dramatic situations to reflect contemporary social, cultural, technological, political and environmental issues, and focused the new script on the tensions that currently exist between humankind and the social, cultural, technological, political and environmental contexts with which we now cope. Dr. Siddens also completed all design work for a production of the script, directed the installation of all technical elements, such as set, lighting, audio, costumes, props, etc., and produced and directed the original play script on the UNI Interpreters Theatre stage on October 14, 15 and 16 of 2010. The production and script have been adjudicated by Dr. Tami Spry of St. Cloud State University, a prominent Performance Studies scholar. Dr. Siddens will now also seek publication of the script through a professional play service such as Playscripts, Inc., Samuel French, etc.

TAMPLIN, JEFF, ASSOCIATE PROFESSOR, BIOLOGY, SPRING 2010

Professor Tamplin analyzed and disseminated results of field-based herpetological data that he has collected over the past several years as a UNI faculty member. These field data are primarily centered on the microhabitat selection and activity patterns of *Glyptemys insculpta*, the North American Wood turtle, an endangered species in Iowa, but also incorporate discoveries and observations of other reptile species, including significant range extensions and a worldwide species record for maximum clutch size in softshell turtles. Tamplin completed 7 articles including an extensive book chapter on wood turtles (for the upcoming University of Iowa Press publication "Natural History of the Amphibians and Reptiles of Iowa") and a coauthored article published in a highly regarded journal (Conservation Genetics) that implicates increased flooding events and climate change for the decline of the wood turtle in Iowa over the past 50 years. Six of the 7 recently submitted articles have been accepted and are either already published or are currently in press.

WILDNER, SIEGRUN, ASSOCIATE PROFESSOR, MODERN LANGUAGES, SPRING 2010

Professor Wildner conducted research at the Mauthausen Memorial Archive and Library (Vienna, Austria), the German National Library in Frankfurt, and at the U.S. Holocaust Memorial Museum, Washington D.C. to examine previously unpublished writings by inmates of the Nazi concentration camp in Mauthausen, Austria. Applying concepts of phenomenology as a theoretical framework, this study focuses on eyewitnesses' perceptions and perspectives, their writing motivation, language use, and writing conditions and will serve as an informative supplement to the existing historical narratives. Results will be published in book format. The Academic Publications Program of the U.S. Holocaust Memorial Museum, the Wallstein Verlag in Göttingen, Germany, or the Austrian Bundesministerium für Inneres (Mauthausen-Studien) are potential publishing outlets.

WOOD, DONNA, PROFESSOR, MANAGEMENT, SPRING 2010

Professor Wood co-edited a special issue of the *Journal of Business Ethics* and coauthored two papers in the issue – an introductory overview and a concluding theory paper. The topic of the special issue was network ethics, an emerging field that encompasses normative, descriptive, and explanatory/predictive understandings of the ethical rules that apply to people and organizations engaged in networked relationships as well as the perception, enactment, and sanctioning of behaviors within the network. This PDA resulted in a theory paper titled "Ethics and the Networked Business," as well as "Introduction to the Special Issue on the Effect of Network Ethics on Business Practices," both coauthored with Adele Santana and Antonino Vaccaro. Because the journal had a significant backlog to publish, our special issue is designated Supplement 4, Volume 90, 2009, although it was actually published in November 2010. We learned recently that the journal's publisher, Springer Verlag, will also publish our special issue (including both our papers, of course) in a book that will also be co-edited by us.