

Contact: Diana Gonzalez

**PROFESSIONAL DEVELOPMENT ASSIGNMENT REPORTS FOR FY 2011**

**Actions Requested:** Receive the professional development assignment reports submitted by the Regent universities for FY 2011.

**Executive Summary:** Each year, the Board of Regents is asked to approve faculty professional development assignments as specified in the Board Policy Manual §4.09. In December 2009 (Agenda Item #2e), the Board approved 107 professional development assignments for FY 2011. Board Policy §4.09E directs the institutions to submit a yearly report of the completed professional development assignments. HF 45 specifies that “the board shall annually prepare a report comparing each assignment proposal to the results received.”

A brief description of each professional development assignment completed in 2010-2011 is available in Attachments A-C (pages 3-40); this report provides information about the value added to the students, university, and state from the assignments, including more than \$5.4 million of funds obtained during or after the faculty member's professional development assignment; there are a number of grant proposals that have the potential for funding but they are still pending. This report addresses the Board of Regents Strategic Plan priority for “educational excellence and impact” as well as “economic development and vitality.”

**Background:**

- ◇ Review process. 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. One of the criteria considered is the impact of the proposed professional development assignment to the university, students, and the state.
- ◇ Proposed activities. Faculty members engaged in a variety of productive activities during their professional development assignments. For example, faculty members had 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.

PDA's 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. An additional significant benefit obtained by the faculty member are the collaborations that occur during the professional development assignment; they frequently lead to continued mutual efforts and in some cases open doors for external grant funding.

- ◇ Length of assignments. Professional development assignments were either one or two semesters in length. For professional development assignments that were two semesters in length, compensation was 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.
- ◇ Number of professional development assignments. There were 107 professional development assignments approved by the Board of Regents for FY 2011; 105 reports are included in the Attachments.
  - ☑ University of Iowa. There were 52 professional development assignments approved for FY 2011; however, four faculty members deferred their PDAs to a later time and two faculty members who had deferred their assignment from previous years undertook their PDAs during 2010-2011. The total number of reports included for SU is 50.
  - ☑ Iowa State University. There were 37 professional development assignments approved for FY 2011.
  - ☑ University of Northern Iowa. There were 18 professional development assignments approved for FY 2011.
- ◇ Faculty replacement costs. Costs are minimized to the greatest extent possible by using a variety of strategies, including having colleagues cover courses, deferring non-required courses to a later time, and adjusting schedules of existing faculty members. Faculty members who are on professional development assignment for a full year receive only half their salary; the balance is used to offset replacement costs.
- ◇ Average length of service. The average length of service for the proposed professional development assignment recipients was 11.0 years at SU; 12.6 years at ISU; and 13.5 years at UNI.
- ◇ External funding obtained while on professional development assignment. A number of faculty members received external grant funding while on professional development assignment or subsequent to the PDA. In addition, a number of faculty members submitted grant proposals which are still pending.
  - ☑ At the University of Iowa, nine faculty members received external funding either during their assignment or following the assignment for more than \$2.25 million.
  - ☑ At Iowa State University, eight faculty members received external funding either during their assignment or following the assignment for more than \$3.22 million.

**UNIVERSITY OF IOWA (\*denotes Faculty Scholar)**

**BALAKRISHNAN, R., PROFESSOR, ACCOUNTING, SPRING SEMESTER**

During the assignment, Professor Balakrishnan undertook four primary activities. First, he visited several schools in Asia (5) and Europe (3) to develop research relationships and to increase UI's global visibility. The cost of these visits was borne by the other schools as he gave scholarly lectures there. He initiated two research projects following these visits. Second, he initiated and developed a research article that is ready for submission to a professional journal. This paper, which consumed the bulk of his time, examines the properties of cost accounting systems which are poorly understood but are widely used. In addition to scholarship, this research is of practical relevance (the precursor paper was funded by the IMA, a practitioner organization) and is highly relevant to MBA classes. Third, he revised another paper which is now forthcoming in a leading academic journal. Finally, he spent some portion of the assignment in revising his textbook to incorporate student feedback.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Boehmke gathered and updated data on nursing home characteristics from 2002 through 2010. He also wrote a program to look up and download geocoded information about these facilities' location and compiled data on state legislative district boundaries and characteristics. He also pursued work on measuring and explaining differences in policy innovativeness across the American states. The research has provided materials for use in Boehmke's regularly taught undergraduate Interest Groups class, has given him skills in spatial analysis for use in his graduate statistics courses, and is resulting in collaborative research with at least one graduate student in the Department of Political Science. Looking ahead, the research will likely have policy consequences for oversight of the nursing home industry.

Is work accomplished on PDA consistent with original PDA? Yes. However, gathering all the data on the demographic characteristics of the state legislative districts took longer than expected. Therefore, the results will be written up during 2011-2012.

**BOWDEN, NED B., ASSOCIATE PROFESSOR, CHEMISTRY, SPRING SEMESTER**

Professor Bowden developed the synthesis of two entirely new polymers that have the right characteristics for medical applications and further studied a third new polymer that was synthesized by his group in the months preceding his PDA. Polymers are used in numerous applications in medicine, from the treatment of cancer to the growth of new organs, and this represented a new field for Professor Bowden. During his PDA, he developed the synthesis of new polymers that greatly increase the diversity of polymers that can be used in medicine. He also examined how these polymers can be used. Furthermore, he synthesized new polymeric membranes that have potential to be useful for industry, and a patent is being pursued based on this work. Scholarly articles were published, grant proposals were submitted, and both undergraduate and graduate students were integrated into the research.

Is work accomplished on PDA consistent with original PDA? Yes.

**BROCHU, CHRISTOPHER A., ASSOCIATE PROFESSOR, GEOSCIENCE, SPRING SEMESTER**

Professor Brochu studied crocodile fossils in museum collections in Oklahoma, Texas, Mississippi, and Alabama; helped organize an international symposium on crocodiles and their close extinct relatives in San Juan, Argentina; submitted two papers (including one describing a giant horned crocodile that ate human ancestors) and one book review for publication and made substantial progress on three more manuscripts; and laid the groundwork for highly competitive grant proposals to be submitted in the next few months, one of which will apply the crocodile fossil record toward understanding climate and sea level change. This work reinforced a major expansion in his research program over the past two years to include more distant crocodile relatives that could resolve ongoing debates. It also gave him first-hand access to specimens photographed for use in his classes, including the oldest known dinosaurs.

Is work accomplished on PDA consistent with original PDA? Yes.

**CARRASCO, ENRIQUE R., PROFESSOR, LAW, FALL SEMESTER**

Professor Carrasco worked on a book about the post-crisis voice of emerging market economies (EMEs) in international finance. The PDA allowed him to produce the book's proposal, first chapter, and portions of three other chapters. When done, the book will give a full account of the evolution of EMEs' voice and document a transformation of global governance from a U.S. dominated unipolar framework to a post-crisis multipolar framework informed by the voice of EMEs. The world is on the verge of a "new international economic order" (NIEO). As such, the book will address the NIEO, focusing on the obligations of EMEs to critically examine the global economic and financial order that prevailed prior to the crisis. The voice of the EMEs should lead to ethically-infused rules of international finance that provide the globally marginalized with the capabilities to pursue the good life. The book will appeal to laypersons, to students and teachers, and to policymakers, be they governors of U.S. states or finance ministers globally.

Is work accomplished on PDA consistent with original PDA? Yes.

**CIOCHON, RUSSELL L., PROFESSOR, ANTHROPOLOGY, FALL SEMESTER**

During the summer of 2010, Professor Ciochon led an international and multi-disciplinary team to carry out geological and paleoanthropological field research at the fossil human site of Ngandong in Central Java (Indonesia). The site, originally excavated by the Geological Survey of Netherlands Indies from 1931-1933, remains the greatest number of Homo erectus fossils uncovered at a single site. During July-August, 2010, the team re-excavated the site in order to clarify long-standing questions surrounding the geology, dating and fossil accumulations with special reference to the Homo erectus skulls. Professor Ciochon used his Professional Development Assignment (Fall 2010) to compile field notes, commence analysis, and incorporate these data into the construction of the first detailed 3D stratigraphy and depositional model of the Ngandong Homo erectus site. It is anticipated that the results will be published in Nature and in Proceedings of the National Academy of Sciences.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Clubb completed a major revision of his experimental play *Light Leaves* and produced a workshop production of this work directed by world-renown director Robert Wilson at the University of Iowa in March 2010. This production was supported by a \$40,000 University of Iowa Arts and Humanities Initiative grant. He curated an exhibition of the text of *Light Leaves* at the Theatre Arts Department during Wilson's residency. Professor Clubb then traveled to Italy to research the works of Giotto and Caravaggio, to India to study Purulia Chhau and Ras Lila theater forms, and to Indonesia to study Kecak and Legong dance theater. Back in Iowa City, Professor Clubb established the conceptual structure of a new full-length play growing out of his research. Work conducted during the grant period will enrich 10 courses Professor Clubb teaches at the University of Iowa.

Is work accomplished on PDA consistent with original PDA? Yes. In addition to the activities outlined in his proposal, he also researched the work of the great Italian painter Caravaggio in Italy and traveled to India to continue his research into Indian theatre forms with Professor Lutgendorf of the SUI South Asian Studies Program. He directed a staged reading of Henrik Ibsen's masterwork *Rosmersholm*, performed by a company of some of this country's best working theater actors at the Lang/Bocanegra Theater in New York City in February 2011.

**COMERON, JOSEP M., ASSOCIATE PROFESSOR, BIOLOGY, FALL SEMESTER**

Dr. Comeron investigated variation in recombination rates at two levels. First, he developed a new, high-throughput method and gathered data to generate the first collection of whole-genome, ultra-dense genetic maps for different individuals of the same species (the fruit fly). Second, he carried out computer simulations of the evolutionary process to investigate the consequences of variable recombination on the ability to detect natural selection. The results have provided the first insight into the magnitude of variation in recombination across an eukaryotic genome and its consequences. Two articles describing the main results of these projects are being written. These results are also a crucial component of a new grant proposal to be submitted to NIH. The new concepts, results and experimental methodologies developed during the projects are already being incorporated into the undergraduate and graduate level courses 'Evolution' and 'Population Genetics and Molecular Evolution'.

Is work accomplished on PDA consistent with original PDA? Yes. After he received his PDA, Professor Comeron received a research grant for \$900,000 from the National Institutes of Health to measure experimentally variation in recombination rates in the model organism *Drosophila melanogaster* using state-of-the art ultra-high throughput sequencing technologies. The project is a first ever in terms of the experimental design, methodology used, scale of the project, and accuracy of the expected results. The PDA allowed him to invest all necessary resources and time to ensure the success of the project which will increase the likelihood of obtaining future, continued external funding.

**CREMER, JAMES F., PROFESSOR, COMPUTER SCIENCE, FULL YEAR**

Professor Cremer carried out two intensive research experiments, one at UI and one in Vietnam, with members of the Hank Virtual Environments Lab, completed several publications, contributed to two external research proposals, helped implement new experimental capabilities in the group's lab, participated as a member of the UI UNESCO City of Literature mobile development team that successfully launched the UCOL iphone app in October 2010, and, as a federally sponsored Vietnam Education Foundation U.S. Faculty Scholar, taught a course at Vietnam's top engineering university, Hanoi University of Science and Technology during Spring

2011. Participation in the UCOL project, independent study work with other students, as well as mobile app development for use in research has strongly impacted Professor Cremer's future teaching; he will teach three new courses during the next two years on mobile app development for various platforms (iOS, Android) and application areas (e.g., health and healthcare).

Is work accomplished on PDA consistent with original PDA? Yes. Subsequent to receiving his PDA, Professor Cremer was named a Vietnam Education Foundation U.S. Faculty Scholar. This provided federal funds for him to teach a course in Spring 2010 at the top science and engineering university in Vietnam. This activity contributed to his PDA work; he and his Ph.D. student carried out, successfully, one of the research studies described in his PDA proposal on site in Vietnam, providing valuable data different from what he could have gathered easily at UI.

**D'AGATA, JOHN-PHILIP, ASSOCIATE PROFESSOR, ENGLISH, FALL SEMESTER**

Professor D'Agata completed one book project and continued working on another. The book he completed, *The Lifespan of a Fact*, is a collaboration with a fact-checker that explores the issue of veracity in nonfiction. The book has just been accepted for publication and will be released by W.W. Norton in February 2012. The second project D'Agata worked on during this period is *The Experience of the American Essay*, an anthology of 40 innovative American essays selected and edited by D'Agata as well as 40 individual introductions that he has written. The anthology is the third and final volume in a series of anthologies that D'Agata has published on the history of innovative nonfiction in world literature.

Is work accomplished on PDA consistent with original PDA? Yes. However, as he was beginning his PDA, Professor D'Agata learned that a different publisher was interested in another project he had been working on for many years - "The Lifespan of the Fact," a book length essay on the issue of veracity in literary nonfiction. Because of time constraints he decided to use the PDA to complete "The Lifespan of a Fact" which is scheduled to be published in February 2012. He also completed a significant amount of work on the original anthology project, which is on schedule and under contract with Graywolf Press. Professor Agata received two grants – one was awarded by the Howard Foundation based at Brown University for \$27,000; the second was from the John Simon Guggenheim Foundation for \$40,000.

**†DAVIES, WILLIAM D., PROFESSOR, LINGUISTICS, SPRING SEMESTER**

Professor Davies traveled to Indonesia to videotape storytellers performing folk tales and historical narratives of the Madurese, the third largest ethnic group in Indonesia, a country of increasing importance in the current global political environment. Native speaker collaborators transcribed the videos and Professor Davies did English translations and linguistic analysis. The 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 University of 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. A series of short books for use in schools on Madura is in preparation.

Is work accomplished on PDA consistent with original PDA? Yes.

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

In 2010, Associate Professor Durham continued to work on a book about the impacts of media representations of sexuality on women's sexual identities. She wrote a proposal and sample chapter for the book and submitted these to a number of academic presses for consideration, including Harvard University Press, NYU Press, Yale University Press, and Stanford University Press. In addition, she published a peer-reviewed journal article in *Feminist Media Studies*; presented a scholarly conference paper at the annual meeting of the International Communication Association; published a book chapter on media audiences; and developed an annotated bibliography for Oxford University Press. She also applied for an external grant to support her book project from the American Philosophical Society.

Is work accomplished on PDA consistent with original PDA? Yes.

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

In Spring 2011, Professor Filios continued work on a book entitled *Conquering Heroes: The Arab Conquest of Iberia in Early Islamic Historiography*. This book examines stories about the Muslim conquest (711 C.E.) in 9<sup>th</sup> and 10<sup>th</sup> century chronicles, 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 Muslim Spain and the Islamic realm. 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. This project is still in progress; Professor Filios expects to submit the book for review to an academic press during Summer 2012.

Is work accomplished on PDA consistent with original PDA? Yes; however, she refined the scope of the project and changed the working title to *Conquering Heroes: The Conquest of Iberia in Early Islamic Historiography*.

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

Dr. Friestad's research is in the area of new synthetic methods for application in drug discovery and synthesis of natural products. The PDA enabled enhanced mentoring of graduate students in starting three new projects in asymmetric synthesis of biologically active oxygen-containing compounds. In Year 3 the synthesis of the C27-C40 fragment of tetrafibricin (potential cardiovascular drug) was completed and was published. New carbon nucleophiles for ring-opening of bicyclic acetals were identified in successful carbon-carbon bond constructions. Dr. Friestad was an invited speaker at the 18<sup>th</sup> International Conference on Organic Synthesis, Bergen, Norway, August 1-6, 2010, presenting results from this research conducted under the PDA/Faculty Scholar Award.

Is work accomplished on PDA consistent with original PDA? Yes. In addition to working on the projected outlined in the PDA, Professor Friestad published five book chapters that were invited contributions to book projects of international scope.

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

Professor Gibson conducted research leading to four completed articles and a proposal to translate a medieval Greek collection of rhetorical exercises. One article argues that the medical writer Galen's essay on ball-playing follows instructions from contemporary rhetorical

manuals on how to praise a human activity. The second shows how Lucian's satirical essay on rhetorical education inverts a popular composition exercise. The third argues that despite the warm recommendation of an authoritative ancient handbook, later writers did not use Palaephatus' rationalizing treatment of Greek myths in their own refutations of myths. The fourth shows how moral concerns informed compositional pedagogy in late antiquity. By increasing his knowledge in these areas, these projects will benefit Professor Gibson's students in Greek literature and culture and in Classical mythology.

Is work accomplished on PDA consistent with original PDA? Yes.

**GLANVILLE, JENNIFER, ASSOCIATE PROFESSOR, SOCIOLOGY, FALL SEMESTER**

Professor Glanville began a major project to study generosity across multiple levels and with multiple methods, arguing that a fuller understanding of the sources of generosity requires connecting individual orientations, the immediate situation, and the wider context. Her results are producing a better understanding of the causal mechanisms that underlie generosity. The findings can be used to inform policy makers and foundations about how best to encourage generous behavior. The Professional Development Assignment was instrumental in allowing her to lay the foundation for this project that is supported by an external grant and will culminate in several journal articles and a book. Professor Glanville also developed a new first-year seminar on prosocial behavior (behavior directed at helping others) during the assignment period. Finally, insights and empirical examples from this project are informing her courses on "Community and Urban Sociology" and graduate-level statistics.

Is work accomplished on PDA consistent with original PDA? Yes. As co-investigator for the project "Choosing Generosity: Person, Situation, and Context," she received funding for \$148,000 from the University of Notre Dame Science of Generosity initiative, funded by the John Templeton Foundation.

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

Professor Glass conducted research in the Donald Allen Papers, housed in the Mandeville Special Collections Library at UC San Diego, and conducted extensive interviews with Barney Rosset, owner and director of Grove Press from 1952 to 1985, and six other individuals who worked closely with him during that time. He also conducted research in the Henry Foner Papers housed at NYU's Tamiment Library. Professor Glass completed a draft of his book, entitled *Printing Revolution: The Story of Grove Press and the Evergreen Review*. It is currently in submission with two colleagues who are starting a book series on post-war literature with Stanford University Press. This semester, Professor Glass is teaching a class on the Paperback Revolution which is derived from his research.

Is work accomplished on PDA consistent with original PDA? Yes. However, Professor Glass proposed a book on obscenity but wrote a book on Grove Press. The topics are closely related because Grove was involved in most of the major censorship battles of the 1950s and 1960s.

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

Professor Gobat used his Spring 2011 PDA/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 completed two book chapters, drafted another two chapters, and began work on an article that considers how the Walker episode engendered the idea of "Latin America." He also completed an article on Nicaragua's Sandinista Revolution, which was based

on a talk he gave at the American Historical Association meetings of 2011; he was invited to submit this article to a U.S. journal. Finally, Gobat undertook a research trip to Argentina to collect archival materials. This material is not only for the book but will be incorporated into Gobat's undergraduate lecture course on U.S.-Latin American relations, a new undergraduate course, and a document reader for use in college courses.

Is work accomplished on PDA consistent with original PDA? Yes. The PDA allowed him to complete all of the PDA goals except for completion of a draft of the entire book because his research in South American and European archives produced major, unexpected findings that will allow him to write a book with more ambitious scope. He will add a four-chapter section that explores the as yet unknown history of the first major anti-American movement in the world. This added section should greatly enhance the book's appeal, especially for readers interested in world history. Another reason for the delay was the fact that he conducted a time-consuming revision of the Spanish translation of his first book. The translated version was published in Nicaragua in 2010. He has drafted about a third of the projected book.

**HAZELTINE, RICHARD E., ASSOCIATE PROFESSOR, PSYCHOLOGY, SPRING SEMESTER**

Cognitive psychology has long sought to understand how humans are able to rapidly change task goals to match the demands of new situations. Professor Hazeltine's PDA focused on the role that task representations play in our ability to perform simple voluntary actions. Professor Hazeltine wrote two papers and conducted several studies examining how humans encode task representations that can efficiently guide behavior in novel as well as practiced settings. These studies address some long-standing questions about the flexibility and efficiency of human behavior and develop new behavioral measures of task boundaries so that individuals' task representations can be rigorously assessed. Some of these concepts were applied to reading instruction in 1<sup>st</sup> and 2<sup>nd</sup> graders. The preliminary results from a study of 225 children conducted during the PDA are very promising and suggest ways to improve reading curricula. This work will enhance Professor Hazeltine's teaching.

Is work accomplished on PDA consistent with original PDA? Yes. However, one of the manuscripts described in the proposal was not completed during the PDA, but another manuscript not listed in the proposal was completed.

**HERMAN, TED, PROFESSOR, COMPUTER SCIENCE, SPRING SEMESTER**

The basic research component of the PDA was collaboration with researchers at the University of Paris (UPMC) on theoretical problems of distributed computing. The applied research was related to sensor network technology in support of the Computational Epidemiology Group at the University of Iowa. A highlight of the educational material part of the PDA effort was the acceptance of a textbook proposal and some supporting online, interactive educational tools.

Is work accomplished on PDA consistent with original PDA? Yes. However, part of the work to develop a tool primarily for sensor network education and development was not completed during the PDA period. In keeping with the original proposal, Professor Herman developed a different educational tool. Other differences include collaborations on distributed computing research and partial development of a new sensor network platform which will be used in applications for UIHC research.

**KOWAL, REBEKAH J., ASSOCIATE PROFESSOR, DANCE, SPRING SEMESTER**

Professor Kowal conducted work on two projects. The first, a monograph, investigates the import of postwar international dance performance on an increasingly global American stage, examining its impact both on the formation of U.S. concert dance forms, and in the larger contexts of domestic race relations, state and citizen involvement in global anti-colonialist movements, and U.S. foreign relations, immigration, and trade policies. She submitted one essay for publication, completed a chapter, and drafted two others, excerpts of which she presented at two conferences. She also received a UI Arts and Humanities Initiative Grant and submitted a competitive external fellowship application. The second, a co-edited volume, advances the field of dance and politics in assembling pioneering work contextualized by analytic essays. With two co-editors, she submitted a prospectus for editorial review. In total, these activities contributed to her field and broadened her knowledge base for course development and teaching.

Is work accomplished on PDA consistent with original PDA? Yes. Only one article stemming from the project has been accepted for publication. Professor Kowal has completed one chapter for the book manuscript and has substantial drafts of two others. She plans to complete both chapters in Spring 2012 and will likely submit excerpts of both to peer reviewed journals as articles for publication.

**LAWRENCE, ERIKA, ASSOCIATE PROFESSOR, PSYCHOLOGY, FALL SEMESTER**

Professor Lawrence developed and began testing a new evidence based group intervention to treat male domestic violence offenders who were court-mandated to Iowa's Batterers Education Program. During the PDA, she established collaborations with key Iowa agencies, completed three books needed to conduct the intervention, and completed two feasibility/pilot studies testing the new intervention. Lawrence also published seven articles and chapters, submitted three articles for review, and made substantial progress on 10 more articles. She completed/is completing three grant applications for external funding, presented her work at national conferences four times, and was invited to give a 5<sup>th</sup> talk based on this work. These activities and products will promote her research efforts in translational research targeting intimate partner violence and have refreshed her teaching skills with regard to clinical research and clinical trials.

Is work accomplished on PDA consistent with original PDA? Yes. Professor Lawrence received a grant from the U.S. Department of Justice for the following project: *Curriculum Development for the Iowa Department of Corrections Batterers Education Program*. She is co-principal investigator for the two-year project which was funded for \$900,000.

**LECUONA, RENE J., PROFESSOR, MUSIC, FALL SEMESTER**

Professor Lecuona learned and performed new piano pieces written for her by Erin Gee and Lawrence Fritts and did preliminary work on a piece written for her by James Correa. The three pieces will become part of a CD recording of new solo piano music. For the execution of Gee's Mouthpiece XIV, Lecuona added vocal techniques to her artistic skill set. She presented solo piano recitals of standard repertoire along with Gee's Mouthpiece XIV and Fritts' Imprimitivity at five South American universities. She presented piano master classes (the traditional term for music teaching seminars) in Brazil and Colombia, teaching selected undergraduate and graduate piano majors at each of the six sponsoring universities. As a result of her activities in South America, Lecuona is in contact with students who are interested in studies at the

University of Iowa. The pieces composed for her have been incorporated into the curriculum for the graduate piano course Piano Literature II (025:297).

Is work accomplished on PDA consistent with original PDA? Yes.

**LIN, CHING-LONG, PROFESSOR, MECHANICAL ENGINEERING, SPRING SEMESTER**

Professor Lin built a multi-scale lung model to examine the mechanical force resulting from the interactions between airflow and tissue in the human lungs, and its role in the distribution and progression of lung disease at the cellular level. He established collaboration with two professors at National Taiwan University in the area of lung image registration, submitted jointly a paper for publication, gave eight invited talks, and is organizing a special journal issue on modeling of biological systems. He also initiated collaboration with Taiwan's National Center for High-Performance Computing and established a three-dimensional visualization laboratory, which will benefit three courses offered in the fall semester 2011.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Lutgendorf researched the process by which tea—in the form of the sweetened, milky beverage called “chai,” a drink now closely associated with Indian life and tastes—was introduced to the subcontinent and assiduously promoted by the British in late colonial times, and then by Indian entrepreneurs after Independence in 1947, to gradually acquire the status of a “national drink.” He conducted archival research in Kolkata, and fieldwork and interviews at ten sites throughout India, collecting visual and textual documentation and oral histories. He began developing this material into a planned book, wrote an essay now in press, and delivered eleven invited lectures at institutions and conferences in India and Australia.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Dr. Lutgendorf studied the relationship of psychological factors such as social support, depression, and stress with progression of ovarian cancer. Her work under the PDA/Faculty Scholar Award has shown that stress hormones can promote cancer growth and that potentially harmful changes in tumor gene expression are seen among ovarian cancer patients experiencing distress in the absence of social support. Recently, her work has also shown links between social support and survival in ovarian cancer patients. Training received during the PDA is promoting her research to develop a broader understanding of pathways by which stress can influence cancer growth. Graduate and undergraduate students are involved in all phases of this research, and research results are incorporated into undergraduate and graduate teaching in Clinical and Health Psychology. Her research program also has potentially important health implications for the people of Iowa.

Is work accomplished on PDA consistent with original PDA? Yes.

**MACKEY, MICHAEL A., ASSOCIATE PROFESSOR, BIOMEDICAL ENGINEERING, FALL SEMESTER**

During his PDA, Professor Mackey collected preliminary data needed for a grant application that will significantly enhance the capabilities offered by the Large Scale Digital Cell Analysis System (LSDCAS), a live cell imaging project developed over recent years in the Colleges of

Engineering and Medicine at the University of Iowa. The PDA also allowed him to bring three manuscripts to near completion and prepare an R01 grant application that will be submitted to the National Institutes of Health within 6 months. In addition, the PDA facilitated several important new capabilities to the LSDCAS software, and will likely result in increased funding for undergraduate, graduate, and post-graduate student training at the University.

Is work accomplished on PDA consistent with original PDA? Yes.

**MCGREGOR, KARLA K., PROFESSOR, COMMUNICATION SCIENCES & DISORDERS, SPRING SEMESTER**

Professor McGregor used the Professional Development Assignment to advance research on word learning in typical learners and learners with language impairments. Specifically she submitted grant proposals to the National Institutes of Health and the Department of Education; she and her students or colleagues submitted seven papers for review at scholarly journals; she presented papers at one national and one international conference; she analyzed a new data set with colleagues at the University of Sydney; and she outlined a new book on word learning for a lay audience. She continued to mentor her doctoral students and to run her lab where the current project concerns the role of sleep in memory for newly learned words. Understanding word learning is an important objective in that vocabulary knowledge contributes to (or detracts from) oral expression, reading, and writing and, ultimately, to the academic and professional success of current students and future citizens of Iowa.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Kembrew McLeod's long-term research program focuses on ways Intellectual Property considerations impinge on scholars and artists. In his final PDA/Faculty Scholar year, he completed a book and documentary project on the subject. They examine 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 was a book titled *Creative License: The Law and Culture of Digital Sampling*.

Is work accomplished on PDA consistent with original PDA? Yes. Professor McLeod received a grant for \$75,000 from the Ford Foundation for an extensive education outreach campaign for his books and documentary. During his PDA, he was able to produce more than anticipated, including publishing two books on the prestigious Duke University Press. The PDA also allowed him to complete production on a documentary that aired on two consecutive seasons of PBS's Emmy Award winning documentary program, *Independent Lens*. His film, *Copyright Criminals* was nominated for an Emmy by PBS. Professor McLeod worked with PBS to develop two free teaching resources that accompany the film and developed an extensive teaching and discussion guide. This full curriculum meets No Child Left Behind testing requirements, ensuring that it will be widely used in American schools.

**MOONEY, BARBARA B., ASSOCIATE PROFESSOR, ART & ART HISTORY, FALL SEMESTER**

Professor Mooney used her Professional Development Assignment semester to conduct extensive research for a book project on George P. Stauduhar (1864-1928), an architect whose churches had a significant impact on the cultural landscape of small towns in the Midwest. Mooney made numerous trips to the collection of The Stauduhar Papers at the University of Illinois in order to study the original drawings and specifications for his designs. She also traveled to, studied, and photographed more than 60 of Stauduhar's churches in Iowa, Illinois, Ohio, Indiana, Minnesota, North Dakota, and Kansas. Mooney has written a preliminary book prospectus on Stauduhar, has had a paper on his churches accepted at an international conference on architectural history, and has completed a substantial portion of a book chapter. The archival and fieldwork experience she gained will serve as the basis for developing a new course, *The Historic Preservation of the Built Environment: Theory and Practice*.

Is work accomplished on PDA consistent with original PDA? Yes. Her evidence led her to focus on prairie church architecture from 1890-1930 for the proposed book.

**NOONAN, MARY C., ASSOCIATE PROFESSOR, SOCIOLOGY, SPRING SEMESTER**

Professor Noonan examined gender differences in lawyers' pay and partnership rates at mid-career over the past twenty years, covering the period from the late 1980s to the mid 2000s. Women first entered the legal field in large numbers in the 1970s. The expectation in the 1970s was that as women integrated the profession they would eventually achieve parity with men. The extent to which this has been realized is an open question, however. Using a unique data set of University of Michigan Law School graduates, Noonan documented gender differences in earnings and partnership rates at the mid-career point (i.e., 15 years after graduation). The project has resulted in two research papers, one focusing on gender differences over time and one examining the differences in earnings for mothers and for childless women. Noonan has incorporated her research into her courses on gender, work, and the family.

Is work accomplished on PDA consistent with original PDA? Yes. However, she also worked on additional projects beyond what she had proposed.

**OSIEL, MARK J., PROFESSOR, LAW, FALL SEMESTER**

During his PDA, Professor Osiel was affiliated with the American Bar Foundation and Northwestern University Law School, both in Chicago. He began research on a new book project and produced a book proposal that has recently been accepted by Cambridge University Press for publication in 2012. Like his five prior books, this too concerns responses to mass atrocity. This one focuses on non-legal responses. He gave several presentations on this research during the fall semester, at Hebrew University, University of Paris (Sorbonne), American Bar Foundation, University of Georgia, Florida State University, and Arizona State University.

Is work accomplished on PDA consistent with original PDA? Yes.

**PIGGE, CHRIS, ASSOCIATE PROFESSOR, CHEMISTRY, SPRING SEMESTER**

Professor Pigge carried out research in the areas of bio-organic/organic and supramolecular synthesis. As part of a research collaboration with other UI researchers in the College of Medicine he helped initiate a project aimed at developing new radioimaging agents for metastatic melanoma. He also investigated new synthetic routes to medicinally relevant natural

products and organic semi-conducting materials. He published five papers on these topics and submitted one external grant proposal. These activities increased his breadth and depth of knowledge in organic and medicinal chemistry and refreshed his teaching skills in these areas.

Is work accomplished on PDA consistent with original PDA? Yes. He designed novel synthetic strategies based on the concept of dearomatization that can be applied to the total synthesis of biologically active natural projects. He also made strides to implement these strategies, and this work continues in his laboratory. In addition to the project described in the PDA proposal, Professor Pigge was able to advance a new collaborative research effort with a group in the UI Carver College of Medicine. This project involved the design and synthesis of new radio-pharmaceuticals for diagnosis and treatment of cancer. Proof of principal studies validating his team's approach is nearing completion and a portion of this work has been recently published.

**POREMB, AMY, ASSOCIATE PROFESSOR, PSYCHOLOGY, SPRING SEMESTER**

Sensory input to our brains, i.e., what we see, hear, feel, smell, and touch, is critical to everything we accomplish, feel, and enjoy as human beings. We need to identify where, and how, in the brain these types of information are processed to help us restore or boost these crucial functions. Professor Poremba's current projects identified a brain region involved in encoding whole sound objects rather than individual frequencies. Neurons in this region fire during recognition of particular sounds while other brain regions participate in remembering these unique sounds. To convey these findings, three journal articles were submitted, a book chapter was written, and a grant was prepped for submission this fall. Findings will be disseminated in classroom teaching and seminars with the results informing the students' educational paths, while adding to the basic medical knowledge necessary for improvement or repair of brain functioning as it relates to hearing and communication.

Is work accomplished on PDA consistent with original PDA? Yes. Professor Poremba focused on the same research questions but did not finish the data set originally proposed; instead, she focused on finished analyses from four other projects for data collected at the University of Iowa rather than the old data collected at the NIMH. She also had a graduate student leave the program and needed to be at the University to oversee data collection rather than traveling back and forth to another site. These submitted research papers are key to grant renewal submission.

**SAMUELSON, LARISSA K., ASSOCIATE PROFESSOR, PSYCHOLOGY, FALL SEMESTER**

Professor Samuelson proposed a formal model of vocabulary development that integrates across individual instances of word learning in multiple tasks to build a lexicon. The model is based on her recent Dynamic Neural Field (DNF) model of noun generalization decisions and changes in those decisions over development (Samuelson et al., 2009). Critically, this DNF provides neural grounding that links brain and behavior in a way that can generate precise behavioral predictions and allow for the integration of the multiple systems involved in early word learning, including encoding of the word, selection of objects in the task space, word learning in context, and category formation. During her PDA, Professor Samuelson focused on this grounding in neural processes by: 1) furthering her understanding of neural dynamics, 2) furthering her training in the use of Near Infrared Spectroscopy (a neuroimaging technique), and 3) completing four manuscripts.

Is work accomplished on PDA consistent with original PDA? Yes.

**SANDLER, LEONARD, PROFESSOR, LAW, FALL SEMESTER**

Professor Sandler conducted legal research and fieldwork, participated in multi-disciplinary projects in the U.S. and Ireland, made presentations to government officials, educators, professionals, nonprofits and grassroots organizations, and published an updated Universal Design & Green Home Survey Checklist in English and Spanish to encourage construction and funding of affordable, sustainable, multigenerational homes. He also began assisting the Global Universal Design in devising a third-party ratings and certification process (similar to the LEED energy program) to guide public and private sector entities in the creation of barrier-free non-residential facilities. Sandler's activities were intended to address some of the challenges that Iowans and people in other parts of the world face when trying to secure affordable, sustainable homes and facilities they can use throughout their lifetime, regardless of age, injury, illness or disability.

Is work accomplished on PDA consistent with original PDA? Yes. However, Professor Sandler's leave was deferred for a year after he sustained a severe injury. As a result, he released and distributed in alternate formats an updated Universal Design and Green Home survey checklist. Professor Sandler expanded the scope of his PDA to include several additional design consultations, presentations, and other activities in Iowa relating to universal design and historic preservation, Global Universal Design Commission standards, ADA for architects, and other issues central to his research and service to Iowa.

**SCULLION, ROSEMARIE, ASSOCIATE PROFESSOR, FRENCH & ITALIAN, SPRING SEMESTER**

Professor Scullion devoted time provided by the PDA to examining archives held in four research centers in Paris, France, advancing a book-length study of the cultural history of post-World War II France. This study focuses on the censorship regime imposed on all films made and publicly screened in France between 1945 and 1975. It also considers the ways in which segments of the French press and leading publishing houses defied the onerous restrictions that successive French governments placed on freedom of expression in the early decades of the Cold War and during the country's decolonization wars in Indochina and Algeria (1946-62). The PDA allowed Professor Scullion to conduct the archival documentation on which she is grounding her study of cultural expression and government censorship in France of the immediate post-World War II era.

Is work accomplished on PDA consistent with original PDA? Yes.

**SHEN, HELEN, ASSOCIATE PROFESSOR, ASIAN & SLAVIC LANGUAGES & LITERATURES, FALL SEMESTER**

Associate Professor Helen H. Shen completed an academic book project which addresses adult Chinese as a second language (hereafter L2) vocabulary acquisition and instruction from the perspectives of both theory and practice. It will be the first book in the field that specializes in L2 Chinese adult literacy issues in the classroom environment. It is expected that the book will meet increasing demands for research on the difficult topic of the slow development of Chinese vocabulary among American adult learners, and on the issues of effective instructional models and methodologies in vocabulary instruction in the field of Chinese education. This book will be used for graduate courses in L2 Chinese acquisition/instruction and as a reference book by college and high school instructors who are teaching the Chinese language both in the state of Iowa and nationwide; it will be highly welcomed by scholars in the area of L2 literacy development.

Is work accomplished on PDA consistent with original PDA? Yes.

**\*SPENCER, JOHN P., PROFESSOR, PSYCHOLOGY, FALL SEMESTER**

The purpose of the PDA was to complete a two-volume book that summarizes this theoretical approach (vol. 1) and provide a hands-on tutorial for developing neural network models within this framework (vol. 2). Three goals were accomplished during the PDA. First, my co-author and I completed a detailed, 15-page outline of each chapter in vol. 1, and an outline of each edited chapter in vol. 2 which was circulated to the contributing authors. Both books are on target for completion by early 2012. 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. Second, I worked with colleagues at the Athinoula A. Martinos Center for Biomedical Imaging at Massachusetts General Hospital/Harvard to develop new ways to use neuroimaging technologies to test Dynamic Neural Field models. I gave three invited talks and completed work on seven papers.

Is work accomplished on PDA consistent with original PDA? Yes, although Professor Spencer shifted the location of his PDA from New York to Boston. This allowed him to achieve an additional goal during the PDA – establishing a collaboration with Dr. Davis Boas at MGM/Harvard on child neuroimaging. The second difference is that the publication schedule for his two volume work was shifted. The new plan is to publish volume two first. He made excellent progress on this volume during the PDA. He also completed a detailed outline for the content on the originally proposed volume one.

**STENSVAAAG, JOHN-MARK, PROFESSOR, LAW, SPRING SEMESTER**

The Prevention of Significant Deterioration (PSD) program of the Clean Air Act is an intricate regimen to protect air quality in areas complying with national ambient air quality standards (attainment areas), by imposing elaborate conditions on and requiring permits for major emitting facilities. Prior to his PDA, Professor Stensvaag had published four articles exploring legal and policy choices made by Federal and State governments in fashioning the area classification, permit trigger, baseline, increment, and ceiling elements of the program. During his PDA, he completed and had accepted for publication three new articles exploring the best available control technology requirement. Because all of Iowa is classified as attainment for one or more air pollutants, these new articles will provide a valuable resource for the Iowa Department of Natural Resources and for PSD permit applicants in the State, and will enhance Professor Stensvaag's teaching of Environmental Law.

Is work accomplished on PDA consistent with original PDA? Yes. It advanced to a different stage of the project and Professor Stensvaag published more articles than anticipated.

**SWENSEN, COLE, PROFESSOR, CREATIVE WRITING, SPRING SEMESTER**

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

“Ekphrasis: Writing the Visual Arts.” She plans to publish the poems individually in journals and collectively as a book.

Is work accomplished on PDA consistent with original PDA? Yes.

**TANG, WENFANG, PROFESSOR, POLITICAL SCIENCE, SPRING SEMESTER**

Professor Tang carried out four projects during the semester. He guest-edited a special issue of the *Journal of Political Communication* which was later published in August 2011. He completed a monographic study on religion and politics in China which is currently under review by a publisher. He wrote a paper on the internet and social revolution in China which he presented at the American Political Science Association annual meeting in September 2011. Finally, he was able to complete 7 of the 8 planned chapters of a book manuscript on authoritarian regime stability in China.

Is work accomplished on PDA consistent with original PDA? Yes.

**THELANDER, KRISTIN, PROFESSOR, MUSIC, HALF TIME FOR ONE YEAR**

Professor Thelander received a 50% PDA for the 2010-2011 academic year, during which she continued with her responsibilities as director of planning for the new music building, departmental service, and teaching doctoral seminars (25:335 and 25:340) during the spring semester. Her work for the PDA included approximately 35 performances and over 100 rehearsals, two presentations, significant professional service (National Association of Schools of Music, etc.), and substantial preparation for a new class, a journal article, and a critical edition of a 19<sup>th</sup> century horn concerto.

Is work accomplished on PDA consistent with original PDA? Yes. She spent more time than anticipated on creative work activities.

**TIERNEY, LUKE, PROFESSOR, STATISTICS & ACTUARIAL SCIENCE, HALF TIME FOR ONE YEAR**

Effective statistical methodology made available through statistical software is critical to the ability of researchers to make maximal use of experimental and observational data, and for the ability of instructors to teach good research practices. Professor Tierney's research during this PDA explored new approaches for the design of statistical software to take advantage of modern high-performance computational resources. Particular areas examined include the effective use of parallel computing and compilation for statistical languages. A pilot implementation of a compiler for the major open source statistical language R was developed and released. In addition, several core procedures were modified to take advantage of multi-core processors. Several papers describing these advances are in preparation, and this work will serve as the basis for funding applications submitted during the Fall.

Is work accomplished on PDA consistent with original PDA? Yes.

**TSE, KENNETH T., ASSOCIATE PROFESSOR, MUSIC, SPRING SEMESTER**

In recent years the development of saxophone education in Asia has seen a tremendous growth. The number of students studying the instrument formally is at a record high. For the past decade Professor Tse has had the honor to visit and participate in many musical events in China, Japan, Thailand, Malaysia, and other locations in Asia and has made some important connections. The primary goal for his PDA was to perform and give master classes at key music conservatories around Asia and to especially further his ties with the Chinese colleagues

and students, which he accomplished. He gave concerts and clinics in China and in nearby countries of Korea, Taiwan, and Japan to solidify his Pan-Asian connections. For musicians and other performing artists, visibility is of utmost importance in promoting one's art as well as recruiting students. This PDA has already benefited his status in the profession, recruitment effort and teaching at the University of Iowa.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Normal aging alters visual attention. Aging affects the extraction of visual information from the environment. Professor Vecera investigated the operation of attention in both normal and accelerated aging (e.g., mild cognitive impairment). Research from Fall 2010 demonstrated 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.

Is work accomplished on PDA consistent with original PDA? Yes. However, the overall goal of Professor Vecera's PDA was to access visual operations in older individuals, including those aging normally, those with accelerated aging, and those with Alzheimer's Disease (AD). His team was unable to recruit patients with AD, but did successfully recruit participants who were aging normally and those with mild cognitive impairment. He received a grant for \$75,000 as a result of his work on professional development assignment.

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

Professor White completed a series of five large-scale paintings on canvas and many works on paper, as well as working on three Plexiglas installations. In her paintings she explored a wide range of new materials that are currently being used in one of the new courses she is teaching in painting, utilizing slow drying acrylics instead of the more toxic oil paints. Her recent works were exhibited this past fall at a number of galleries nationally and she completed a large-scale permanent commission in Los Angeles. In 2011, she will be exhibiting at the John Davis Gallery in Hudson, NY. Professor White also traveled through Spain and Morocco, allowing her the opportunity to make gallery contacts and collect visual resources for her painting. During the winter term she taught a course in India, "Art and Architecture of North India," allowing her the opportunity to collect more visual resources for her painting and make new contacts for exhibitions and future internships for her students.

Is work accomplished on PDA consistent with original PDA? Yes.

**WIEMER, DAVID F., PROFESSOR, CHEMISTRY, FULL YEAR**

Professor Wiemer conducted research on design and synthesis of potential anti-cancer agents. His efforts included synthesis of natural compounds with activity against brain tumors, as well as design and synthesis of organophosphorus compounds that inhibit specific enzymes of isoprenoid biosynthesis and may have value in treatment of leukemia and myeloma. He published four papers, has four more under review, initiated two new collaborative research efforts, secured a new external grant, and submitted three other grant proposals that are still

pending. His research results will be included in chemistry courses at both the undergraduate (Organic Lab) and graduate (Advanced Organic Synthesis) levels.

Is work accomplished on PDA consistent with original PDA? Yes. In addition, Professor Wiemer received a grant from the Children's Tumor Foundation for \$50,000.

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

Since 2009 SAAH Intermedia Program Head Jon Winet has directed The University of Iowa UNESCO City of Literature Mobile Application Development Team, an interdisciplinary group of researchers that developed "City of Lit," an app in concert with Iowa City's UNESCO City of Literature award. The app launched in October 2010. During research travel, Jon gave presentations on New Media and civic engagement in England and Croatia, and at the UNESCO Creative Cities Network 2010 Shenzhen International Conference. As part of his community development research he curated three exhibitions for the Capital City Arts Initiative, Carson City, NV. He also produced online projects on the 2010 FIFA World Cup. His projects investigated the potential of emerging technologies for creative practice and civic engagement while addressing social and cultural issues. His research resulted in new classes, and has contributed to the University of Iowa's public digital humanities scholarship and teaching.

Is work accomplished on PDA consistent with original PDA? Yes.

**WING, ADRIEN K, PROFESSOR, LAW, FALL SEMESTER**

Professor Adrien Wing completed two articles which were accepted for publication. Both involved Muslim women's human rights. Women wearing Islamic dress face the most discrimination. There is a need for international and national laws to enhance their protection. Additionally, she conducted research and did a first rough draft of several chapters of a book on international and national legal strategies to heal group spirit injuries. Many groups around the world suffer from physical and emotional damage as a result of racism, sexism, colonialism, and other isms. Wing has termed this harm "spirit injury." Among the solutions discussed are national and international court cases, constitution making, affirmative action, reparations, and truth commissions. She did six scholarly presentations and completed four other small projects. The work will be incorporated into lectures for her courses *International Human Rights and Law in the Muslim World*.

Is work accomplished on PDA consistent with original PDA? Yes.

IOWA STATE UNIVERSITY

**BAILEY, MICHAEL, ASSOCIATE PROFESSOR, HISTORY, 8 YEARS OF SERVICE; FULL YEAR**

Professor Bailey spent his PDA largely at the Institute for Research in the Humanities, University of Wisconsin-Madison where he completed his book manuscript, *Superstition in the Late Middle Ages*, now under review at Cornell University Press. In addition, he wrote an article for inclusion in the Cambridge History of Magic and Witchcraft (Cambridge University Press), and began initial research for a new book project on contemporary superstition, as well as a future project on the history of hypocrisy, broad themes related to his area of expertise. His research advances, both in terms of research and pedagogy, inform his teaching at all levels of the curriculum.

Is work accomplished on PDA consistent with original PDA? Yes.

**BASU, SAMIK, ASSOCIATE PROFESSOR, COMPUTER SCIENCE, 8 YEARS OF SERVICE; FALL SEMESTER**

Professor Basu spent the fall 2010 semester at the University of California, Santa Barbara, working with a world authority on a software engineering project directed toward software verification and program analysis. As a result of this collaboration, he and his collaborators have identified a subclass of communicating systems that can be verified effectively in practice. This paves the way to develop verifiable systems. The solutions to this research problem open new avenues for incorporating state-of-the-art verification techniques into both undergraduate and graduate courses that allow for hands-on experimentation by students in software engineering. His PDA resulted in publication of one peer-reviewed paper and two papers accepted and forthcoming. He was awarded, in collaboration with his UCSB colleague, an NSF grant for \$493,918 (\$164,966 to ISU).

Is work accomplished on PDA consistent with original PDA? Yes.

**CARAGEA, PETRUTA, ASSOCIATE PROFESSOR, STATISTICS; 8 YEARS OF SERVICE, FALL SEMESTER**

Professor Caragea visited the University of California in both Santa Barbara and Santa Cruz. He started collaborations with international leaders, which led to an invitation to present at the International Statistical Symposium in August 2011. This PDA was valuable to Professor Caragea as well as Iowa State University because the new connections with lead statisticians and scientists fosters professional development, improves the quality of teaching, raises student interest, and increases the ability to help agronomists and scientists in the biological sciences with quantitative analysis. One doctoral student is researching and writing on topics related to the recent collaborations. Although a grant submitted to USDA was not funded, it received good feedback, and Professor Caragea will continue to explore possibilities for funding for this research.

Is work accomplished on PDA consistent with original PDA? Yes.

**CHAPELLE, CAROL, PROFESSOR, ENGLISH, 26 YEARS OF SERVICE, FULL YEAR**

Professor Chapelle spent time at Université Laval in Quebec City, Canada during the PDA period to complete a book monograph now titled: *A cross-disciplinary study of Quebecois cultural content in French Language teaching and learning*. The book manuscript is currently under review and targeted for publication in 2013. She completed three additional papers all of

which are forthcoming. The research she produced increases understanding of culture teaching in foreign language teaching, which is important for increasing intercultural competence of students. This aids in instruction of English as a Second Language (ESL), international business, and the advancement of cross-cultural understanding. Students in ISU undergraduate and graduate courses in ESL will benefit from Professor Chapelle's enhanced expertise. This PDA has resulted in a strengthened relationship with Université Laval where ISU has a student exchange program. Finally, Professor Chapelle participated in a proposal that resulted in a \$1.2 million grant from the U.S. Department of State for training English language professionals and materials development for English language learners.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Clark spent time at the Institute for Wetland and Waterfowl Research (IWWR) in Winnipeg and at the University of Manitoba, Canada. He focused his attention on data generated from two large-scale, long-term projects, both animal population and landscape ecology, with spatial statistical analyses. He completed analysis and wrote papers on spatial ecology of predator prey systems. He studied and wrote about population distribution and genetic patterns that arise from habitat selection and spatially-explicit movement behaviors. He built collaborative research projects with biologists at IWWR as well as with faculty and grad students at ISU, published one manuscript, completed and submitted for review four others, as well as furthered drafts of three other collaborative manuscripts. Three accomplishments to highlight: completion of unique qualitative analyses regarding life history evolution brings long-term collaboration with Dr. Bronikowski to fruition; the development of skills on special statistical analyses with IWWR colleagues, which he can incorporate into research projects and his courses; publication of "Principles of Landscape Ecology" opened opportunities for teaching and discussing with online authors and reviewers, which will have long-lasting impact on his undergraduate and graduate teaching. He is now positioned to focus on the working relationship with the Iowa Department of Natural Resources and completing a book on bobcats.

Is work accomplished on PDA consistent with original PDA? Yes.

**D'ALESSANDRO, DOMENIC, PROFESSOR, MATHEMATICS, 12 YEARS OF SERVICE,  
FALL SEMESTER**

Professor D'Alessandro spent time at the University of Minnesota working with an international authority on topological quantum field theory. This new area in mathematics combines algebraic geometry and string theory. Through his interactions with faculty at UM and his participation in a course on Algebraic Topology, Professor D'Alessandro has developed new directions in his research which deals with the control of quantum mechanical systems. This research complements other areas of expertise in the department and is relevant to his students. He produced two journal papers, which were conditionally accepted. A collaborative research proposal submitted to the Department of Defense during this period has been funded and will provide Professor D'Alessandro with \$400,000 over a period of five years.

Is work accomplished on PDA consistent with original PDA? Yes.

**DAVIS, RADFORD, ASSOCIATE PROFESSOR, VETERINARY MICROBIOLOGY AND PREVENTIVE MEDICINE, 13 YEARS OF SERVICE, FALL SEMESTER**

Professor Davis enhanced his knowledge in the areas of public health while strengthening the link between the United Nations' Food and Agriculture Organization (FAO) and universities during this Professional Development Assignment. He contributed to the development of disease prioritization methodology and tools, explored synergies between community animal and community health delivery systems and proposed options for improvement, and investigated the role of trade in disease spread and their socio-economic impacts while working at the FAO. Dr. Davis has taken an active role in promoting the "One Health, One Medicine Program" in the College of Veterinary Medicine; the program is an international mission to bring veterinary and human medicine closer to solve important public health issues of today. Professor Davis reports that the time working for FAO was beneficial to his students, the College of Veterinary Medicine and to Iowa State University. As part of the PDA, he was able to position Iowa State University as an exclusive leader in veterinary and animal health training in Sierra Leone; develop a relationship with the Vice Chancellor of Njala University, send two students to Sierra Leone in June 2011; connect with veterinary groups in Nepal and apply for a USAID grant to address livestock and climate change. As a result of the PDA, he was invited to speak at the Institute for Science in Global Policy conference in October 2010.

Is work accomplished on PDA consistent with original PDA? Yes.

**DIMITROVA, DANIELA, ASSOCIATE PROFESSOR, GREENLEE SCHOOL OF JOURNALISM AND MASS COMMUNICATION, 8 YEARS OF SERVICE; FULL YEAR**

Professor Dimitrova traveled to the Mid-Sweden University and Sofia University in Bulgaria, where she extended research in cross-cultural media framing, with a focus on election news. She was in Sundsvall, Sweden, during the Swedish parliamentary election in September 2010. While in Sofia, Bulgaria, Professor Dimitrova had access to the national library "St. Cyril and Methodius," which is the only library that holds back issues of all newspapers published in Bulgaria. This field research, which included manual review of six national newspapers and digital images of hundreds of articles of interest, resulted in a unique dataset, which will be used for additional research investigations. As a result of the PDA research and renewed relationships/collaborations, Professor Dimitrova co-edited one book, wrote two research articles, created a teaching innovation, submitted two manuscripts for publication and three manuscripts in progress. In both Sweden and Bulgaria, Professor Dimitrova met with journalism students and presented guest lectures to journalism classes. Also, she was a featured guest on a national radio program, which increased the visibility of both her research and of Iowa State University. Through the PDA experience, Professor Dimitrova enriched the general body of knowledge about framing theory, and the area of cross-cultural media framing of political events, which will provide a base for testing theory across countries. As a result of this PDA, Professor Dimitrova was awarded an IREX research grant for \$6,000, titled "The Relationship between Media and Politics in Post-Communist Bulgaria." (IREX is a nonprofit organization funded primarily by the U.S. Department of State Title XIII Program.)

Is work accomplished on PDA consistent with original PDA? Yes.

**FEI, SHUI-ZHANG, ASSOCIATE PROFESSOR, HORTICULTURE, 10 YEARS OF SERVICE; SPRING AND SUMMER SEMESTERS**

During this professional development assignment at the Plant Gene Expression Center, USDA in Berkeley, California, Professor Shui-zhang worked with researchers on self-incompatibility

(SI) in *Miscanthus sinensis*. (*Miscanthus*, along with switchgrass, is an ideal biomass producer for renewable energy production because of its high yield and low input need.) The training he received in plant reproductive biology helped develop needed skills to expand his research into biomass crops. He networked with researchers on genetics and breeding of biomass crops during the Joint Genome institutes Annual Users Meeting. Of particular value was his work with visiting professor, Dr. Jiang, from Hunan Ag University, China. The skills developed will have a lasting impact on germplasm enhancement and fundamental research in biomass crops. Dr. Fei has one manuscript in preparation on *miscanthus sinensis*; he established a *miscanthus sinensis* population at ISU, which has led to a collaborative genomic project with a colleague in the Agronomy Department; he presented a poster on biorenewable energy for a retreat. A grant proposal submitted to Department of Energy's Joint Genome Institute is under review. The new skills and collaborations developed through this PDA will enhance his ability to contribute to the study of biorenewable energy at ISU and in the state of Iowa. Also, Dr. Fei's students will benefit from his enhanced knowledge of new directions in the study of biomass sources.

Is work accomplished on PDA consistent with original PDA? Yes.

**FIORE, ANN MARIE, PROFESSOR, APPAREL, EDUCATIONAL STUDIES AND HOSPITALITY MANAGEMENT, 22 YEARS OF SERVICE, FALL SEMESTER**

Professor Fiore traveled to Wuhan University of Science and Engineering (China) as part of her three-year Chutian Scholar appointment (2009-2011). She offered a new graduate course to WU students on statistical tests and empirical research methods, as well as branding aesthetics, and experiential marketing, new topics in Chinese universities. She collected data for two cross-cultural research studies on these topics, which she is carrying out with two ISU graduate students for publication. A result of this PDA was her invitation to participate in their International Academic Forum of Fashion Culture as a commentator and presenter. She has made progress on data analysis for Rural Renaissance Community Index (RRCI) manuscripts still in preparation, and has co-developed and submitted a rural economic development grant proposal (pending). She developed and has offered a distance education course for undergraduates on Aesthetics of Everyday Experience. She completed a co-authored forecasting textbook which is in the galley proof stage. Finally, she is planning a field study course in China for ISU students in 2012.

Is work accomplished on PDA consistent with original PDA? Yes.

**FLETCHER, CYNTHIA, PROFESSOR, HUMAN DEVELOPMENT AND FAMILY STUDIES, 35 YEARS OF SERVICE; FALL AND SPRING SEMESTERS**

Professor Fletcher spent time at the University of Wisconsin-Madison, University of Vermont, and the University of New Hampshire working alongside researchers who have expertise in qualitative and quantitative research methods to conduct engaged scholarship on rural communities. Her research assesses changes in the well-being of rural Iowa families and communities that have been part of a longitudinal study of rural poverty. The results of these new research approaches will inform ISU Extension programs and help Iowa communities identify effective strategies to address rural poverty. Interactions with faculty at the University of Wisconsin increased her awareness of grant opportunities in her discipline. She submitted two research proposals (totaling \$14,408 and \$634,875), which are pending. She authored a white paper and completed a manuscript draft.

Is work accomplished on PDA consistent with original PDA? Yes.

**FOX, RODNEY, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 13 YEARS OF SERVICE, FALL AND SPRING SEMESTERS**

Professor Fox received two research contracts totaling over \$500,000 and completed the majority of a new textbook that helps to explain the flows of gases and modeling of gases under various flow criteria. His work on an international stage serves to keep Iowa State University at the forefront of national chemical and biological engineering and serves to attract the best and the brightest of graduate students.

Is work accomplished on PDA consistent with original PDA? Yes.

**GOGGI, ALCIRA SUSANAI, ASSOCIATE PROFESSOR, AGRONOMY; 11 YEARS OF SERVICE; SPRING SEMESTER**

During this professional development assignment at the United Nations' Food and Agriculture Organization (FAO) in Rome, Italy, and at the Organisation for Economic Co-Operation and Development (OECD) in Paris, France, Professor Goggi collaborated with scholars working on agriculture and climate change. She enhanced her research program on soybean genome fluidity and on the effect of environmental stress on seed quality, which has global ramifications for seed systems. The effect of climate change on plants and the capacity of the genome to reorganize partially as the result of environmental stress could allow new opportunities for soybean adaptation and variety development. She incorporated this seed system approach in her classroom teaching as well as in her research. Her PDA resulted in two manuscripts accepted for publication in disciplinary journals; one manuscript was submitted to the FAO and one manuscript is in preparation. She presented at the FAO-wide research seminar. Stakeholders at many levels – department, college, university and seed industry – benefit from her research and teaching on seed/environmental issues and enhanced skills for funding opportunities in seed quality and environmental stress research as they relate to climate change.

Is work accomplished on PDA consistent with original PDA? Yes.

**HARRIS, MARY, ADJUNCT ASSISTANT PROFESSOR, NATURAL RESOURCE ECOLOGY AND MANAGEMENT, 6 YEARS OF SERVICE, FULL YEAR**

Professor Harris spent her PDA at the University of New England (Australia) to study pollination services at local scales in intact and fragmented ecosystems as a key for understanding the benefits of vegetation diversity in more extensively fragmented landscapes, such as that in which produce crops are grown in Iowa. This also relates to prairie restoration efforts in Iowa to create similar systems of recovering communities of plants and their pollinators. She initiated a research project focusing on the conservation of native figs and their associated fig wasp pollinators occurring in a naturally fragmented landscape; the results are useful to understanding similar contexts in Iowa. She completed field studies on pollinator/prey attraction in fragmented habitat. Once associated lab work is completed, it will result in multiple future publications. The field season allowed her to provide a reference collection of identified bee species for two undergraduates working in her lab. They will use this in identification of incoming pollinator census collections. She has incorporated examples from Australia into her courses (Plan Protection Using Natural Enemies, Forest Insect and Disease Ecology, and Introduction to Wildlife and Fisheries). Professor Harris applied for and received funding from Hermon Slade Foundation \$80,306AUS (Australian dollars), which is ongoing. Also, she applied for, but was unsuccessful in a \$2.9 million NSF grant.

Is work accomplished on PDA consistent with original PDA? Yes.

**HILL, MATHEW G., ASSOCIATE PROFESSOR, ANTHROPOLOGY, 9 YEARS OF SERVICE, SPRING SEMESTER**

Professor Hill worked intensively on publications, including a book detailing the archeology of the Paleo-Indians of Western Nebraska – the subject of his research for the past decade. He brought together and analyzed the tremendous amounts of data collected during these studies. In addition to the book, he worked on a journal article that will be published. These projects represent a major, substantive contribution to Great Plains prehistory, Great Plains paleoclimatology, and knowledge on human response to environmental change.

Is work accomplished on PDA consistent with original PDA? Yes.

**KOTHARI, SURAJ, PROFESSOR, ELECTRICAL AND COMPUTER ENGINEERING, 27 YEARS OF SERVICE, FALL SEMESTER**

Professor Kothari is a recognized expert in cyber security and this faculty research assignment permitted him the opportunity to co-develop a \$4.1 million research proposal for a U.S. Department of Defense unit to address vulnerabilities in cell phone and personal digital devices. Dr. Kothari utilized his research assignment to create relationships with numerous software development firms; the economic development role of such interactions among our corporate partners cannot be underestimated as the ultimate benefit of such interactions is increased employment opportunities for all Iowans and especially ISU students.

Is work accomplished on PDA consistent with original PDA? Yes.

**LAVROV, DENNIS, ASSISTANT PROFESSOR, ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY, 7 YEARS OF SERVICE, SPRING SEMESTER**

Professor Lavrov spent a semester at the Centre d'Océanologie de Marseille, France. He used genomics to study the evolution of sponges. Travel to the Mediterranean allowed him to collect and study the huge diversity of organisms available in that region. He collaborated with local professors in analyzing genetic data with the chemical, developmental and morphological data they collected. The collaboration led to an additional two manuscripts with an established collaboration, and the PDA provided him an opportunity to establish new collaborations with faculty in Paris, Munich, Ireland and Spain. During the PDA, he presented two seminars in France and the United Kingdom, and conducted a course in Russia. Although no new grant money has been received, the preliminary data collected during this PDA will be used to apply for several federal and international grants.

Is work accomplished on PDA consistent with original PDA? Yes.

**LU, PING, PROFESSOR, AEROSPACE ENGINEERING, 21 YEARS OF SERVICE, FALL SEMESTER**

Professor Lu is a valued researcher with grant support from the U.S. Air Force. The research completed during his faculty research assignment helped highlight his significant cutting-edge research in astronautics and space flight for the Department of Aerospace Engineering. Dr. Lu's research has received notice and recognition by NASA and numerous aerospace companies, in addition to new partner universities, that benefit our students with improved career opportunities in the aerospace industry.

Is work accomplished on PDA consistent with original PDA? Yes.

**MARTIN, RYAN, ASSOCIATE PROFESSOR, MATHEMATICS, 8 YEARS OF SERVICE, FALL SEMESTER**

Professor Martin visited several locations including the University of California, San Diego, and Cambridge University during a Fall Semester Professional Development Assignment. Dr. Martin is part of a group of faculty at ISU that has made recent advances in graph theory. He used the semester to meet with other authorities in this field to extend his research and to communicate his discoveries. As a result of the PDA, Professor Martin authored or co-authored seven manuscripts, presented eight research talks at universities in Illinois, Nebraska, Virginia, and the United Kingdom, and applied for grants to the National Science Foundation and the National Security Agency.

Is work accomplished on PDA consistent with original PDA? Yes.

**MAZUR, ROBERT, ASSOCIATE PROFESSOR, SOCIOLOGY, 26 YEARS OF SERVICE, SPRING SEMESTER**

Professor Mazur spent spring semester 2011 at the Makerere University in Uganda to study issues of post-conflict resettlement and food security in order to promote the international recognition for his work and publications in the fields of population mobility, livelihood strategies, food security, and child health. His research, writing and publications contribute to the evolving development and research activities for ISU's Center for Sustainable Rural Livelihoods, for which Professor Mazur serves as Associate Director for Socioeconomic Development. Research in these areas contributes to his graduate and undergraduate teaching at Iowa State. Professor Mazur advances sociological concepts and models appropriate for future research and policy-making internationally. As a result of the PDA, Professor Mazur prepared five manuscripts; three are published and two are forthcoming. He was invited and presented at four international meetings. Professor Mazur is the principal investigator for a U.S. Agency for International Development grant for 2008-2012 of \$905,553, with the FY12 amount of \$227,000.

Is work accomplished on PDA consistent with original PDA? Yes.

**MIRANOWSKI, JOHN, PROFESSOR, ECONOMICS, 16 YEARS OF SERVICE, SPRING SEMESTER**

During this professional development assignment at the United Nations' Food and Agriculture Organization (FAO) in Rome, Italy, and the Organisation for Economic Co-Operation and Development (OECD) in Paris, France, Professor Miranowski studied the economic potential for long-term biofuel expansion. His interaction with colleagues abroad has altered his economic perception of the potential role of biofuel, and he is now focusing on the value of a longer-term perspective on biofuel and feedstock-related issues and some new directions in research. Instead of backcasting to develop future projects, Professor Miranowski now promotes forecasting in a longer term economic framework instead of a shorter term economic policy model. He has already integrated this new perspective into his courses emphasizing the importance of studying natural resource issues and problems into a long term perspective as opposed to a short term policy response as had been done. Students, the University, and the state of Iowa benefit from this new focus on the long-term perspective. He received a Biobased Industry Center grant for \$37,500 for the current fiscal year. This PDA resulted in the publication of one journal article, two submitted for publication, one under revision, and two in preparation.

Is work accomplished on PDA consistent with original PDA? Yes.

**MONTABON, FRANK, ASSOCIATE PROFESSOR, LOGISTICS, OPERATIONS AND MANAGEMENT INFORMATION SYSTEMS, 11 YEARS OF SERVICE, SPRING SEMESTER**

Professor Montabon taught and conducted research in supply chain management at the University of Melbourne in conjunction with an invitation from the Fulbright Scholar Program. He had originally planned to spend his PDA with Fulbright in Hungary, but that opportunity did not come through. In Melbourne, he prepared and taught two new courses in project management for undergraduate and graduate audiences. He began a new research project regarding how criminal and civil litigation relative to environmental issues affects the stock performance of firms. His research resulted in the submission of three manuscripts to journals and the near completion of two others. He developed professional networks at the University of Melbourne and via visits to Deakin University and the University of Tasmania where Iowa State University has study abroad programs.

Is work accomplished on PDA consistent with original PDA? Yes.

**MU, AILI, ASSOCIATE PROFESSOR, WORLD LANGUAGES AND CULTURES, 10 YEARS OF SERVICE, SPRING SEMESTER**

Professor Mu furthered her progress on her current book manuscript, *Moments of Truth: The Chinese Short-shorts Phenomenon*, which explores the popularity of this literary genre in contemporary Chinese cultures. Professor Mu already has presented this topic at national and international conferences which have brought this current research to the attention of intellectual communities globally. As the only stand-alone Chinese Studies minor in Iowa, the ISU program distinguishes itself with a focus on modern China. This project will contribute to that goal. Also, Dr. Mu compiled an extensive reading textbook for her Chin 403 class. As part of the PDA, she attended the special joint conference of Association for Asian Studies (AAS) and the International Convention of Asian Scholars. Here, she exchanged views with scholars in history, anthropology, and culture studies from Beijing University, Stanford University and Harvard University. This led to an invitation to contribute an article to "China and New Left Visions: Political and Cultural Interventions," which will be published in spring 2012.

Is work accomplished on PDA consistent with original PDA? Yes.

**MUENCH, JOSEPH, ASSOCIATE PROFESSOR, ART AND DESIGN, 10 YEARS OF SERVICE, SPRING SEMESTER**

Professor Muench continued his exploration of the creation of a cohesive body of artwork that demonstrates specialized technical approaches to fabricated metal sculptures. He designed and created "Hank" the fourth in a series of chased and repousse portrait vessels. He developed an innovative system for securing and effectively working on larger pneumatically chased panels; worked directly with a specialist in "Auto/Aero" sheet metal shaping using techniques and large specialty metal forming equipment that is difficult to access in a standard studio setting. The PDA dramatically expanded his understanding of hybrid metal shaping techniques. He will disseminate and share his new knowledge through his students, through exhibitions and publications of his work. Based on their instructor's knowledge of metal forming principles and techniques, his students will strengthen their portfolios. This element makes them more competitive in their further education pursuits or employment.

Is work accomplished on PDA consistent with original PDA? Yes.

**NASON, JOHN, PROFESSOR, ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY, 11 YEARS OF SERVICE, FULL YEAR**

Professor Nason spent 2010 at the University of New England, Armidale, Australia. The primary research objective was to examine host shifts, which is when a parasite switches to a new host. As a result of the PDA, he received \$80,306AUS (Australian dollars) from the Herman Slade Foundation, and the research is expected to lead to several research publications in 2012-2013. Smaller grants received include: NSF, \$13,411; National Cotton Council and Cotton, Inc., \$9,720; and the Center for Global and Regional Environmental Research, \$1,560. Additional large grant submissions have not been funded; however, a research collaboration is expected to lead to a couple of publications and possibly a grant. Professor Nason has incorporated research into his teaching for biological evolution and empirical population genetics courses at Iowa State.

Is work accomplished on PDA consistent with original PDA? Yes.

**OLIVER, JAMES, PROFESSOR, MECHANICAL ENGINEERING, 10 YEARS OF SERVICE, FULL YEAR**

Professor Oliver created relationships, together with Dr. Judy Vance, in educational opportunities that utilize virtual reality based research conducted at the ISU virtual reality research center (VRAC). Dr. Oliver completed significant research proposals that leverage the Iowa State University U.S. National Science Foundation proposals with the European counterpart to the NSF. Additionally, he assisted ISU by traveling from France to England to articulate the role of ISU research in wind energy between a major international wind manufacturer and international partner university. ISU was able to save the cost of sending a person to England because Dr. Oliver was already in Europe conducting research.

Is work accomplished on PDA consistent with original PDA? Yes.

**ONG, SAY KEE, PROFESSOR, CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING, 17 YEARS OF SERVICE, SPRING SEMESTER**

Professor Ong experienced one of the most fortuitous experiences in his role as an expert in water and waste management. His arrival in New Zealand coincided with the devastating earthquake that struck New Zealand in 2011, and he was able to study, firsthand, the significant problems for waste management and water resources during a natural catastrophe. In the true spirit of a faculty exchange, a key researcher in sediment and water transportation of minerals will be visiting Dr. Ong at Iowa State University to continue their collaboration on water quality research, which has a significant impact on the quality of life for all Iowans.

Is work accomplished on PDA consistent with original PDA? Yes.

**POON, YIU, ASSOCIATE PROFESSOR, MATHEMATICS, 26 YEARS OF SERVICE, FULL YEAR**

Professor Poon spent his time collaborating with colleagues at the College of William and Mary and in Hong Kong on his research on quantum computing, laying out the theoretical foundation for building computer processors that are so tiny that quantum electron effects will overwhelm standard electronics. As a result of this PDA, Professor Poon has had three journal articles accepted for publication and has two others in progress. He co-organized the 2<sup>nd</sup> Workshop on Quantum Information Science at Hong Kong Polytechnic University in China (January 2011). He also delivered research presentations at five conferences in Singapore, Hong Kong Polytechnic, National University of Singapore, University of Malaysia, and Hong Kong University

of Science and Technology. This international exposure highlights ISU's expertise in this domain of mathematics and informs Professor Poon's teaching.

Is work accomplished on PDA consistent with original PDA? Yes.

**PRUETZ, JILL, ASSOCIATE PROFESSOR, ANTHROPOLOGY, 10 YEARS OF SERVICE, FALL SEMESTER**

Professor Pruetz spent fall 2010 in Senegal, West Africa, studying the chimpanzees of that region, observing chimp behavior that is unique to that time of year. This is the first time in her nine-year study that she was able to be on-site during this season, which typically is the end of the rainy season and beginning of the dry season, when large wildfires sweep through the area. As a result of the PDA, Professor Pruetz created two new manuscripts for submission and worked with several graduate students on four manuscripts based on research at the site. Also, she and her graduate students presented three research papers at the 2010 International Primatological Society Meetings in Japan. Research in 2010 was supported by a grant from the National Geographic Society. Dr. Pruetz is probably the ISU faculty member most recognized outside the state of Iowa. The television, radio and print specials on her work on how human behavior is mirrored in that of chimps have made her the top field primatologist since Jane Goodall.

Is work accomplished on PDA consistent with original PDA? Yes.

**SCHULTE-MOORE, LISA, ASSOCIATE PROFESSOR, NATURAL RESOURCE ECOLOGY AND MANAGEMENT, 8 YEARS OF SERVICE, FULL YEAR**

Professor Schulte-Moore traveled to the Nature Conservancy of Minnesota and the University of Minnesota, Twin Cities Campus for her PDA. She developed collaborations with colleagues in ecology, economics, engineering, and forestry who have basic and applied expertise in biomass production and systems analysis. She used her assignment to learn about ongoing activities regarding biomass production in the northern U.S. Corn Belt and learned two new modeling tools that allow her to conduct systems analysis associated with biomass and bioenergy production. This PDA has broadened her knowledge of sustainable biomass production systems and increased her ability to conduct systems analyses. This PDA and the collaborations established resulted in the submission of five grant proposals (two of which were successful); submission or resubmission of 10 manuscripts for publication in journals and books (six are now published or in press); and delivery of eight presentations at various scholarly venues. Furthermore, she will submit proposals to NSF to further her work. She is disseminating her research findings at professional meetings and in her undergraduate and graduate classes at ISU (i.e., Forest Biology, Stand Dynamics, Ecosystems Management, and Sustainable Agriculture Colloquium).

Is work accomplished on PDA consistent with original PDA? Yes.

**SHANKS, JACQUELINE, PROFESSOR, CHEMICAL AND BIOLOGICAL ENGINEERING, 12 YEARS OF SERVICE, FALL SEMESTER**

Professor Shanks, a leader in the new Engineering Research Center (ERC) on chemicals from biorenewables, assisted in the positive assessment of the Center for BioRenewable Chemicals, currently ISU's only National Science Foundation (NSF) ERC. In addition, she was nominated to serve on the prestigious Biological and Environmental Research Advisory Committee for the U.S. Department of Energy. Dr. Shanks utilized her time while on assignment to co-write several large research proposals, ranging from \$5 million to \$25 million per proposal. The

probability of success on these proposals is greatly enhanced by the relationships she has been able to obtain through her faculty development assignment.

Is work accomplished on PDA consistent with original PDA? Yes.

**SOMANI, ARUN, PROFESSOR, ELECTRICAL AND COMPUTER ENGINEERING, 14 YEARS OF SERVICE, SPRING SEMESTER**

Professor Somani is an expert in high performance computing, a research point of pride for Iowa State University since the U.S. Supreme Court recognized that the world's first digital computer was designed and operated at ISU. Dr. Somani hopes to bring further recognition to ISU by beginning work on a major new textbook to explore computer architecture and embedded computer systems. Dr. Somani recently stepped down after serving as department chair for electrical and computer engineering for many years, and this faculty assignment helped to restart his significant research portfolio.

Is work accomplished on PDA consistent with original PDA? Yes.

**TUGGLE, CHRISTOPHER, PROFESSOR, ANIMAL SCIENCE, 20 YEARS OF SERVICE, SPRING SEMESTER**

Professor Tuggle spent the spring semester working with bioinformaticists at the Roslin Institute, Midlothian, U.K. as a Fulbright Fellow. He published one book chapter and submitted one manuscript, with one in preparation and several more to be submitted within the next six months. At Roslin, he trained in the use of Biobay Express 3D software created by his hosts for the analysis of datasets. Dr. Tuggle developed and introduced new uses for this software that contributes to a better understanding of the pig immune system with an eye to battling infectious diseases. Furthermore, Dr. Tuggle presented seminars on his ISU research in four venues at three institutions in two countries, maximizing the impact of his PDA. The collaboration with these U.K. scholars has resulted in a visit by his host, Dr. Hume, to ISU to interact with faculty, staff, administrators and students. Planning is underway for increased scientific and cultural collaborations between ISU and Roslin Institute faculty, staff and students in the future.

Is work accomplished on PDA consistent with original PDA? Yes.

**VANCE, JUDY, PROFESSOR, MECHANICAL ENGINEERING, 27 YEARS OF SERVICE, FULL YEAR**

Professor Vance is an expert in virtual reality with applications to mechanical design. Together with Dr. Oliver, Dr. Vance created relationships in educational opportunities that utilize virtual reality based upon research conducted at the ISU virtual reality research center (VRAC). Dr. Vance formed significant research that improved computer-aided design tools for our students and has received nearly \$500,000 in new research funding at this early stage following her PDA. During AY2011, she explored opportunities in multidisciplinary design that crossed the boundaries of engineering, business, industrial design, and architecture, as well as the use of haptics in virtual reality applications. She visited Edinburgh, Scotland; Leeds, UK; and Delft, Netherlands during this PDA. She focused on multidisciplinary design that will benefit the Mechanical Engineering Department as it develops an industrial design option in collaboration with the College of Design, a high demand area for students. Her work will help maintain the institution's leadership in industrial design and virtual reality applications.

Is work accomplished on PDA consistent with original PDA? Yes.

**YANG, XIAO-BING, PROFESSOR, PLANT PATHOLOGY, 18 YEARS OF SERVICE, FALL SEMESTER**

During a visit to the Beijing Agricultural University in Beijing, China, Professor Yang studied the effects of climate change on the pandemic of wheat yellow rust. This experience provided new insights to understanding macro-scale disease epidemics. Professor Yang was successful in projecting the entry of soybean rust, its damage potential and overwintering regions. This seasonal forecasting is essential to the soybean industry, and he has been honored with a U.S. Department of Agriculture Award for Excellence. A direct outcome of the PDA was a patent application through the ISU Foundation for a significant discovery in the colonization mechanisms of a group of fungi and their impacts on plant health. He found the mechanism of soybean sudden death syndrome in relation to Roundup Ready crops, which will significantly impact the current crop production system. Sudden death syndrome in soybeans has been increasing since it was discovered in Iowa in 1994, and can reduce soybean yields 20 percent to 100 percent. Currently it has no known control mechanism. Grants received as a result of this PDA include \$56,000 from the United Soybean Board, \$47,000 from BASF to work on Headline plant health mechanisms, \$35,000 from the Iowa Soybean Association for work on soybean sudden death syndrome, and \$28,000 from the Iowa Soybean Association for work on white mold.

Is work accomplished on PDA consistent with original PDA? Yes.

**ZHU, DAN, ASSOCIATE PROFESSOR, LOGISTICS, OPERATIONS AND MANAGEMENT INFORMATION SYSTEMS, 13 YEARS OF SERVICE, FULL YEAR**

Professor Zhu traveled to China to build collaborative partnerships with peers at Beijing University of Technology, Tsinghua University, Beijing University, and Beijing Normal University, in China and Carnegie Mellon University, UCLA, University of Nebraska-Lincoln, and University of Texas Health Science Center in the United States. These collaborations are necessary to build her research program in knowledge management and data mining. She completed and submitted four jointly authored manuscripts to top-tier journals in her field. Of these manuscripts, one has been published, two are forthcoming, and one is pending. Furthermore, the exposure to other types of business programs has provided her with valuable insight on executive training and CIO programs. Finally, this research work feeds Professor Zhu's work to develop an innovative business intelligence program for our students as well as potential study abroad opportunities in China.

Is work accomplished on PDA consistent with original PDA? Yes.

UNIVERSITY OF NORTHERN IOWA

**AMIN, SHAHINA, ASSOCIATE PROFESSOR, ECONOMICS, 9 YEARS OF SERVICE, FALL SEMESTER<sup>1</sup>**

Professor Amin conducted empirical research to measure and to analyze the determinants of child labor and the gender earnings gap between working boys and girls in Bangladesh, in both the formal and informal sector. In line with UNI's teacher-scholar model, the research is helping Professor Amin mentor two undergraduate students who are conducting research under her supervision on similar topics related to the USA. Professor Amin has presented the preliminary results at UNI Poster Session *Scholars in Action: The 2011 UNI Symposium on Research, Scholarship and Creative Activity* and submitted the paper to *Demography*, a top tier journal. Upon receiving a "revise and resubmit" evaluation, Professor Amin revised and resubmitted the paper to the journal and is waiting to hear from the editors.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Berghammer created *Imagine the Possibilities: Creating Dramatic Worlds with Autistic Students*, a drama and theatre program designed to embrace the specific creative, social, and physical needs of youth with autism between the ages of 6 and 12, to discover best practices for artistically serving them. Professor Berghammer created three distinct, sequential drama programs which she designed, implemented, and assessed within three different spectrum disorder programs: an after school respite program for youth 6-17 at a local non-profit agency, an in-school spectrum specific elementary classroom consisting of seven youth with autism (five boys, two girls) between the ages of 5-11, and an enrichment program (ASPIRE) for 15 adolescents with Asperger's Syndrome from the tri-state area of Wisconsin, Iowa and Illinois at the Mercy Medical Autism Spectrum Center in Dubuque. Programs at EPI and Highland focused largely on the development of spontaneous and make-believe play, peer interaction and collaboration. At ASPIRE the focus was largely on individual and small group social skill building with a focus on gesture and non-verbal body language. Professor Berghammer presented elements of this project to the Guernsey Foundation and the Cedar Falls AAUW chapter meeting, and will make a presentation to a select audience within the College of Humanities, Arts, and Sciences late in October. While the plans for publication are in initial stages, Professor Berghammer has been invited to present at the American Alliance for Theatre and Education annual conference in Kentucky (August 2012) and the TASH (The Association for the Severely Handicapped) convention (November 2012).

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Bullard composed a series of original studies (études) for the viola, entitled "Technical Studies for the Contemporary Violist," which will be idiomatic to the instrument and serve to teach and refine the important technical skills needed for the performance of music composed after 1900. The project contained five components: 1) the composition of the études; 2) the entering of the musical score into a computer software program (Finale and/or Sibelius); 3) the field-testing of the études with students, both in the UNI viola studio and in other teachers'

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<sup>1</sup> Deferred from fall 2009.

studios; 4) the recording of the études (performed by Bullard and recorded in UNI's new studio), and 5) the writing of pedagogical suggestions for teachers to accompany the etudes. Professor Bullard has completed components 1, 2, and 5, is currently working on component 3, and has deferred component 4 until summer 2012. The most immediate benefit of this project is the direct application of the pedagogical materials in the following classes which Professor Bullard teaches: Applied viola (undergraduate and graduate studio classes); High String Techniques and String Methods (classes for string music education students); and String Pedagogy (for future teachers of advanced string students). Professor Bullard has started disseminating the results of the project through discussions with over a dozen colleagues from across the country, including composers, violists in professional symphony orchestras, private studio teachers at major conservatories and universities, and studio teachers of intermediate to advanced students. She plans to publish by January 2012 through Fountain Park Music Publishing, bringing national attention to the music program and the viola studio at the University of Northern Iowa.

Is work accomplished on PDA consistent with original PDA? Yes.

**BURKHARDT, REBECCA, PROFESSOR, MUSIC, 15 YEARS OF SERVICE, FULL YEAR**

Professor Burkhardt continued her joint project with Professor Goatley to compose and write *Just Ann*, a musical based on the life of former Texas governor Ann Richards. Professor Burkhardt composed the music for the project. The bulk of the musical (book and lyrics) has been completed, and the final two short sections (Senior Advisor and Cancer Patient) have been outlined. Professors Burkhardt and Goatley will complete the draft by the end of the fall semester 2011. The book currently stands at 120 pages of text. There are 17 songs in the musical: six are complete, seven have completed lyrics, and four are drafted. The research and creative work on the structure of musical works for the stage make Professor Burkhardt a better teacher and coach of this material to UNI students in their pursuit of musical theater performance. Significantly, the project has already impacted the Iowa community. The initial reading held in Marshalltown, Iowa, in June 2011, under the direction of Rod Caspers, an Austin director, involved both students and community members from Cedar Falls, Grinnell and Marshall County. Also, students from both UNI and Iowa Valley Community College worked together as participants and audience members in the reading. On a national level, another reading took place on July 30, 2011 in Austin. In November 2011, Professors Burkhardt and Goatley will submit the play for workshop at the Sundance Theatre Lab.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Eden researched aspects of the history of botany in early America. In the course of researching the history of botany in early America, Professor Eden refined the scope of the project to the introduction of the soybean to the United States. Professor Eden applied for and received two grants, one to support further research, and the other to support grant-seeking. With that assistance, she worked on a pilot study necessary for the application of major research grants and for use in a book. A book on the history of the soybean in the United States will immediately benefit UNI and be of great interest to a number of people around the world, including scholars, farmers, people involved in the industrial sectors of the soybean industry, and the general public. Nearly everyone in the United States uses something soybean-related. As so many of the people of Iowa are involved in the soybean industry in some way, this study will enrich their understanding of how and why Iowa became such a major

soybean producer. Under the terms of the Provost's Seed Grant, Professor Eden will submit applications for grants from the National Science Foundation, the National Endowment for the Humanities, the American Council of Learned Societies, and the American Philosophical Society to complete the book-length study on the history of the soybean in the United States. The results of the research she performed on her PDA will be used in the pilot studies attached to these grants and will be included in the book-length study when it is published.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Goatley continued her joint project with Professor Burkhardt to compose and write *Just Ann*, a musical based on the life of former Texas governor Ann Richards. Professor Goatley wrote the lyrics and dialogue for the project. The bulk of the musical (book and lyrics) has been completed, and the final two short sections (Senior Advisor and Cancer Patient) are outlined. Professors Goatley and Burkhardt will complete the draft by the end of the fall semester 2011. The book currently stands at 120 pages of text. There are 17 songs in the musical: six are complete, seven have completed lyrics, and four are drafted. As a teacher of playwriting, practicing the art of playwriting makes Professor Goatley a better teacher in the classroom. Significantly, the project has already impacted the Iowa community. The initial reading held in Marshalltown, Iowa, in June 2011, under the direction of Rod Caspers, an Austin director, involved both students and community members from Cedar Falls, Grinnell and Marshall County. Also, students from both UNI and Iowa Valley Community College worked together as participants and audience members in the reading. On a national level, another reading took place on July 30, 2011 in Austin. In November 2011, Professors Goatley and Burkhardt will submit the play for workshop at the Sundance Theatre Lab.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Groves completed a research project on microfossils from sites in Guizhou Province, South China, which are being evaluated as potential type localities for certain stages of the international geologic time scale. Professor Groves's work on microfossils from these sites was performed in his capacity as head of a Task Group organized under the auspices of the International Commission on Stratigraphy (ICS). The project resulted in five technical articles and site descriptions for the proceedings volume and field excursion guidebook, published in Nanjing by the Chinese Academy of Sciences. Professor Groves authored, individually and jointly, five articles for this volume. The research project is valuable to UNI insofar as it has enabled Professor Groves to establish and strengthen professional relationships with international experts in his field. Professor Groves plans to continue to collaborate with specialists with the Nanjing Institute. Ultimately, his work will result in the formal ratification of type localities for the stages under investigation. All expenses associated with his visit to China were covered through a grant from the Chinese National Science Foundation.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Klassen completed a 300-page manuscript for book publication. Professor Klassen's overall goal in writing this book is guided by a single question: "How did one of the most radical youth movements in our nation's history revolutionize the way Americans did business and spur the longest-running consumer spending binge in U.S. history, a buying extravaganza fueled by product innovations and business ideas hatched by its very own members?" He identified 38 principal hippie leaders and 39 authentic hippie products whose collective contribution to the American economy by the beginning of the millennium was approximately \$1.4 trillion. Professor Klassen is in contact with a publisher and will attempt to have the book published by December 2011. The book advances people's knowledge of the business history of this period of time and explicates examples and principles of product and idea innovation from this era. As such, it has wide application for Iowa business scholars, including the faculty of the College of Business Administration, and practitioners.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Lindquist examined the impact of culture on ethical decision making for US vs. European decision makers. Since most cultural research in this domain examines a US vs. Asian cultural difference, it is often assumed that differences among nations of Western culture are minimal when the reality is that there are cultural differences even within nations that impact ethical decision making and certainly among Western cultures. Professor Lindquist developed and ran laboratory experiment in the U.S. to collect data measuring parameters of ethical decision making. Subsequently, he collected data in Austria using student subjects at a mid-sized national Austrian university in Klagenfurt, Austria. He used experimental scenarios and surveys translated into German, with responses translated from German to English. Professor Lindquist plans to submit this research to two conferences within the next couple of months, the American Accounting Association's (AAA) national meetings to be held in Washington, DC in August 2012 and the European Academy of Management (EURAM) conference to be held next summer in the Netherlands. Additionally, he is presenting his findings at a UNI Graduate College Brown Bag seminar in February 2012 and plans to submit this research to *Behavioral Research in Accounting (BRIA)*, which is a premiere behavioral accounting journal of the AAA. Professor Lindquist's research is of great interest to UNI and the citizens of Iowa. For example, many professionals in Iowa (e.g., John Deere, Aegon, etc.) are intimately involved with business dealings and individuals in Europe, just as many other Iowans spend weeks if not months annually in Europe conducting business.

Is work accomplished on PDA consistent with original PDA? Yes.

**LYNCH, ANNETTE, PROFESSOR, APPLIED HUMAN SCIENCES, 18 YEARS OF SERVICE, FALL SEMESTER**

Professor Lynch completed a book manuscript currently under final editorial review with Berg Publications. The book examines how the increasingly visual aspects of popular culture are transforming the gender and sexuality constructions of identity for both men and women in our society. Of particular focus is the role of male gaze, particularly those aspects of men's culture steeped in misogyny, in scripting expressions of female sexuality. The completed chapters investigate the intersection of fashion and trend-based and marketed cultural constructions of gender presented in this shifting medial landscape. Professor Lynch's research is very relevant

to her work as Director of a major grant from the U. S. Department of Justice and the development of a Center for Violence Prevention, because current escalating rates of dating violence among teenagers, coupled with studies indicating that one in five young women experiences sexual assault while attending college, have been highlighted as a major health issue by Vice President Joe Biden. The normalizing of misogyny among boys and men, and the aligning of expressed sexuality with power among girls and women, both strongly developed themes within her book, together set the stage for attitudes with the potential to lead to violence against women. The research she undertook for writing the book helps Professor Lynch challenge educators working in the K-12 system in Iowa and fellow faculty members across the Regent universities to help students confront and negotiate the meaning of the popular culture imagery surrounding them, which often affects their lives and relationships with others.

Is work accomplished on PDA consistent with original PDA? Yes.

**MAIER, DONNA, PROFESSOR, HISTORY, 31 YEARS OF SERVICE, FULL YEAR**

Professor Maier focused on collating and evaluating witness testimony in trials of perpetrators of the Rwandan Genocide (1994). For this project, she traveled to Rwanda, Tanzania, Canada, and Kansas (USA) to observe and collect transcripts of the testimonies and judgments of several trials which shared a common venue: genocide crimes carried out in the prefecture of Butare, Rwanda, in April-June 1994. Comparative evaluation of the collected data, based on how judges determined the credibility of witnesses, is currently underway. Professor Maier completed the objectives of data collection, travel, and research, and is currently writing articles for publication. Furthermore, while on PDA she made a public presentation about her work at Tumaini University in Makumira, Tanzania, and attended trials, judgments, sentencings and appeals judgments of numerous cases at the International Court Tribunal for Rwanda (ICTR). Professor Maier also attended several conferences and meetings on accountability for genocide and other serious violations of international humanitarian law in Kampala, Uganda (June 2010), Goma Democratic Republic of Congo (July 2010), Gaborone Botswana, The Hague Netherlands, Geneva Switzerland (July 2011) and Chautauqua New York (August 2011). Professor Maier has two public presentations about her research scheduled for March and April 2012, one to a UNI audience, and one to the American Association of University Women state convention in Des Moines. This research has greatly stimulated and enriched Professor Maier's teaching at UNI. For example, she teaches directly about the Rwandan Genocide in courses focused on Genocides of the Twentieth Century. In these courses, students investigate, among other things, famous historical genocide trials and sometimes do mock trials. Additionally, she includes a two-week unit on the Rwandan Genocide in her Liberal Arts course on African Culture. For outreach, she has given and will continue to give public presentations to groups such as the Iowa United Nations Association and the Iowa American Association of University Women.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Mattingly completed all PDA proposed activities which involved initial analyses in a two-phase exploratory study to establish a connection between an organization's citizenship profile and its underlying culture. During the first phase of the study, Professor Mattingly secured data from KLD Analytics, Inc., regarding companies' social performance and used the data to compose variables for a principal component analysis (PCA). The data included approximately 100 data items for nearly 3,000 companies publicly traded on U.S. stock

exchanges. Professor Mattingly produced a sample of 1,485 KLD-rated companies, composed of the S&P 1500 broad market index, consisting of companies representative of the entire population of publicly traded companies in the U.S., across all size ranges – including large, medium, and small companies. Furthermore, he calculated the average for each variable for years 2006-2009 and reduced the number of variables to 26 through exploratory factor analysis. For the second phase of the project, Professor Mattingly identified industries demonstrating ample variation on both of the two dimensions uncovered using the principal component analysis, chose two representative companies from each of the four quadrants constituting the property space, and then compared archival documents to confirm the citizenship profiles and link them to underlying dimensions of culture. Professor Mattingly plans to reproduce the results from the first phase of the project as a manuscript for publication in scholarly journals, whereas a second manuscript may be produced to demonstrate the utility of the resulting model for practicing managers. Citizens of Iowa gain from this research in multiple ways. For example, people gain knowledge that citizens who work in organizations (which will account for the majority) can use at work to minimize their organizations' social risks.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Palczewski drafted two essays analyzing the rhetoric of suffrage postcards and completed construction of a digital archive of hundreds of historic suffrage postcards. In the first essay, Professor Palczewski explored the way in which commercially produced postcards depicting police actions against suffrage protestors control repression, while in the second essay she focused on the 30-card series approved and endorsed by the National American Women Suffrage Association (NAWSA). In the process of working on the first essay, Professor Palczewski substantially expanded its scope, focusing not just on postcards, but on photographic images of suffrage parades and the Silent Sentinel protests. Versions of this essay already have been presented at a conference, accepted for publication as part of a selected works volume, and been presented as part of the Rhetorical Leadership Lecture Series at the University of Wisconsin-Milwaukee. Her work will also be presented at the Public Address Conference. As for the second essay on NAWSA series, she plans to submit it for conference presentations and publications in the spring 2012 semester. The research enhances Professor Palczewski's teaching. This fall 2011 semester, she is teaching a course on gender in communication and another on social protest. In every class period, she finds herself drawing on reading and thinking she did during the PDA. What is more, the work on suffrage postcards, and how analysis of the images in them can inform contemporary struggles within a multi-media society, has been the project that has most allowed Professor Palczewski to represent the University of Northern Iowa to external communities.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Peters investigated the effectiveness of the various ways states regulate the behavior of candidates for judicial office in an attempt to protect judicial impartiality and examined state supreme court elections by using several databases of candidate and interest group advertising, candidate characteristics, and election outcomes. To test his hypotheses, Professor Peters is compiling a comprehensive dataset of state changes to judicial codes of conduct from 1990-2010. The finished book will be comprised of eight chapters. Although he still has work to

do toward completing the book, Professor Peters has completed all the objectives he proposed when he applied for the PDA. Indeed, he has drafted four chapters, drafted most of the data analysis for a fifth chapter, and is completing data collection for the sixth. Regarding dissemination, Professor Peters has drafted a prospectus which he plans to submit, along with the four chapters, to potential publishers in November or December of this year. Additionally, he is submitting a proposal to present a draft of chapter six to the 2012 Midwest Political Science Association meeting. This book will be valuable to scholars of elections, those interested in issues relating to judicial independence, and practitioners and activists who are in the midst of adapting state regulations to the new realities of judicial elections. Furthermore, the book will have more immediate pay-offs in his teaching and his ability to serve the state of Iowa. The research has already led him to a more nuanced view of judicial independence, one he expects to incorporate into the courses where he most discusses these issues. In this regard, Professor Peters has several readings already in mind that he can integrate into his Law and Politics course in Spring 2012.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Somodi investigated a variety of properties of the Ihara zeta function of a finite graph. The investigation centered on identifying new classes of graphs for which the zeta function and the spectrum of the adjacency matrix determine each-other, describing the location of its poles, and investigating graph coverings that have a similar splitting type of the prime cycles from the base graph. Professor Somodi completed all objectives, activities, or phases proposed in the original application, and some of the results of his project are summarized in the three papers that were submitted for publication and are currently under review. Professor Somodi also made three presentations at professional conferences in Texas and Illinois and a colloquium in the Department of Mathematics at UNI in spring 2011. Spending one semester working on this project has significantly increased Professor Somodi's level of expertise in this area of mathematics. For example, some of the problems related to zeta functions of graphs can be fairly accessible to graduate students in the UNI's Master's Degree in Mathematics program; other problems might be suitable for undergraduate research.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Stichter explored the previous personal, social and institutional characteristics of college students who were defined as at-risk while in high school. The study aimed at examining how these students overcame the barriers that may have otherwise prevented them from graduating high school. The decision for students to graduate or leave school can be positively and negatively influenced by personal, social and institutional factors that vary among at-risk individuals. While all objectives of his original PDA proposal were not completed, there was significant progress made during the Fall Term 2010; he is positioned to complete his dissertation and graduate in spring 2012. Professor Stichter submitted a proposal to the National Dropout Prevention Network Annual Conference, which was accepted for presentation on October 9, 2011 in Chicago, Illinois. Professor Stichter's project will be of value to the University of Northern Iowa and Iowa's Research and Development School.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Strauss synthesized transition metal dichalcogenides intercalated with Manganese or Chromium to canvas them as possible future hydrogen storage materials. The benefit of hydrogen as a potential energy source is that it has no harmful emissions because its only combustion product is water. The barrier for hydrogen as a fuel source is the current lack of materials that can store a high density of hydrogen. The development of these materials is essential for the future development of a hydrogen economy. The structure and composition of these materials were confirmed by X-ray diffraction, Scanning Electron Microscopy and Energy Dispersive X-Ray spectroscopy (SEM/EDX). The results of these two techniques narrowed the target materials to  $TiS_2$  and  $TiSe_2$ . Other compounds also found in the analyses of the samples provided new synthetic pathway to nanostructure  $HfO_2$  and  $TaS_2$ . This work completed all objectives of the proposal and even provided other publishable results not directly related to hydrogen storage materials. Professor Strauss's study for hydrogen storage materials has provided several students with undergraduate research experiences. While one student took the unexpected results of the formation of  $TaS_2$  nanotubes as the basis for her senior Honor's thesis, another has been using both the titanium and tantalum materials to explore the use of the department's recently acquired gas sorption instrument for hydrogen storage studies. The ability to perform local hydrogen storage studies will make proposals to external sources more attractive for funding. During this semester, a new student was trained to carry on synthesis of these materials. Professor Strauss co-wrote two presentations with two students and presented at the March 2011 National Meeting of the American Chemical Society, and the April 2011 Research Seminar at the University of Iowa in Iowa City. The PDA also allowed Professor Strauss to revise four co-authored articles (2011) related to this project. Furthermore, the research benefits the State of Iowa in its commitment to support the research and application of alternative energy sources. This project is related to a cross-disciplinary effort here at UNI funded by the State of Iowa through the Iowa Office of Energy Independence (Grant # 09-IPF-11).

Is work accomplished on PDA consistent with original PDA? Yes.

**STRAUSS, MITCHELL, PROFESSOR, SCHOOL OF APPLIED HUMAN SCIENCES, 10 YEARS OF SERVICE, SPRING SEMESTER**

Professor Strauss completed all objectives, activities, or phases proposed in the original application for Professional Development Assignment. That is, he gathered all the elements necessary to piece together a coherent history of Sweetree Mills. The data suggest that Sweetree Mills fortunes rose and declined in concert with major shifts in U.S. trade policy during the life of the company. While U.S. trade policy was the dominant variable that impacted Sweetree's business, major change in the U.S. retail landscape also dramatically influenced the company's fortunes. Finally, the original location of both the Sweetree Mill and the owner/family was influenced to some degree by the family's Jewish identity. The Gastonia/Cherryville North Carolina area was an enclave for Jewish textile manufacturers. The research broadened Professor Strauss's understanding of the history of the U.S. textile and apparel industry and enhanced his courses. From this project, Professor Strauss plans to produce publications to be submitted to peer review journals.

Is work accomplished on PDA consistent with original PDA? Yes.

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

Professor Williams completed all objectives on his original PDA application, which included developing a Flash-based version of *PsychExperiments*, an Internet-based application for teaching statistics, research methods and other common aspects of social science research, increasing opportunities for students to participate in science, technology, and statistics based research activities and laboratory exercises, including experiment design, data collection, data analysis, and results presentation in an online environment. Ten flash-based experiments and exercises were developed with six of them being live on the site and four additional exercises being debugged and tested. In the process of doing the project, several experiments that were listed in the original PDA were swapped out for other experiments which were easier at the time to program. Since August 2010, the beginning of Professor Williams's PDA, there have been over 4,400 downloads of data from the website. During that same time period, an additional 137 instructors and classrooms from around the country signed up to use the site. Furthermore, 16,742 data submissions have been sold. All users and instructors visit the UNI Department of Psychology server, helping promote UNI as a place of teaching excellence. During the PDA period, Professor Williams prepared and submitted five posters at the 46<sup>th</sup> Annual Symposium on Recent MMPI Research, Minneapolis, MN. one poster at the Annual Meeting of the Iowa Psychological Association, Dubuque, IA, and another poster at the 2011 Annual Graduate Symposium, University of Northern Iowa, Cedar Falls, IA.

Is work accomplished on PDA consistent with original PDA? Yes.