2015 Celebration of Publications, Creative Works, and Grants

Wednesday, October 28
University Ballroom
3:30-5:00 p.m.
A university is more than an amalgamation of several colleges. It also is an organization which celebrates the full richness of faculty contributions including those vital and exciting contributions in research, scholarship and creative activity within their disciplines. These contributions come in many forms: journal articles, book chapters, monographs, art works, music compositions, performances of many varieties and a host of others. Funded research contributions are similarly varied. Through such activities, faculty members stay at the growing edges of their fields, and in so doing, they enrich their intellectual lives as well as those of their students.

Once again, I invite each participant at this event today to browse the contributions of your colleagues, ask questions, and celebrate the intellectual vitality of our university community. Each year as this event grows and widens its reach and audience, it continues to inspire and impress me. I am sure it will do the same for you.

Dr. Blair M. Lord
Provost and Vice President of Academic Affairs

Academic Affairs


Art


Nivens, Charles. *Graphic Design USA*, a national magazine on design. Juried national exhibition. Recipient of a 2015 American Graphic Design Award for the design of the "University of Illinois, Department of Chemical and Biomolecular Engineering Mass Transfer Spring/Summer Brochure"


Richardson, David. *Graphic Design and Poetry in Motion.* Guest lecture at Southern Utah University’s Department of Art & Design’s weekly Art Insights series, Cedar City, Utah; November 20, 2014.

Richardson, David. *Migrations* selected for screening at the Rabbit Heart Poetry Film Festival at Nick’s Bar in Worcester, Massachusetts, October 12, 2014; a finalist for Best Sound/Music.

Richardson, David. *Migrations* and *On a Prophet* included among the thirty short-listed poetry-films at the 2nd Ó Bhéal International Poetry-Film Competition 2014 and screened during the IndieCork Film Festival, October 12-19, 2014, in Cork, Ireland.

Richardson, David. *Migrations.* An original film-poem, curated into and screened at CYCLOP, the 4th International Videopoetry Festival in Kiev, Ukraine; November 21-23, 2014.

Richardson, David. *On a Prophet,* a film-poem, awarded First Prize for Best Editing in Liberated Words III’s “Memory” show, an international poetry-film festival at the Arnolfini Gallery in Bristol, UK; September 13, 2014.

Richardson, David. *On a Prophet.* A collaborative film-poem, curated into and screened at Visible Verse Poetry Film Festival 2014, the Cinematheque in Vancouver, Canada; Heather Haley, curator; October 18, 2014.

**Biological Sciences**


Business


Chemistry


College of Education and Professional Studies


Communication Disorders and Sciences


Communication Studies


Continuing Education


Counseling and Student Development


Early Childhood, Elementary, & Middle Level Education


Economics


English


**Family and Consumer Sciences**


**Geology and Geography**


History


Key, Newton, Steve Brantley, and Lisa Dallas. "Digital Participation from Online to the Classroom," Faculty Summer Institute, Champaign, 27-29 May 2015.

Lee, Jinhee. “Documenting a Modern Massacre: Challenges and Opportunities in the Case of the Kanto Massacre of Koreans in the Japanese Empire.” Workshop Hidden Scars Then and Now: the 1923 Great Kanto Earthquake and the Massacre of Koreans in Japan (Meeting in conjunction with a joint conference Midwest Conference on Asian Affairs and Southwest Conference of Asian Studies), University of Kansas, Lawrence, KS, October 4, 2014.


Reid, Debra A. “Searching for Egalitarianism in Citizenship Education” Phi Kappa Phi Forum (Fall 2014), 9-11.


Honors College


Kinesiology and Sports Studies


Library Services


Key, Newton, Steve Brantley, and Lisa Dallas. "Digital Participation from Online to the Classroom," Faculty Summer Institute, Champaign, 27-29 May 2015.


Mathematics and Computer Science


Galperin, Gregory. 2015. Multidimensional Cube. Moscow, Russia: Moscow Center of Mathematical Education.


Galperin, Gregory. 2015. “Squares and Cubes Adjacent to a given Figure.” Quantick July 2015 (7).


Music


Nursing


Philosophy


Physics

Political Science


Psychology


Recreation Administration


Sociology and Anthropology


Special Education


Technology


Theatre Arts

Gadomski, Christopher. Scene Design for William Shakespeare’s *Julius Caesar*, Performed at Festival 56 in Soldiers and Sailors Park in Princeton, IL, The show was performed June 28 - July 26, 2015.

2015 Recipients of the Edwin L. “Bud” May Award

Sean and Rebecca Peebles

**Dr. Rebecca Peebles** has been a tenure-track faculty member in the EIU Chemistry department since 2004, serving as Annually Contracted Faculty for three years before that. Prior to coming to EIU, she was a Visiting Assistant Professor at Canisius College in Buffalo, NY for one year. In 2008, she and Sean Peebles received National Science Foundation funding for Research at Undergraduate Institutions to perform microwave spectroscopy to determine the structures of small molecules, and particularly to understand the properties of weak interactions between molecules, which are important in a range of applications such as the action of drugs in the body, biochemical reactions, and construction of nano-machines. This funding was renewed in 2012, and current interests also include formation and spectroscopic investigation of unstable chemicals containing electrical charges. Since 2008, the Peebles’s joint funding has supported 19 summer research students, often for multiple years, as well as many additional school-year only students. Dr. Peebles has previously received grants from the Dreyfus Foundation and the Petroleum Research Fund to support spectroscopic studies of atmospheric pollutants such ozone destroyers, and since 2009 she has taken multiple trips to the Canadian Light Source synchrotron facility in Saskatchewan to record high precision spectra of potential ground-water contaminants. Dr. Peebles has received support for these endeavors from the Council on Faculty Research, which, combined with Chemistry department support, has allowed her to take students along on these data collection missions. Dr. Peebles is a native of Washington, DC. She received a BA in Chemistry from Oberlin College in 1996 and a Ph.D. in Physical Chemistry from the University of Michigan in 2000.

**Dr. Sean Peebles** has been a faculty member in the EIU Chemistry Department since 2001. His research focuses on determination of structure and properties of molecules and weakly interacting clusters of molecules using microwave spectroscopy and computational chemistry. Recent National Science Foundation (NSF) funding allowed modifications to also target studies of reactive ionic species in the gas phase. The research utilizes a chirped-pulse Fourier-transform microwave spectrometer, which was constructed entirely at EIU with the help of undergraduate students and represented the first such instrument at a principally undergraduate institution. Our goal is to improve understanding of the fundamental forces acting between molecules, such interactions being important in many different areas, such as drug interactions, protein folding, CO2 capture, and atmospheric and combustion chemistry. In addition to NSF support, Dr. Peebles’s research has also been funded by external grants from the Petroleum Research Fund, and he was the recipient of a Dreyfus Foundation Teacher-Scholar Award in 2009. Dr. Peebles received his B.Sc. and Ph.D. degrees in Chemistry from the University of Exeter in the UK, and was a postdoctoral research fellow at the University of Michigan, Ann Arbor and a Visiting Assistant Professor at SUNY Fredonia before coming to EIU.
Externally Funded Grants Received
Fiscal Year 2015

Academic Affairs

Project Directors: Armstrong, Ke’An / Neal, Jack / Good, Brenda – WEIU
Funding Agency: City of Charleston Tourism
Title of Project: WEIU Kids Day at the Castle

Project Directors: Armstrong, Ke’An / Neal, Jack – WEIU
Funding Agency: United Way of Coles County
Title of Project: Raising Readers

Project Directors: Davenport, Mona / Burkhead, Maggie - Minority Affairs
Funding Agency: U.S. Department of Education
Title of Project: TRIO: Student Support Services FY15

Project Director: Neal, Jack - WEIU
Funding Agency: Corporation for Public Broadcasting
Title of Project: CPB Interconnection Grant FY15

Project Director: Neal, Jack - WEIU
Funding Agency: Illinois Arts Council
Title of Project: IAC FY15 (Basic Grant)

Project Director: Neal, Jack - WEIU
Funding Agency: Corporation for Public Broadcasting
Title of Project: Community Service Grant FY2015

Business Affairs

Project Directors: Siegel, Ryan / Weber, Chad - Facilities Planning and Management
Funding Agency: Illinois Department of Commerce and Economic Opportunity
Title of Project: Natural Gas Boiler Tune-up

Project Directors: Siegel, Ryan / Weber, Chad - Facilities Planning and Management
Funding Agency: Illinois Department of Commerce and Economic Opportunity
Title of Project: Physical Science Condensate Pipe Insulation

Project Director: Zimmer, Timothy - Facilities Planning and Management
Funding Agency: Illinois Emergency Management Agency
Title of Project: Enhancing Campus Security
College of Arts and Humanities

**Project Director: Crews, Daniel** - College of Arts & Humanities Dean's Office  
Funding Agency: City of Charleston Tourism  
Title of Project: Celebration: A Festival of the Arts 2015

**Project Director: Murray, Robin** - English  
Funding Agency: National Writing Project  
Title of Project: Teacher Leadership Development SEED Grant - Year Two

**Project Director: Reid, Debra** – History  
Funding Agency: Delta Kappa Gamma Educational Foundation  
Title of Project: Field School in Interdisciplinary Medieval Research, Analysis and Public Interpretation

**Project Director: Rossi, Richard** – Music  
Funding Agency: Charleston Area Charitable Foundation (CACF)  
Title of Project: CACF for the Eastern Symphony Orchestra

**Project Director: Vaught, Dwight** - College of Arts and Humanities Dean's Office  
Funding Agency: New England Foundation for the Arts: National Dance Project  
Title of Project: Residency by the Seldoms dance company and performance of POWER GOES

Lumpkin College of Business and Applied Sciences

**Project Directors: Baker, Misty / Kennedy-Hagan, Karla** - Family and Consumer Sciences  
Funding Agency: Illinois Department of Human Services/US Department of Health and Human Services  
Title of Project: Child Care Resource and Referral FY15

**Project Directors: Baker, Misty / Simpson, Linda** - Family and Consumer Sciences  
Funding Agency: Illinois Network of Child Care Resource and Referral Agencies  
Title of Project: INCCRRA Recruitment and Recognition of Early Care and Education Practitioners

**Project Director: Painter, James** - Family and Consumer Sciences  
Funding Agency: Paramount Farms  
Title of Project: Perceived Feelings of Contentment and Happiness after Consuming Snack Foods

**Project Director: Savickas, Eric** - Military Sciences  
Funding Agency: Tawani Charitable Foundation  
Title of Project: EIU ROTC Cadet Awards Promotion FY15

College of Education and Professional Studies

**Project Director: Bower, Douglas** - Education and Professional Studies Dean's Office  
Funding Agency: Illinois Board of Higher Education  
Title of Project: IBHE Common Core State Standards Integration (Increase #1)
Project Directors: Jackman, Diane / Reid, Brian - Early Childhood, Elementary, and Middle Level Education
Funding Agency: Southern Illinois University – Edwardsville
Title of Project: Illinois IHE Partnership- EIU IHE Mini-grant

Project Director: Lucas, Stephen - Secondary Education & Foundations
Funding Agency: Various Illinois Institutions of Higher Education
Title of Project: Teacher Graduate Assessment

Project Directors: Mulvaney, Michael / Barkley, James - Recreation Administration
Funding Agency: Edgar County Highway Department
Title of Project: Edgar County Trails and Greenways: Blackhawk Trail Master Plan (Phase II)

Project Director: Reven, Linda - Early Childhood, Elementary, and Middle Level Education
Funding Agency: Illinois Network for Child Care Resource and Referral Agencies
Title of Project: Gateways to Opportunity Youth Development Specialist Credential pilot program

Project Director: Reven, Linda - Early Childhood, Elementary, and Middle Level Education
Funding Agency: Illinois Network for Child Care Resource and Referral Agencies
Title of Project: Gateways to Opportunity School Age Specialist Credential pilot program

Project Director: Rich, Cynthia - Education and Professional Studies Dean's Office
Funding Agency: Library of Congress
Title of Project: Teaching with Primary Sources

Project Directors: Bower, Douglas - Education and Professional Studies Dean's Office
   Ames, Melissa / Binns, Donna / Murray, Robin - English Department
Funding Agency: Illinois State Board of Education
Title of Project: ISBE Teacher Prep Redesign English Department FY15

Project Directors: Bower, Douglas - Education and Professional Studies Dean's Office
   Lassak, Marshall - Mathematics and Computer Science
Funding Agency: Illinois State Board of Education
Title of Project: ISBE Teacher Prep Redesign Math Bower FY15

College of Sciences

Principal Investigator: Canam, Thomas - Biological Sciences
Funding Agency: Environmental Protection Agency
Title of Project: Fungi and Bioenergy: Development of a Sustainable Biomass Pretreatment System

Principal Investigator: Colombo, Robert - Biological Sciences
Funding Agency: UIUC/INHS/IDNR/USFWS
Title of Project: Asian Carp 2015

Principal Investigator: Colombo, Robert - Biological Sciences
Funding Agency: Illinois Water Resources Center
Title of Project: Effect of Dams on the Genetic Structure of Fish Assemblages in the Vermillion River
Principal Investigators: Colombo, Robert / Bollinger, Eric / Meiners, Scott - Biological Sciences
Funding Agency: Illinois Department of Natural Resources/USFWS
Title of Project: A Long-term Monitoring Program of Fish Population on the Wabash River

Principal Investigators: Colombo, Robert / Laursen, Jeffrey / Pederson, Charles - Biological Sciences
Funding Agency: Sanitary District of Decatur
Title of Project: Ecological condition of a stretch of the Sangamon River receiving effluent from the Sanitary District of Decatur: Focusing on water chemistry, qualitative habitat assessment, and the mussel, macroinvertebrate and fish assemblages

Principal Investigators: Colombo, Robert / Meiners, Scott - Biological Sciences
Funding Agency: Illinois Department of Natural Resources
Title of Project: NFPP - Vermillion River Basin Biological Assessment for Dam Removal

Principal Investigator: Coons, Janice - Biological Sciences
Funding Agency: University of Illinois Urbana Champaign/Illinois Natural History Survey
Title of Project: Population surveys, reproductive ecology, and seed ecology and seed predator identification for Physaria kaibabensis.

Principal Investigators: Craig, Cameron - Geology/Geography; Grant, Pete – CATS; Johnson, Mark - College of Sciences
Funding Agency: Illinois Principals Association
Title of Project: Illinois Principals Association: Model Math Curriculum Video Series

Principal Investigator: Deppe, Jill - Biological Sciences
Funding Agency: Illinois Department of Natural Resources
Title of Project: Bat communities in Illinois State Parks & Nature Preserves in Coles and Clark Counties: Bat Inventory & Habitat Associations

Principal Investigators: Di Naso, Steven / Gutowski, Vincent - Geology/Geography
Funding Agency: City of Danville
Title of Project: GIS Utilities Mapping Services

Principal Investigators: Di Naso, Steven / Gutowski, Vincent - Geology/Geography
Funding Agency: Iowa Select Farms
Title of Project: System Management, Mapping and Workflow Initiative

Principal Investigators: Di Naso, Steven / Gutowski, Vincent - Geology/Geography
Funding Agency: City of Berwyn
Title of Project: GIS Utilities Mapping Initiative 2014 - Phase II

Principal Investigators: Di Naso, Steven / Gutowski, Vincent - Geology/Geography
Funding Agency: City of Charleston
Title of Project: GIS Database Development for the City of Charleston (Amendment #8)

Principal Investigator: Meiners, Scott - Biological Sciences
Funding Agency: Lumpkin Family Foundation
Title of Project: Evaluating the potential of chestnuts and hazelnuts as sustainable crops in East-Central Illinois.
**Principal Investigator: Menze, Michael** - Biological Sciences  
Funding Agency: National Science Foundation  
Title of Project: Collaborative Research: Mechanisms of Tolerance to Severe Water Stress in Animals

**Principal Investigator: Mullin, Stephen** - Biological Sciences  
Funding Agency: Illinois Department of Natural Resources  
Title of Project: Safe Passage: The Hose Bridge as a Model Conduit System During Seasonal Peaks in the Migration of Small Vertebrates.

**Principal Investigator: Maia, Anabela** - Biological Sciences  
Funding Agency: Illinois Water Resource Center  
Title of Project: Effects of structural rehabilitation on nutrient retention and uptake, community assemblages, and functional morphology of biotic communities in a small Midwestern stream

**Graduate School**

**Project Director: Chesnut, Robert** - Research and Sponsored Programs  
Funding Agency: Illinois Department of Human Services  
Title of Project: Prescription Information Library FY15

**Library Services**

**Project Director: Heldebrandt, Elizabeth** - Library Services  
Funding Agency: Illinois Humanities Council  
Title of Project: Quanah and Cynthia Ann Parker: The History and the Legend

**Student Affairs**

**Project Directors: Davidson, Eric / Murphy, Cherise** - Health Services  
Funding Agency: Illinois Department of Human Services  
Title of Project: IDHS: Statewide Higher Education Substance Abuse Prevention Program

**Project Director: Moore, Linda** - Career Services  
Funding Agency: Illinois Board of Higher Education  
Title of Project: Illinois Cooperative Work Study Program FY2015
Internal Funding

2015 Dean’s Award of Excellence in Summer Research and Creative Activity

Dr. Lyndsay Jenkins, Psychology Department

Dr. Jenkins’s research interests revolve around student academic success, factors that enable success, such as academic enablers and social support, as well as potential barriers to academic success, such as externalizing behaviors, bullying, and peer victimization. Through her research, she hopes to gain a better understanding of characteristics and outcomes associated with major bullying roles (i.e., bully, assistant, victim, defender, and outsider) and how this process can be translated into prevention and intervention efforts for schools.

She graduated from Northern Illinois University with a Ph.D. in Psychology, specializing in School Psychology. Dr. Jenkins has been at EIU since 2012 and teaches undergraduate and graduate classes in the Psychology Department. She is the coordinator for the Undergraduate Internship Program in the Psychology department and co-advisor for the Psychology Club. She regularly works with undergraduate and graduate students and their research projects and has sponsored over two dozen student research presentations at local, regional, and national conferences in the last three years.

2015 Summer Research and Creative Activity Award Recipients

Bickford, John – Early Childhood, Elementary, and Middle-Level Education
   The Historical (Mis)Representation of War within Children's and Young Adult Literature

Campbell, Julie – English
   "Humanism, Translation, and Transnational Histories"

Canivez, Gary – Psychology
   Structural Validity of the WISC-V: Confirmatory Factor Analytic Analyses Comparing Bifactor and Higher-Order Models

Deppe, Jill – Biological Sciences
   Quantifying broad-scale songbird migration patterns in the Yucatan Peninsula and Cuba to identify conservation priorities in the Gulf of Mexico.

Engles, Tim – English
   "Not quite his own master': Richard Wright's Savage Holiday" [book chapter]

He, Hongshan – Chemistry
   A Near-infrared Dye for Dye-sensitized Solar Cells

Hendrickson, Ryan – Political Science
   Congress and ISIS: The Constitutionality of President Obama's New War
Hung, Kai – Biological Sciences
Using DNA Fingerprinting to Analyze Genetic Variations in Escherichia coli Samples

Jenkins, Lyndsay – Psychology
Measurement of the Bystander Intervention Model in Middle School

Kronenfeld, Barry – Geology/Geography
User-Friendly Software for Manual Cartogram Construction - Application Narrative

Laingen, Chris – Geology/Geography
The Corn Belt’s Quiet Transformation

Ludlow, Jeannie – English/Women’s Studies
Undue Burdens and Personal Responsibility: Literary Pregnancy and Abortion in the Post-Choice Decade in the United States

Meiners, Scott – Biological Sciences
Evaluation of Stress Tolerance in Chestnut and Hazelnut Varieties

Menze, Michael – Biological Sciences
Can We Predict the Spread of the Gypsy Moth by Understanding Thermal Performance of this Invasive Forest Pest?

Nathan, Britto – Biological Sciences
Loss of Smell in Women an Early Sign of Alzheimer’s Disease

Periyannan, Gopal – Chemistry
Glutamate Carboxypeptidase II from Caenorhabditis elegans: An Efficient Model to Study Human Folic Acid Metabolism and Stroke Development

Polydore, Catherine – Counseling and Student Development
An Exploratory Qualitative Investigation of Secondary Education in Dominica

Semeniuc, Radu – Chemistry
Inspired by nature, designed for CENCERE: An amphiphilic ligand for methane hydroxylation

Wharram, Charles – English
Broadview Edition of Goethe’s The Sorrows of Werther

Wixson, Christopher – English
Bernard Shaw, Mass Marketing, and Proprietary Cures
2015 Dean’s Award of Excellence in Research and Creative Activity

Dr. Michael Menze, Biological Sciences

Dr. Menze’s research focuses on the biochemical underpinnings of adaptations to extreme environmental insults such as elevated temperature, severe dehydration, and freezing in animals. He is especially interested in how the ‘cellular powerhouse’, termed mitochondrion, integrates into states of suboptimal metabolic activities. His interest in mitochondrial physiology and metabolism aligned well with the research objectives of two colleagues here at Eastern, and he quickly developed strong collaborations with Dr. Britto Nathan a Neurobiologist in the Biology department, and Dr. Konkle a Biochemist in the Chemistry department. The synergistic interactions among these three scientists lead to novel research avenues investigating the role of a recently discovered iron-sulfur cluster containing protein termed mitoNEET (CISD1) in mitochondrial energy production and neuronal health. All three scientists are continuing to actively collaborate on several questions surrounding the role of mitoNEET in a variety of biological model systems and diseases. Dr. Menze also fosters a strong student centered research program at EIU and he provides many undergraduate and graduate students with research opportunities throughout the year.

2014-2015 Council on Faculty Research Award Recipients

Bickford III, John – Early Childhood, Elementary and Middle-Level Education
Elementary and Middle Level Students’ Historical Thinking

Chesner, Craig – Geology/Geography
Geologic Mapping of Samosir Island: Insights into the Recent History of the Toba Caldera, Sumatra, Indonesia

Deppe, Jill – Biological Sciences
Evaluating stopover site quality for migratory songbirds in the Gulf of Mexico: Conservation and management priorities

Knight, Lania – English
Writing Speculative Fiction: Remnant, a novel

Konkle, Mary – Chemistry
Characterization of TZD Drugs Binding to Glutamate Dehydrogenase 1

Menze, Michael – Biological Sciences
The Brain on Aging – Role of CISD1

Mullin, Stephen – Biological Sciences
Manipulative moms: Examining the relationships between environmental variables and offspring traits in a live-bearing snake species

Nathan, Britto – Biological Sciences
Molecular Studies of a Brain-Selective Estrogen to Prevent Alzheimer's Disease
Periyannan, Gopal – Chemistry

Quesada, Ruben – English
Poetry Writing: Elegies

Slaven, Isaac – School of Technology
Employing observed photodegradation in ink pigments as a safety indicator in synthetic life safety equipment

2015-2016 President’s Fund for Research and Creative Activity Award Recipients

Cook II, David – Mathematics and Computer Science
The Lefschetz Properties in Algebra, Combinatorics, and Geometry

Maia, Anabela - Biological Sciences
Evolution of median fins in basal bony fishes

Semeniuc, Radu – Chemistry
Metal-Based Compounds for Environmentally Friendly Transformations

2015-2016 Council on Faculty Research

College of Arts and Humanities
Matthew Boonstra
Nora Pat Small

Lumpkin College of Business and Applied Sciences
Marko Grunhagen, Chair
Melanie Burns

College of Education and Professional Studies
Rebecca Cook
Jennifer Stringfellow

College of Sciences
Ronan Bernas
Rebecca Peebles

Library Services
Steve Brantley