In this second issue of RSP’s Quarterly Review, we turn our attention to the Innovation and Intellectual Property office (IIP), which connects university research to companies both large and small. IIP Director Joe Janda works closely with faculty, students and staff who seek to get their discoveries into the commercial marketplace through licensing and the creation of startup companies. For a relatively youthful research enterprise like PSU’s, IIP’s successes to date have been remarkable.

The Review also highlights Social Determinants of Health (SDH), an initiative that exemplifies PSU’s ability to link research to the interests of our community partners. SDH researchers show how health outcomes depend not only on genetics and exposure to biological dangers, but also on the quality of our social environment. This work is a key component of our partnership with the Oregon Health and Science University and forms a cornerstone of the planned joint OHSU-PSU School of Public Health.

Although RSP’s primary focus is on helping faculty obtain and manage external funding, the results of that research show up in our publications. Along with PSU’s Libraries, RSP has begun assessing PSU’s scholarly output. A recent analysis of 3,300 peer-reviewed PSU publications for the past four years (figure below) shows a very balanced portfolio across disciplines, with some concentration in social sciences, engineering, and computer science, fields representing many of our strongest partnerships. A parallel look at the field-weighted impact factors for these publications reveals that papers with international collaborators are cited three times more often than those with single authors.

We invite you to check out our report ReTHINKing Research at PSU, which describes the components of our office and suggests ways we might grow our research and partnerships activity. Finally, RSP has entered the Twittersphere. If you’d like to receive our periodic updates, follow @PDXVPR.

Jonathan Fink
Vice President
Research & Strategic Partnerships

Joe Janda, Director, Innovation & Intellectual Property

### Inside this Issue

- The Social Determinants of Health Initiative 2
- Developing Pathways to Social Communication 3
- First Stop Portland 3
- PDC Partnership with PSU OHSU Supports Commercialization for Six Startups 3
- PSU Startup Profile: APDM 4
- Innovation Rally Awards 4
- IIP Support of PSU Projects 5
- Ground work for Collaborations with OHSU 5
- 2nd Quarter Awards 6
- 2nd Quarter Proposals 8
- 2nd Quarter Expenditures 10
- Faculty Publications 10

---

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision Sciences</td>
<td>2.4%</td>
</tr>
<tr>
<td>Economics</td>
<td>2.2%</td>
</tr>
<tr>
<td>Business, Management</td>
<td>6.0%</td>
</tr>
<tr>
<td>Social Science</td>
<td>11.9%</td>
</tr>
<tr>
<td>Psychology</td>
<td>5.0%</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>2.3%</td>
</tr>
<tr>
<td>Medicine</td>
<td>7.2%</td>
</tr>
<tr>
<td>Biochemistry, Genetics</td>
<td>4.1%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4.85%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>9.3%</td>
</tr>
<tr>
<td>Other</td>
<td>7.7%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4.1%</td>
</tr>
<tr>
<td>Physics and Astronomy</td>
<td>5.2%</td>
</tr>
<tr>
<td>Chemistry</td>
<td>2.9%</td>
</tr>
<tr>
<td>Materials Science</td>
<td>4.8%</td>
</tr>
<tr>
<td>Engineering</td>
<td>10.7%</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5.5%</td>
</tr>
<tr>
<td>Earth and Planetary Science</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
The Social Determinants of Health Initiative

A 2008 World Health Organization report defines social determinants of health as “the complex, integrated and overlapping social structures and economic systems that are responsible for most health disparities. These social structures include social environment, physical environment, health services, structural and societal factors.” Addressing the causes and mitigating the effects of such disparities are essential to the long-term sustainability of our society and environment.

In 2012, after much preparation, PSU Schools of Social Work (SSW), Community Health (SCH), and the Dept. of Sociology, with the support of Academic Affairs and Research & Strategic Partnerships, launched the Social Determinants of Health Initiative (SDH Initiative). The SDH Initiative’s goal: to promote community health by identifying, understanding, and addressing the systems and structures influencing wellbeing. One of the primary tools researchers in the SDH Initiative use to advance that goal is community-based participatory research (CBPR). CBPR pairs academics and community members in equal partnerships to identify specific community needs and develop research projects aimed at meeting those needs in culturally sensitive ways.

Founded by Drs. Laurie Powers, Carlos Crespo, and Veronica Dujon, the SDH Initiative is an interdisciplinary network for researchers, policy makers, healthcare practitioners, students, and the community. The SDH Initiative leverages the collective resources and expertise of members, provides a platform for collaboration, and is home for projects developing, implementing, and testing the efficacy of programs related to the social determinants of health.

The SDH Initiative includes over 150 members, affiliated with departments throughout PSU and OHSU, state and local agencies, community organizations, and regional health systems. Nine research centers have ties to the SDH Initiative. Five faculty members were hired to focus research in the area of social determinants of health: Dr. Christina Nicolaides, MD, MPH, and Director of the SDH Initiative, and Drs. Ginny Garcia-Alexander, Dawn Richardson, Lynne Messer, and Kelly Gonzalez. Together they have over 30 projects funded or awaiting funding and have published dozens of papers advancing knowledge in numerous fields.

SDH Initiative projects include the AASPIRE program, a study that brings together academics and the autistic community to develop and preform research relevant to the needs of adults on the autism spectrum. The HEARTH collaborative is a community-academic partnership working to better understand the interaction of factors that impact homelessness and the substance abuse recovery process. The SDH Initiative’s Research Highlights page provides information on other studies in progress in and around the region.

“Health isn’t just about biology,” said Director Nicolaides. “We already know there are a multitude of social factors that influence health. The trickier question is what to do about them. My hope is that the SDH Initiative can bring together individuals throughout the area so we can start figuring out how to address social inequalities and improve health equity.”

With its long-term focus on community health, equity, sustainability, education, and the urban environment, PSU is ideally situated to become a national and international hub for students, researchers, policy makers, and others interested in the social determinants of health.

For community stakeholders, practitioners, and researchers interested in SDH, the Institute for Sustainable Solutions is hosting a Research into Action Symposium on SDH February 28th. LEARN MORE.

READ ABOUT OTHER PSU RESEARCH CENTERS
Developing Pathways to Social Communication

A common challenge for children with autism spectrum disorder (ASD) is developing the skills necessary to interact with others. If a child with autism has difficulty with or is incapable of communicating needs, thoughts, and feelings with intent, that child may face serious social, economic, health, and healthcare problems later in life.

Dr. Amy Donaldson is a practicing speech-language pathologist and Assistant Professor, Dept. of Speech & Hearing Sciences. She directs the Autism & Child Language Laboratory at PSU where she studies the use of communication in social contexts. She was also recently appointed to the Oregon State Behavior Analyst Regulatory Board by Governor Kitzhaber.

“My interests are in clinically-based research, assessing intervention efficacy, and social communication by children with ASD. In the lab we don’t just look at speech, we examine the intentionality of communication in children with ASD, their engagement, reciprocity, play—the things that motivate them to move forward,” said Dr. Donaldson.

In the Lab, Dr. Donaldson is working on several research projects. One, the Autism Speaks-funded SocialsibS, is investigating the feasibility of a never before attempted hybrid sibling-mediation and video modeling intervention and the effects it has on the communication practices of children with ASD. In this study graduate student clinicians are teaching siblings ways to interact with and help learners with ASD acquire new communication skills. Their interactions are recorded and later played back to the children with ASD to provide them with a supportive visual model of targeted behaviors. Dr. Donaldson, in collaboration with Drs. Lew Bank and Christina Nicolaidis of the School of Social Work, is in the process of ramping up the project, adding a parental component, and preparing to move forward with a NIH proposal this spring.

For individuals with ASD and other developmental disabilities, the skills to communicate with intention may not come easily, but they are essential to an individual’s ability to navigate in society. Studies like SocialsibS and other projects underway in Dr. Donaldson’s Autism & Child Language Disorders Laboratory are developing and testing interventions intended to lead children with ASD to the behaviors and skills they’ll need to communicate socially. In the long run this work could provide families, teachers, and peers with the knowledge and tools they’ll need to help their loved ones learn how to express their thoughts, feelings, and needs in the variety of social contexts they’ll face as they grow into adulthood.

READ MORE ABOUT FACULTY RESEARCH AT PSU

PDC Partnership with PSU, OHSU Supports Commercialization for Six Startups

Six local companies will receive grants of up to $30,000 through a pilot program to promote technology commercialization sponsored by the Portland Development Commission in partnership with Oregon Health & Science University (OHSU) and Portland State University (PSU).

Both OHSU and PSU play critical roles in encouraging local innovation and entrepreneurial incubation. The grants are intended to catalyze the development of new ventures based on OHSU and PSU technologies, assist promising small businesses and stimulate entrepreneurship and related job creation.

The PSU-affiliated companies are:

• SweetSense, Inc.
• APDM
• Hawthorne Materials

LEARN MORE
As 2014 begins, PSU startup **APDM** is gearing up for another year of growth.

A Portland-based medical device company and PSU Business Accelerator company-in-residence, APDM was founded by PSU innovator, entrepreneur, and Professor Dr. James McNames, PSU alumnus, Andrew Greenberg, and Dr. Matteo Aboy, Associate Provost and VP of Research at the Oregon Institute of Technology (OIT). By 2010, with IP licensed from PSU, the company had developed the world's most advanced, wearable movement monitors: the Sapphire, Emerald, and Opal, and an accompanying movement analysis system, the Mobility Lab.

Since opening their doors, APDM has grown from 12 to 17 employees, many of whom were once students at PSU. They have plans to add positions this year. Their wearable monitors and Mobility Lab, both produced here in Oregon, are used by Microsoft, MIT, NASA, and others. In three years they've sold products to 134 universities, clinics, corporations, and organizations in 24 countries on six continents. Company sales now push $1.5 million a year.

In December, APDM was one of three PSU-affiliated startup companies to receive a $30,000 commercialization grant from the Portland Development Commission. The funds will go toward pursuing the FDA approval needed to open new markets. The coming months will bring the launch of a new line of products with improved capabilities for researchers and clinicians.

Originally designed to fill the need for precision, wearable movement monitors and mobile labs to aid researchers studying Parkinson's disease, APDM's hardware and systems have applications in athletic performance tuning, concussion management, ergonomics, repetitive stress injury, physical therapy, and rehabilitation.

The market for wearable technologies is expected to reach $8.3 billion by 2018, and heading into the new year APDM is poised to grow with it. As the company continues to expand it plans to deepen its roots here in Portland and continue collaborations with scientists, faculty, and clinicians at OIT, OHSU, and here at PSU. APDM is just one example of how Portland startup companies with close ties to PSU are enriching Oregon's tech economy and improving lives around the world as well as in our own backyard.

### Innovation Rally Awards $35,000 in Research Funds

During the Winter, Spring, and early-Summer terms of 2013, PSU's Innovation & Intellectual Property office (IIP) held an open call for students and faculty to explore services the office provides, share projects, and participate in collaborative partnerships designed to transform ideas developed in the lab into realities that benefit society. Projects submitted during that time were considered for $35,000 in research development grants available through IIP's first Innovation Rally.

Submitted projects were presented to an outside committee of domain experts, entrepreneurs, and venture fund managers who were asked to comment on each project in terms of potential impact, partnership opportunities, commercialization readiness, and market opportunity. This past November, the committee selected three projects to receive portions of the available funding.

The recipients of the development grants are:

1. **Dr. Daniel Ballhorn**, Dept. of Biology—production of non-GMO pest-resistant plants. $25,000 in unrestricted research funds.
2. **Dr. Tami Clare**, Dept. of Chemistry—method of detecting degradation of coatings, such as those used to protect outdoor sculptures. $5,000 in proposal development funds.
3. **Dr. Shankar Rananavare**, Dept. of Chemistry—method of correcting inconsistencies in patterning caused by current photolithography techniques. $5,000 in proposal development funds.
IIP Support of PSU Projects, Innovations, Faculty & Student Entrepreneurship
Six Year Snapshot

Connecting innovators and entrepreneurs to sources of funding is one way IIP supports faculty and student projects. Through internal mechanisms like the University Venture Development Fund, the Innovation Rally, and revenue distribution, and external partnerships with organizations like the PDC, IIP has provided $1.31 million in funding to promote the use and increase the impact of innovations developed here at PSU.

Some projects need funding to meet essential milestones. Small investments in clinical studies, IT development, and market viability can yield returns of tremendous value and facilitate a virtuous feedback loop wherein positive results often lead to further financial backing.

Groundwork for Collaborations with OHSU

Research from three faculty in the Center for Life in Extreme Environments (CLEE) and the Dept. of Biology could lay the groundwork to improve health and healthcare.

Professor of Biology, Dr. Ken Stedman and graduate student James Laidler were recently mentioned in a New York Times article. Stedman and Laidler have found a way to preserve viruses—a technique that could extend the shelf life of vaccines and allow for storage at room temperatures. Their work shows that viruses—which form the basis of many vaccines—can be covered with a silicate coating and kept in a state of suspended animation. This patent-pending process could eventually save millions of lives in the developing world by making vaccines more widely available.

In early January, the NSF awarded an $810,000 grant to Dr. Jason Podrabsky, CLEE researcher and Dept. of Biology Chair, for his proposal, “Regulation of Extreme Anoxia Tolerance via MicroRNAs in Embryos of the Annual Killifish Austrofundulus limnaeus.” The grant will support a study examining the role of small, non-coding RNAs in the cellular processes that give this species the unique ability to suspend metabolic, developmental, and cellular activity and survive in environments deplete of oxygen for months. Data collected could one day inform cancer research.

Also receiving a major award from the NSF in January was Associate Professor of Biology, Dr. Suzanne Estes. She received $750,000 for a study of “Mitonuclear Interaction and the Genetic Architecture of Phenotypic Evolution,” which will evaluate how various cellular components and processes contribute to the evolution of genes and species, information that may help decipher the origins of many diseases.
Research & Strategic Partnerships Quarterly Review, Winter 2014

Research Snapshot

Second Quarter, Fiscal Year 2014

Awards Received Q2, 2014

- CLAS: 19
- CUPA: 11
- MCECS: 17
- SSW: 14
- Other: 10
- COTA: 1
- GSE: 0
- SBA: 2

<table>
<thead>
<tr>
<th>Awards by Comparison</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>$11,895,294</td>
</tr>
<tr>
<td>FY 2014</td>
<td>$5,647,631</td>
</tr>
</tbody>
</table>

New Awards: $3,418,471
Amendments: $2,168,160
Student Projects: $61,000
Total: $5,647,631

Selected Awards

View the Complete List of Awards

Baney, William, Washington State Recovery Youth Service SAT-ED Program, SSW, Center for Improvement of Child & Family Services, Department of Social and Health Services, $101,625, New Award
Bass, Robert, Aggregated Residential Battery Energy Storage Systems, MCECS, Civil Engineering, Portland General Electric, $5,868, New Award
Becker, William, Assessment in Research for the Portland Metro STEM Partnership, CLAS, Center for Science Education, Hillsboro School Foundation, $14,250, New Award
Bertini, Robert, Preparing a Possible Oregon Road Map for Connected Vehicle Deployment Scenarios, MCECS, Civil & Environmental Engineering, Oregon Department of Transportation, $145,000, New Award
Cahn, Katharine, Nak Nu Wit Workforce Development Partnership, SSW, Center for Improvement of Children & Families, Northwest Portland Area Indian Health Board/Substance Abuse and Mental Health Services Administration, $138,658, New Award
Cellarius, Karen, Cascadia/Outside In SAMHSA PBHCI Evaluation, SSW, Regional Research Institute, Cascadia Behavioral Healthcare, Inc./Department of Health and Human Services, $60,000, Amendment to Existing Award
Creutzburg, Megan, Climate, Land Management and Future Wildlife Habitat in the Pacific Northwest, CLAS, Institute for Natural Resources, Oregon State University/US Geological Survey, $29,662, Amendment to Existing Award
Crum, Eric, Portland Building Waste Assessment, CUPA, Community Environmental Services, City of Portland, $1,725, New Award
Curtis, Renee, Sustainability: Promoting Sustainable Decision Making in Informal Education, CUPA, Center for Urban Studies, Oregon Museum of Science and Innovation/National Science Foundation, $46,715, Amendment to Existing Award
Daim, Tugrul, Northwest Energy Efficiency Technology Roadmap, MCECS, Engineering & Technology Mngt Bonneville Power Administration, $246,266, Amendment to Existing Award
Damon, Lara, Economic Opportunity Initiative-MicroEnterprise Project, SBA, Portland Development Commission/US Department of Housing and Urban Development, $105,537, Amendment to Existing Award
Dill, Jennifer; Co-PI: Haugendorn, Hau, Transforming the Transportation Profession to Create Bikeable & Walkable Cities, OTHER, OTREC, Summit Foundation, $105,341, New Award

Dusicka, Peter, Impact of Cascadia Subduction Zone Earthquake on the Seismic Evaluation Criteria of Bridges, MCECS, Civil & Environmental Engineering, Oregon Department of Transportation, $191,793, New Award

Elliott, Debra, Studded Tire Survey, OTHER, National Policy Consensus Center, Oregon Department of Transportation, $72,100, New Award

Estes, Suzanne, Mitonuclear Interaction and the Genetic Architecture of Phenotypic Evolution, CLAS, Biology, National Science Foundation, $178,990, New Award

Figliozzi, Miguel, Evaluating the Use of Crowdsourcing as a Data Collection Method for Bicycle Performance Measures and Identification of Facility Improvement Needs, MCECS, Civil & Environmental Engineering, Oregon Department of Transportation, $174,350, New Award

Frank, Lauren, Transforming Cancer Knowledge, Attitudes, and Behavior Through Narrative, CLAS, Communication, University of Southern California, $10,331, New Award

Fritz, Charlotte, Family-supportive Supervisor Behavior Training in Correction Personnel, CLAS, Psychology Oregon Health and Science University/The National Institute for Occupational Safety and Health, $50,000, New Award

Gallup, John Luke, Quantification of the Economic Costs Resulting from the Lack of Bolivia’s Sovereign Access to the Pacific Ocean, CLAS, Economics, Dirección Estratégica de Reivindicación Marítima - DIREMAR, $100,497, New Award

Gil-Kashiwabara, Eleanor, Nak-Ni-Wit (Systems of Care), SSW, Regional Research Institute, Northwest Portland Area Indian Health Board/Substance Abuse and Mental Health Services Administration, $199,967, Amendment to Existing Award

Green, Beth, TQRIS Validation Study, SSW, Center for Improvement of Children & Families, Oregon State University/Oregon Employment Department, $231,304, New Award

Izumi, Betty, Harvest for Healthy Kids Dissemination Program, CUPA, School of Community Health, Kaiser Permanente, $39,939, New Award

Janda, Joseph, OHSU/PSU Commercialization Grant Pilot Program, OTHER, Innovation & Intellectual Property, Portland Development Commission, $90,000 Amendment to Existing Award

Jones, Bill, 10kw, 40kWh IBF Energy Storage System Field Trial, SBA, Oregon BEST, $150,000, New Award

Jurjevich, Jason, Oregon County-level and Coordinated County-City Population Forecasts, CUPA, Population Research Center, Oregon Department of Land Conservation and Development, $440,716, New Award

Keller, Tom, Evaluation of Mentoring Enhancement Demonstration Projects, OTHER, Center for Interdisciplinary Mentoring, American Institutes for Research/US Department of Justice, $123,237, Amendment to Existing Award

Maier, David, Science & Technology Center for Coastal Margin Observation & Prediction, MCECS, Computer Science, Oregon Health and Science University/National Science Foundation, $69,998, Amendment to Existing Award

McNeff, Elizabeth, Promoting Adoption and Implementation of the Healing Pathways Program to Reduce Depressive Symptoms in Women with Disabilities, SSW, Regional Research Institute, Oregon Health and Science University/US Department of Education, $70,818, Amendment to Existing Award

Messer, Lynne, Guide to Healing, CUPA, School of Community Health, University of North Carolina-Chapel Hill/Health Resources and Services Administration, $33,403, Amendment to Existing Award

Moradkhani, Hamid, Portland State Climate Change Streamflow Dataset, MCECS, Institute for Materials & Manufacturing Research, Bonneville Power Administration, $316,769, New Award

Noll, Jennifer, Enhancing Mathematics Teaching and Learning in Urban Elementary Schools, CLAS, Mathematics & Statistics, Teachers’ Development Group/National Science Foundation, $35,393, Amendment to Existing Award

Nordback, Krista, WSDOT Bicycle and Pedestrian Miles of Travel - Phases I & II, OTHER, OTREC, Washington State Dept of Transportation $30,000, New Award

Pan, Yangdong, Klamath River Long-term Periphyton Community Characterization, CLAS, Communications, Kier Associates, $16,735, New Award


Rissi, Jill, Health Engagement Model Comprehensive Evaluation Proposal, CUPA, Public Administration, Oregon Health Policy and Research, $214,549, Amendment to Existing Award


Singer, Laurel, BLM OR-WA: CESU - Consensus Center Pilot Project Facilitation in Roseburg, Oregon, CUPA, National Policy Consensus Center, Bureau of Land Management, $293,000, Amendment to Existing Award

Sytmsa, Mark, IPA - Robyn Draheim, CLAS, Environmental Sciences & Research, US Fish & Wildlife Service, $50,915, Amendment to Existing Award

Talke, Stefan, Improving Estuarine Transport Models Using Satellite Measurements, MCECS, Civil & Environmental Engineering, Office of Naval Research, $50,000, Amendment to Existing Award

Teuscher, Christof, A Stochastic Inference Model based on Probabilistic Bit-Streams, MCECS, Electrical & Computer Engineering, University of Michigan/Defense Advanced Research Projects Agency, $34,703, Amendment to Existing Award

Thanheiser, Eva, Enhancing Mathematics Teaching and Learning in Urban Elementary Schools, CLAS, Mathematics & Statistics, Teachers’ Development Group/National Science Foundation, $71,858, Amendment to Existing Award

Wood, William, Electroswag Welding Development Phase 2, OTHER, Environmental Sciences & Research, Boeing, $120,086, New Award
Research Snapshot

Second Quarter, Fiscal Year 2014

Proposals Submitted Q2, 2014

- **CLAS 67**
- **CUPA 20**
- **MCECS 25**
- **SSW 12**
- **Other 10**
- **COTA 0**
- **GSE 3**
- **SBA 1**

138 Proposals Submitted
$30,637,724 Requested

Proposals by Comparison

- FY 2013
  - Q1: 113
  - Q2: 138
- FY 2014
  - Q1: 138
  - Q2: 120

Selected Proposals

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abramson, Jonathan</td>
<td>Development of Novel Compounds for Treatment of Arrhythmias in CPVT</td>
<td>CLAS, Elex Biotech</td>
<td>$565,376</td>
</tr>
<tr>
<td>Strongin, Robert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allen, Jennifer</td>
<td>SEES Fellows (Mueller, Jocelyn): The Contribution of Urban Foodscales</td>
<td>OTHER, National Science</td>
<td>$471,481</td>
</tr>
<tr>
<td></td>
<td>to Socio-ecological Resilience</td>
<td>Foundation</td>
<td></td>
</tr>
<tr>
<td>Amali, Said</td>
<td>Digital Preservation of Middle East’s Historical Manuscripts</td>
<td>SSW, Qatar University/Qatar</td>
<td>$471,481</td>
</tr>
<tr>
<td></td>
<td>National Research Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anderson, Shelby</td>
<td>Collaborative Research: 1500 years of archaeology &amp; paleoecology</td>
<td>CLAS, National Science</td>
<td>$484,845</td>
</tr>
<tr>
<td></td>
<td>on the Selawik &amp; Buckland Rivers</td>
<td>Foundation</td>
<td></td>
</tr>
<tr>
<td>Anderson, Timothy</td>
<td>Footwear Recommender, MCECS, Nike</td>
<td></td>
<td>$19,966</td>
</tr>
<tr>
<td>Ballhorn, Daniel</td>
<td>Collaborative Research: Epigenetic Mechanisms of Heritable Adaptation</td>
<td>CLAS, National Science</td>
<td>$668,446</td>
</tr>
<tr>
<td></td>
<td>to Stress in Plants</td>
<td>Foundation</td>
<td></td>
</tr>
<tr>
<td>Baney, William</td>
<td>SSP TANF Family Stability and Employment Initiatives Training Pilot</td>
<td>SSW, Oregon Department of Human</td>
<td>$348,574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Services</td>
<td></td>
</tr>
<tr>
<td>Bank, Lewis; Lee,</td>
<td>Strong and Healthy Immigrant Children (SHIC) and Families</td>
<td>SSW, National Institutes of</td>
<td>$1,764,095</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Barsanti, Kelley</td>
<td>Synthesis of Comprehensive Emissions Measurements and Multi-scale</td>
<td>MCECS, Joint Fire Science</td>
<td>$435,314</td>
</tr>
<tr>
<td></td>
<td>Modeling for Understanding Secondary Organic Aerosol Chemistry in</td>
<td>Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wildland Smoke Plumes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barsanti, Kelley;</td>
<td>Constraining organic aerosol sources in the Southeast US: Field data</td>
<td>MCECS, National Oceanic and</td>
<td>$270,224</td>
</tr>
<tr>
<td>Pankow, James</td>
<td>analysis and process-level modeling</td>
<td>Atmospheric Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bertini, Robert</td>
<td>Preparing a Possible Oregon Road Map for Connect Vehicle/Cooperative</td>
<td>MCECS, Oregon Department of</td>
<td>$150,000</td>
</tr>
<tr>
<td></td>
<td>Systems Deployment Scenarios</td>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>Bleiler, Steven</td>
<td>Bringing Direct Calculation of Uncertainty, Sensitivity, and Risk</td>
<td>CLAS, National Science</td>
<td>$325,187</td>
</tr>
<tr>
<td>Booth, Adam</td>
<td>into SAGE &amp; R</td>
<td>Foundation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collaborative Research: Mantle to watershed to flora: Coupling</td>
<td>CLAS, National Science</td>
<td>$268,785</td>
</tr>
<tr>
<td></td>
<td>surface and deep Earth processes to decipher the evolution of the</td>
<td>Foundation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cascadia-Mendocino Triple Junction margins</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

View the Complete List of Proposals
Selected Proposals

Bright, Anita, Math Screener Project, GSE, Center for Applied Linguistics, $199,506
Bullock, David, Oregon Military Museum Library Internship, GSE, Oregon Military Department/US Department of Defense, $15,000
Cahn, Katharine, Nak Na Wt Workforce Development Partnership, SSW, Northwest Portland Area Indian Health Board, $138,658
Cal Santiago, Raul B, Collaborative Research - Harnessing the wind: Power output shaping for VAWT arrays using reduced order models of the flow field, MCECS, National Science Foundation., $269,554
Carder, Paula, Oregon Integrated Housing/Services Initiative, CUPA, Cedar Sinai Park, $49,615
Chaille, Christine; Narode, Ronald, SYSTMic Learning and Pedagogical Content Knowledge (STEM PCK), GSE, Educational Service District 112, $29,939
Curtis, Renee, Metro Fork it Over Program and Website, CUPA, Metro, $67,500
Daim, Tugrul, NW Energy Efficiency Technology Roadmap, MCECS, Bonneville Power Administration, $246,266
Dill, Jennifer, Multiday GPS Travel Behavior Data for Travel Analysis, OTHER, Resource Systems Group, $31,953
Duffield, Deborah, Restoring Comprehensive Response for the Northern Oregon/Southern Washington Marine Mammal Stranding Program, CLAS, National Oceanic and Atmospheric Administration, $100,000
Elliott, Debra, ODOT Studied Tire Usage Survey, OTHER, Oregon Department of Transportation, $72,061
Farquhar, Stephanie, Addressing Aggravating Factors of Pediatric Asthma in a Rural Environment, CUPA, University of Washington, $67,266
Fugliozzi, Miguel, Evaluating the Use of Crowdsourcing as a Data Collection Method for Bicycle Performance Measures and Identification of Facility Improvement Needs, MCECS, Oregon Department of Transportation, $174,350
Gelmon, Sherrill, Evaluation of Health Information Exchange (HIE) Services in Oregon, CUPA, Oregon Health Authority, $50,000
Gilleo, Bruce, National Ownership and Resilience: What Do They Mean For Democracy and Good Governance?, CUPA, Institute of International Education, $72,177
Goforth, Andrea, Identifying and Controlling Radiative and Non-Radiative Pathways in Luminescent Silicon Nanoparticles: Comparative Synthesis and Comprehensive Multi-level Characterization, CLAS, National Science Foundation, $753,678
Gonzales, Kelly, Perceived Experience of Discrimination in Health Care for American Indian Women in an Urban Setting, CUPA, Ruth Landes Memorial Research Fund, $47,100
Gordon, Sean, Watershed Assessment Model Development for the Interagency AREMP, OTHER, Bureau of Land Management, $147,024
Green, Beth, ACF: Healthy Start Effectiveness Study, SSW, NPC Research, Inc., $51,850
Huguet, Nathalie, Economic Contraction and Alcohol-related Suicides: A Multilevel Analysis, CUPA, University of California, Los Angeles, $214,451
Jay, David; Moradkhani, Hamid; Strecker, Angela; Liu, Jenny Hsing-I; Talke, Stefan; Zapata, Marisa; Nielson, Eric; Christy John, CNH: Transformation of the Lower Columbia River Estuary (1860-2060) Dynamic Interactions between Natural and Human Systems, MCECS; CLAS, CUPA, National Science Foundation, $1,499,968
Jetter, Antionie; Gray, Steven; Ellsworth, Lisa, Policy Scenarios for fire-adapted communities: understanding stakeholder risk-perceptions by measuring mental models, using Fuzzy Cognitive Maps, MCECS, Bureau of Land Management, $181,093
Jiao, Jun, Graphene-TiO2-Based Multicomponent Photocatalysts and Their Synergetic Effects on Visible-Light Absorption, MCECS, National Science Foundation, $448,701
Jurjevich, Jason, County-Level Population Forecasts for Oregon, CUPA, Oregon Department of Land Conservation and Development, $440,715
Lowrey, Marty, Intimate Partner Violence Training, SSW, Oregon Department of Justice, $66,518
Luiz, Jessamyn, Support for Oregon Court Appointed Special Advocate (CASA) Volunteer Programs, OTHER, Oregon Housing and Community Services, $100,561
Makler, Jon, Smart, Shared and Social: Enhancing All-Hazards Recovery Plans with Demand Management Technologies, OTHER, US Department of Transportation, $990,496
Nicolaidis, Christine, Supplement: A Cohort Study of Preterm Delivery in Relation to Partner Abuse, Mood, and Anxiety Disorders, SSW, Harvard University/ National Institutes of Health, $10,222
Perona, John, Functional evolution of class I aminoacyl-tRNA synthetases, CLAS, National Institutes of Health, $1,441,561
Raghavan, Rahul, A horizontally acquired tRNA enhances Coxiella burnetii infection of macrophages, CLAS, National Institutes of Health, $440,076
Richardson, Dawn; Crespo, Carlos, Portland Bridges to Baccalaureate, CUPA, National Institutes of Health, $1,580,074
Richardson, Susan, Reclaiming Futures North Carolina Project, SSW, North Carolina Department of Juvenile Justice and Delinquency Prevention, $44,984
Rissi, Jill, Achieving the Triple Aim in Medicaid: Evaluating the Access, Quality, Health and Cost Impacts of Coordinated Care Organizations in Oregon, CUPA, Oregon Health Policy and Research/Robert Wood Johnson Foundation, $332,310
Scheller, Robert, Process-Based Carbon Trajectories on the Great Lakes Social-Ecological Gradient (GLaSEG), MCECS, University of Michigan, $297,947
Strongin, Robert, PNW Louis Stokes Alliance for Minority Participation, CLAS, University of Washington, $543,374
Sysma, Mark, Micro-evolutionary processes in less than a century of allopatric separation: examining morphological, behavioral, and pheromone differences between two separate invasive populations of nectaria (Myocastor Coypus), CLAS, Haifa University, $115,114
Walker, Janet, Amplify My Plan (AMP), SSW, Technical Assistance Collaborative/Substance Abuse and Mental Health Services Administration, $70,354
Williams, Dilarfuz, Science in the Learning Gardens: Factors that Support Racial and Ethnic Minority Students’ Success in Low-income Middle Schools, GSE, National Science Foundation, $450,000
Wood, William, Electroswag welding development phase 2, OTHER, Boeing, $120,086

View the Complete List of Proposals
Research Snapshot

Second Quarter, Fiscal Year 2014

Expenditures by Comparison

Q2 Publications

View the Complete List of Publications

The following is a list of faculty publications and work accepted for publication in the second quarter of fiscal year 2014. Records were submitted by faculty and appear exactly as submitted.


Bright, A., **Connor, M.A.** "Building on What They Bring: Special Considerations when Working with Young Immigrant Students in Mathematics," Cross-cultural Considerations in the Education of Young Immigrant Learners (J. Keengwe & G. Onchwari), pp. 68-85. 2013. Curriculum and Instruction


Research Snapshot

Q2 Publications


Erogan, B., Bauer, T. “Deeds that help and words that hurt: Helping and gossip as moderators of the relationship between leader-member exchange and advice network centrality,” Personnel Psychology.


Ruben, B. “Putting the heart back into writing: Nurturing voice in middle school students,” Middle School Journal 45(2) pp 12 – 18. 2013.

