

# **WSU Spokane Grant and Contract Award Summary**

**January 1 – March 31, 2016**

## **NEW & TRANSFER AWARDS**

### **Celestina Barbosa-Leiker (PI) – College of Nursing**

*Robert Wood Johnson Foundation*

**“Future of Nursing Scholars 2016”**

This is a matching grant that provides funds for the Robert Wood Johnson Future of Nursing Scholars program, which was established to alleviate the shortage of nurse scientists and educators. The program will provide training, mentoring, and networking opportunities to two WSU PhD in Nursing students for three years.

### **Celestina Barbosa-Leiker (PI) – College of Nursing**

*American Association of Colleges of Nursing*

**“Jonas Nurse Leader/Veterans Healthcare Scholars Program 2016-18”**

This new grant provides two years of matching funds for two PhD in Nursing students to participate in the Jonas Nurse Scholar program. The program supports doctoral nursing students pursuing both PhD and Doctor of Nursing Practice (DNP) degrees and aims to increase the number of doctorally prepared faculty available to teach in nursing schools nationwide and the number of advanced practice nurses providing direct patient care. The two WSU participants will be Sheila Hurst, RN (Jonas Nurse Leader Scholar) and Laura Sherburne, RN (Jonas Veterans Healthcare Scholar).

### **Chris Blodgett (PI) – Child and Family Research Unit**

*WA State Office of Financial Management/WA State Office of the Superintendent for Public Instruction*

**“Statewide, Longitudinal Data Systems”**

This contract provides funding for WSU’s Child and Family Research Unit to complete two research projects that will enhance current capabilities in the Education Research and Data Center’s P-20W longitudinal database, which provides information about enrollment in postsecondary education. The first project involves analysis of data from the Washington Kindergarten Inventory of Developing Skills (WaKIDS), which will provide a look at factors influencing academic success from kindergarten through early elementary school grades. The second project looks at postsecondary school readiness and will document the community risk and protective factors that describe local community variations in postsecondary academic success. The goal of these projects is to determine what community-level interventions and policy actions could influence overall educational success and test the utility of the adverse childhood experiences (ACEs) framework as a social risk factor in post-secondary educational success.

### **David Brody (PI) – Dept. of Criminal Justice & Criminology**

*Washington State Board of Industrial Insurance Appeals*

**“2016 Judicial Performance Evaluation of the Washington State BIIA Judiciary”**

This research study involves a judicial performance evaluation of the judges of the Washington State Board of Industrial Insurance Appeals (BIIA). The study will survey all parties (including litigants, attorneys, and paralegals) who appeared at hearings and mediation conferences held before BIIA Administrative Law Judges in cases concluded during calendar year 2015, assessing the extent to which each judge acted in a manner consistent with their position and official duties. Results will be provided to the court as a whole and to individual judges and will also be used to conduct a comparative analysis between the current evaluation results and those obtained from the 2008 and 2012 evaluations.

### **Ruth Bryant (PI) – College of Nursing**

*Sigma Theta Tau International*

**“Benefits of and Barriers to Patient Engagement with Reduction of Harm”**

This grant provides funding to hold focus groups to explore attitudes and perceptions toward engaging patients in reducing preventable harm and safety risks. Participants will include patients, family members, and health professionals affiliated with Providence Sacred Heart Medical Center in Spokane, Wash., and Saint Patrick Hospital in Missoula, MT.

**Dedra Buchwald (PI) – Community Health***University of Washington/National Institutes of Health***“A Primary Prevention Trial to Strengthen Child Attachment in a Native Community”**

This is a subaward of a project to test the Promoting First Relationships (PFR) program in American Indian (AI) children at a reservation in northeastern Montana. The research team will test the effectiveness of the PFR program in improving the caregiver's sensitivity to the child. They will also examine child attachment security to the caregiver and the child's social and emotional functioning. The goal is to create a culturally adapted PFR intervention to promote sensitive caregiving and child attachment security in American Indian populations, minimizing the impact of stressors on children living on the reservation as well as fostering resilience and improving their risk outlook.

**Dedra Buchwald (PI); Astrid Suchy-Dicey – Community Health***University of Washington/National Institutes of Health***“Alzheimer's Disease Research Center Satellite Core”**

This is a subaward of an NIH center grant, establishing a satellite core of the Alzheimer's Disease Research Center in Seattle. The WSU team will provide assistance in this project, which will recruit participants of the Strong Heart Stroke Study to examine Alzheimer's Disease and its consequences in about 100 elder American Indians. The Strong Heart Stroke Study is a follow-up study to the Strong Heart Study, a large longitudinal cohort study examining cardiovascular disease and its risk factors in American Indians.

**Dedra Buchwald (PI) – Community Health***University of Minnesota/National Institutes of Health***“National Research Mentoring Network for a Diverse Biomedical Workforce”**

This is a subaward that provides funding for Dr. Buchwald to colead the Professional Development Core of the National Research Mentoring Network for a Diverse Biomedical Workforce. The Professional Development Core will convene grant writing workshops twice a year for 20 or more participants, focusing on projects in underserved or rural communities.

**Dedra Buchwald (PI) – Community Health***University of Oklahoma/National Institutes of Health***“Tribal Health and Resilience in Vulnerable Environments Study THRIVE”**

This is a subaward of a study aimed at assessing food insecurity among Native Americans and increasing the availability and intake of vegetables and fruits in convenience stores in two tribal nations of Oklahoma. The study outcomes will inform the development of a multimedia manual to guide food environment changes among tribes nationally.

**Naomi Chaytor (PI) – Elson S. Floyd College of Medicine***Dose Safety Co/National Institutes of Health***“Use of Dose Safety Controller (DSC) Artificial Pancreas in Subjects with Hypoglycemia Unawareness”**

This is a subaward for a study to evaluate whether the Dose Safety Controller (DSC) software improves the health and lives of persons with Type-1 diabetes who have become unaware of hypoglycemia. The project involves a series of studies that use an artificial pancreas device—which mimics the glucose regulating function of a healthy pancreas—in conjunction with the DSC in Type-1 diabetes patients with hypoglycemic unawareness. As part of this project, Chaytor will look at whether use of the DSC resulted in improved quality of life and emotional symptoms.

**Chris Davis (PI) – Elson S. Floyd College of Medicine***Neurodetective International***“EEG Signal Evaluation of Aldehyde Dehydrogenase Deficient Mice”**

This contract provides funding for WSU to conduct a scientific evaluation of a line of transgenically altered mice for Neurodetective International, a biomedical contract research organization that specializes in pre-clinical efficacy testing. The research team will measure and analyze sleep stage and electroencephalogram (EEG) slow-wave sleep activity in the mice.

**Travis Denton (PI) – College of Pharmacy**

*National Institutes of Health*

**“New compounds to study neurological disorders related to autophagic dysfunction”**

This award provides funding for a study of a chemical compound that activates autophagy, a process that cleans up old or damaged particles and proteins from cells. The study may lead to the development of a new drug for neurologic disorders related to autophagic dysfunction, such as ALS, Alzheimer’s disease, Parkinson’s disease, and traumatic brain injury.

**Glen Duncan (PI) – Program in Nutrition & Exercise Physiology**

*University of Washington/National Institutes of Health*

**“Validation and application of portable particulate device in the UW Twin Registry”**

This award funds a two-part study to assess the associations between environmental exposures and health outcomes, using a new wearable device for measuring environmental toxicants called the Portable University of Washington Particle Monitor (PUWPM). The study will use pairs of adult twins from the community-based UW Twin Registry to explore the associations between exposures to air pollution, noise, and other environmental factors; physical activity, diet, psychosocial stress, and clinical outcomes such as blood pressure, height, weight, and waist circumference; and biological markers related to inflammation and stress. It may ultimately lead to new insights linking environmental, behavioral, and genetic aspects of chronic disease.

**Glen Duncan (PI) – Program in Nutrition & Exercise Physiology**

*National Institutes of Health*

**“TWIN Study of Environment, Lifestyle Behaviors, and Health”**

This is funding that has been transferred from the PI’s previous institution. It funds a study of environmental influences on lifestyle behaviors and health in identical twins who grew up together but now live apart. Through the use of a multisensory board—a small wearable device that can sense movement, barometric pressure, and location—the PI will determine how the home built environment influences levels of walking and total physical activity; investigate how often the twins use features of their home built environment that are associated with activity and eating to determine whether proximity to features of the home built environment are associated with their use; and measure associations among the built environment, lifestyle behaviors, and body mass index in twins who live apart by linking weight status with physical activity levels and food intake to determine if body mass index is associated with the built environment through these behaviors.

**Janet Edwards (PI); Gary Varrella; Trevor Lane; Michael Jensen; Brian Brandt; Lauren Hrcicik; Linda McLean; Pamela Watson; Jana Ferris; Caroline Backman – WSU Extension**

*National 4-H Council/US Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP)*

**“4-H National Mentoring Program Year 6”**

This award funds the WSU Extension 4-H National Mentoring Program, which will replicate the 4-H Tech Wizards afterschool youth mentoring program in eleven counties—Kitsap, Klickitat, Pierce, Spokane, Ferry, Pend Oreille, Snohomish, Clallam, Lewis, and Wahkiakum counties and on Joint Base Lewis-McChord. Community sites will serve underrepresented, underserved school-aged youth in economically disadvantaged communities. Goals of the project are to reduce school dropout rates, improve academic performance; increase skills in science, technology, engineering, and mathematics; promote continued education and career development; and reduce juvenile delinquency; and promote stronger community connections for youth and their families. Three counties will replicate the Youth and Families with Promise program serving Tribal communities within the Colville Reservation and underserved at-risk audiences in Grant and San Juan counties.

**Zachary Hamilton (PI) – College of Arts & Sciences, Dept. of Criminal Justice & Criminology**

*WA State Office of Financial Management*

**“Educational Experience Impact on Juvenile Justice Outcomes”**

This award provides funding for a collaborative project with the Washington State Center for Court Research. The research team will define, research, and report on the prior education experience of juvenile offenders and outcomes by juvenile offender sentencing type, such as probation only, probation and treatment, and involvement by Juvenile Justice Rehabilitation Administration. The project is part of a four-year effort to enhance current capabilities to use data in the statewide longitudinal data system managed by the Education Research and Data Center.

**Zachary Hamilton (PI) – College of Arts & Sciences, Dept. of Criminal Justice & Criminology**

**WA State Office of Financial Management**

**“Washington State Sex Offender Contact Standards”**

This contract provides funding for WSU to review the social science, criminal justice, and public policy research regarding risk assessments for sex and kidnapping offenders who are in the community, as well as the methods used for community notification risk level classification. The PI will also review the research related to the reassessment of an offender's risk level after some period of time in the community and the existing reassessment protocols of Washington's Cowlitz, Island, Lewis, Skagit, Snohomish, Spokane, Thurston, and Yakima counties.

**Lois James (PI) – College of Nursing**

**WSU Office of Commercialization**

**“Counter Bias Training to Repair Broken Police Community Relationships in the Wake of Racially Charged Officer-Involved Shootings”**

This is commercialization seed grant funding to develop Counter Bias Training to train police officers to respond to potentially threatening situations based on actual threat cues and not based on suspect race or ethnicity. The training will use 60 highly realistic deadly force judgment and decision-making scenarios developed at WSU and will be deployed nationwide by the International Association of Chiefs of Police (IACP), the organization responsible for implementing the training recommendations from President Obama's Task Force on 21st Century Policing.

**Kimberly McKeirnan (PI); Lisa Woodard; Linda Garrelds MacLean; Celestina Barbosa-Leiker – College of Pharmacy/College of Nursing**

**Empire Health Foundation**

**“Building the Prototype of a Regional System that Will Increase Access to Quality Patient Care through Medication Optimization in rural Eastern Washington State”**

This award provides funding for WSU to partner with Better Health Together and the Alliance for Integrated Medication Management to develop, implement, and evaluate a prototype medication delivery system to serve patients with chronic disease in seven counties in eastern Washington. The partner organizations will work with primary care providers, pharmacies, and community partners in the counties to develop the system, which will offer integrated medication management and medication optimization and has the potential to improve patient outcomes, increase access to care, and decrease costs.

**Sterling McPherson (PI); Katherine Hirchak – College of Nursing**

**University of Washington Institute for Translational Health Sciences/National Institutes of Health**

**“Improving the Total Health of Urban Native Youth: Measuring Prevention Services’ Impact at an Integrated Health Center”**

This grant funds a project to examine the impact of several ongoing prevention services offered at the NATIVE Project on physical, behavioral, and educational outcomes. The NATIVE Project is a Spokane-based organization that provides youth and adolescent mental health and substance abuse treatment services and an urban Indian Health Clinic. Prevention services studied include open gym, healthy dinners, homework room, peer mentorship, and mental health services. Outcomes measured include body mass index, mental health status and service utilization, and school dropout rates.

**Jeannie Padowski (PI) – College of Pharmacy**

**Bastyr University**

**“Phase IIb Study of Intranasal Glutathione in Parkinson’s Disease”**

The goal of this project is to determine the effect of 3 months of intranasal administration of reduced glutathione (GSH) on central nervous system glutathione levels in subjects with Parkinson's disease. Glutathione is an antioxidant found in the brain that helps the body get rid of toxins, heal cellular damage, and reduce inflammation. Many symptoms of Parkinson's disease are associated with glutathione depletion.

**Jean-Baptiste Roulet (PI) – College of Pharmacy**

**University of Wisconsin at Madison/National Institutes of Health**

**“Sterol Metabolism in Rett Syndrome”**

This is a subaward for a project aimed at advancing scientists' understanding of Rett syndrome (RTT), a debilitating neurodevelopmental disorder that causes problems in brain functions that are responsible for cognitive, sensory, emotional, motor, and autonomic function. Although the genetic cause of the disease has been identified as mutations in a gene called MECP2, the mechanism of the disease is not well understood. This study will explore the potential role of sterol metabolism in RTT. Sterols (or steroid alcohols) occur naturally in plants, animals, and fungi, with the most familiar type of sterol being cholesterol.

**Ka’imi Sinclair (PI) – Community Health**

**National Congress of American Indians**

**“Healthy Dads, Healthy Kids”**

This award funds work to adapt the “Healthy Dads, Healthy Kids” program to reduce diabetes in Asian and Pacific Islander communities. The program was originally designed to help overweight fathers lose weight and be a role model of positive health behaviors for their children.

**Denise Smart (PI); Lois James; Tamara Odom-Maryon; Bryan Vila – College of Nursing/College of Arts & Sciences, Department of Criminal Justice & Criminology**

**TriService Nursing Research Program**

**“Effects of Sleep Deficiency on National Guard Personnel Responding to Disasters”**

This grant funds a study to examine the prevalence and consequences of sleep deprivation and fatigue in National Guard medical personnel responding to a major disaster. The long-term goal for the project is to help protect the health of service members, civilian disaster response partners, and disaster victims and improve mission capability by reducing fatigue-induced errors by National Guard service members.

**Zhenjia Wang (PI) – College of Pharmacy**

**National Institutes of Health**

**“Neutrophil-mediated Drug Delivery”**

This award funds a five-year project to study how neutrophils—the most abundant type of white blood cells in the bloodstream—could be used as a vehicle for delivering therapeutic nanoparticles to specific parts of the body. This work may help design new drugs to treat inflammatory disorders underlying acute and chronic diseases, including cancer. Specifically, the study will look at the efficacy of using neutrophil-mediated nanoparticle transport to treat acute lung injury, a devastating disease that cannot currently be treated with drugs.

**Lisa Woodard (PI) – College of Pharmacy**

**Better Health Together**

**“Prevention 1st - 1422 Grant to Improve Health for All Americans”**

This award funds a program to prevent and manage diabetes, high blood pressure, and obesity by improving environments in offices, schools, government agencies, and community settings to promote healthy behaviors; improving service delivery related to preventing and managing high blood pressure and diabetes; and increasing community linkages to support prevention, self-management, and control of these conditions.

## **AWARDS FOR ONGOING WORK**

*(Renewal, continued, and supplemental funding for projects awarded previously)*

### **Salah-Uddin Ahmed (PI) – College of Pharmacy**

*National Institutes of Health*

#### **"Regulation of IL-6 Mediated Inflammation and Tissue Destruction by EGCG"**

This is continued funding for a project aimed at developing safer, more cost-effective new therapies for rheumatoid arthritis based on EGCG, an active component found in green tea. The researcher will study the cellular and molecular mechanisms by which EGCG blocks the production of interleukin-6 (IL-6), a protein that has been shown to play a key role in the progression of rheumatoid arthritis. IL-6 is the target of a new medication for the disease that has been shown to be effective, but is very costly and comes with severe side effects. As part of the study, the researcher will test whether EGCG is effective at fighting systemic and local inflammation; slowing down bone destruction; and suppressing vascular dysfunction in rheumatoid arthritis.

### **Julie Akers (PI); Linda Garrelts MacLean; Bidisha Mandal – College of Pharmacy/School of Economic Sciences**

*National Association of Chain Drug Stores Foundation*

#### **"Pharmacist Care for Patients with Minor Illnesses in Washington State"**

This is renewal funding for a study of the effectiveness of pharmacist-provided care for minor ailments and conditions, comparing the quality and cost of this care with that provided in primary care offices, urgent care clinics, and emergency rooms. The WSU team is collaborating with more than 35 community pharmacies throughout the state to offer pharmacist-provided patient care services and collect data for the study. A regional health plan will provide anonymous data on care provided in the other settings.

### **Greg Belenky (PI) – Sleep and Performance Research Center**

*United Airlines*

#### **"Fatigue Risk Management System Route Studies"**

This is renewal funding for a field study of sleep and performance in pilots on ultra long-range flight routes in commercial aviation. Flight routes studied include those between the U.S. west coast and Sydney and Melbourne, Australia and Tel Aviv, Israel; the U.S. east coast and Mumbai, India, and Hong Kong, China; and the Island Hopper route between Honolulu and Guam. This work supports the airline's use of fatigue risk management, a non-prescriptive approach to managing flight and duty times.

### **Chris Blodgett (PI) – Area Health Education Center**

*Trauma Center Justice Resource Institute/US Department of Health and Human Services – Substance Abuse and Mental Health Services Administration*

#### **"A Comparative Effectiveness Trial of School-Based Complex Trauma Interventions"**

This is incremental funding for a four-year project funded by the U.S. Department of Justice. As part of the project, the researchers will evaluate an initiative to improve treatment and services for children and adolescents who have experienced traumatic events and to increase access to these treatments and services throughout the nation.

### **Dedra Buchwald (PI); Ka’imi Sinclair – Community Health**

*National Institutes of Health*

#### **"Culturally Adapted Strategies to Enhance Kidney Donation in Native Communities"**

This is a balance transfer for a grant that was transferred from the PI's previous institution. The grant funds a project to conduct a multi-level intervention to increase kidney donation among American Indians at three rural sites in Washington and Montana. American Indians are 3.5 times more likely than white Americans to have treated end-stage renal disease and the mean age of onset is 6 years younger. This study follows up on an earlier study done by the investigators to understand beliefs about and barriers to kidney donation among American Indians, which revealed that they are willing to donate organs to family members and other Native recipients. This project will seek to increase both deceased donation and living donor kidney transplants, as well as improve the completion of transplantation evaluations and survey dialysis patients in the Northwest Renal Network to increase the knowledge of kidney donation and transplantation in American Indians.

**Patricia Butterfield (PI); Janessa Graves; Julie Postma; Lois James – College of Nursing**  
**Oregon Health and Sciences University/National Institute for Occupational Safety and Health**  
**“Nursing Students’ 1st Entree into Clinical Rotations: Initial Behaviors Addressing Shift Work, Sleep, and Safe Practice”**

This is continued grant funding from the Oregon Healthy Workforce Center at Oregon Health and Sciences University under its Total Worker Health research program, which is supported by the National Institute for Occupational Safety and Health. It funds a study aimed at describing students' sleep patterns and perceptions of safe practice during their first semester of evening clinical rotations. Practicing nurses are known to report a number of sleep-associated problems—such as difficulty sleeping and excessive sleepiness—which can increase the likelihood of patient medication errors, needle-stick injuries, and other health and safety issues. Understanding student nurses' initial behavior patterns in response to shift work can yield insights into opportunities for occupational interventions, both at the university and hospital level.

**Janet Edwards (PI); Gary Varrella; Trevor Lane; Michael Jensen; Brian Brandt; Michael Wallace; Alison White; Lauren Hrncirik – WSU Extension**

**National 4-H Council/US Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP)**  
**“4-H National Mentoring Program Year 5 – Mini Grant for National 4-H Council Youth Summits”**

This award provided additional funds for WSU Extension's Youth and Families unit to send a Spokane County team of four youths and an adult coordinator to attend the National 4-H Council's Healthy Living Summit program in Chevy Chase, Maryland, in February 2016.

**Shobhan Gaddameedhi (PI) – College of Pharmacy**

**National Institutes of Health**

**“Role of the Circadian Clock in Melanocyte Biology and UV-Induced Melanomagenesis”**

This is continued funding for a grant from the National Institute for Environmental Health Sciences to study the potential role of the circadian clock—the internal biological clock that keeps us on a 24-hour cycle—in the development of melanoma, a type of skin cancer that forms from pigment-containing skin cells known as melanocytes. Preliminary research by the PI suggests that the protein expression level of the MITF gene—which is involved in melanocyte survival and plays a role in melanoma development—is regulated by the circadian clock. The PI will study the effects of the circadian clock on melanocyte biology, on melanocytic signaling pathways induced by solar UV radiation—a major risk factor for melanoma development—and on cutaneous melanoma development. The study may provide a basis for innovations in melanoma prevention and treatment.

**K Michael Gibson (PI) – College of Pharmacy**

**University of Nebraska/ National Institutes of Health – National Institute of Child Health and Human Development**

**“Sterol and Isoprenoid Disease Consortium”**

This is continued funding for a subcontract for a pilot project of the Sterol and Isoprenoid Diseases (STAIR) consortium, a collaborative group of investigators dedicated to clinical research on disorders related to the metabolism of cholesterol and other sterols and isoprenoids. This project evaluates cell surface biomarkers in patients with Hyper IgD syndrome (HIDS), a periodic fever syndrome resulting from a defect in the cholesterol pathway known as mevalonate kinase deficiency. A mouse model of this disorder developed by the PI has shown immunity abnormalities that could explain the periodic fever and elevation of IgD

**K Michael Gibson (PI) – College of Pharmacy**

**National Institutes of Health/National Institute of Neurological Disorders and Stroke**

**“Phase II Trial of SGS-742 in Succinic Semialdehyde Dehydrogenase Deficiency”**

This is renewal funding for a clinical trial to test the effectiveness of the experimental drug SGS742 on succinic semialdehyde dehydrogenase (SSADH) deficiency, an inherited disorder with characteristics of autism and epilepsy. SSADH is involved in breaking down a neurotransmitter known as GABA (gamma-aminobutyric acid), which prevents the brain from being overloaded with too many electrical signals. SSADH deficiency leads to an increase of GABA and a related molecule called gammahydroxybutyrate (GHB), particularly in the central nervous system. SGS742 targets a specific GABA receptor in the brain. The study may lead to better treatment for SSADH deficiency and related disorders that involve GABA metabolism.

**Janessa Graves (PI); Patricia Butterfield; Celestina Barbosa-Leiker; Julie Postma; Gail Oneal – College of Nursing  
Oregon Health and Sciences University/National Institute for Occupational Safety and Health**

**“Total Worker Health among New Nurses: An Instrument Development Study”**

This is continued grant funding from the Oregon Healthy Workforce Center at Oregon Health and Sciences University under its Total Worker Health research program, which is supported by the National Institute for Occupational Safety and Health. It funds a pilot project to investigate nurses' perception of risks related to total worker health.

**Zachary Hamilton (PI); Alex Kigerl; Jacque van Wormer – College of Arts & Sciences, Dept. of Criminal Justice & Criminology**

**Washington State Department of Corrections**

**“Washington State Department of Corrections STRONG-R Project”**

This is renewal funding for WSU's assistance in creating and validating a series of models to assess the risk of re-offense for felons convicted and sentenced in the state of Washington.

**Doreen Hauser-Lindstrom (PI); Gary Varrella; Brian Brandt – WSU Extension**

**Kansas State University/US Department of Agriculture – National Institute of Food and Agriculture**

**“2016 4-H Military Partnership Grant”**

This is renewal funding for 4-H activities targeted to military connected youth throughout the Pacific Northwest region. The focus is on integrating 4-H activities into military youth programming. Military branches reached include the Army National Guard, Air National Guard, Army Reserves, and Navy Reserves.

**Doreen Hauser-Lindstrom (PI) Gary Varrella; Brian Brandt – WSU Extension**

**US Department of Defense/US Army**

**“Operation Military Kids: Ready, Set, Go!”**

This is supplemental funding for additional work done to complete WSU's share of work for the Operation Military Kids program, a U.S. Army initiative that supported children and youth affected by a parent's deployment. The Operation Military Kids program ended on March 31, 2015.

**James Krueger (PI) – College of Medical Sciences**

**University of Pennsylvania/National Institutes of Health**

**“Metabolic Regulation of Wakefulness”**

This is a continuation of an NIH subaward with the University of Pennsylvania. The aim of the project is to identify the metabolic processes in the brain that cause impaired wakefulness in people affected by sleep disorders, such as obstructive sleep apnea. The study could help identify specific molecules involved in impaired wakefulness, which could open the door to the development of new therapies to improve wakefulness among those with sleep disorders.

**Michael McDonell (PI) – Community Health**

**WA State Dept. of Social and Health Services, Department of Behavioral Health and Recovery/U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration**

**“First Episode Psychosis Evaluation”**

This is supplemental funding for a grant that funds activities related to the evaluation of the Washington State Department of Behavioral Health and Recovery's first episode psychosis program in Yakima County. WSU will lead the quantitative evaluation of the program and will work with the University of Washington to conduct the qualitative evaluation. The first episode psychosis program was launched to enhance the recognition of early signs and symptoms of psychosis so that effective treatment can be started promptly.

**Mary Paine (PI) – College of Pharmacy**

**University of Colorado Denver/National Institutes of Health**

**“Drug Metabolizing Enzyme and Transporter Function in Chronic Kidney Disease”**

This is continued NIH subaward funding for a project with the University of Colorado Denver. It funds a translational research project to examine the effects of vitamin D supplements on the enzymes and proteins that help deliver and metabolize drugs in patients with chronic kidney disease (CKD), who are known to suffer from vitamin D deficiency. The results will be used to guide development of new dosing regimens for drugs that are affected by the altered metabolism and or transport in CKD patients.

**John Roll (PI); Patricia Butterfield; Celestina Barbosa-Leiker; Joann Dotson; Dennis Dyck; Donelle Howell; Janet Katz; Sterling McPherson; Roberta Paul – College of Nursing/College of Arts and Sciences**

**National Institutes of Health**

**"Behavioral Health Collaborative for Rural American Indian Communities"**

This is a continued grant funding for a center for excellence—in collaboration with the University of Washington—to establish a behavioral health collaborative in rural American Indian communities. The center aims to contribute to improved mental health and reduced substance abuse in rural American Indian communities through the development and dissemination of prevention and intervention strategies.

**Éva Szentirmai (PI); Weihang Chai; Levente Kapas; Ken Roberts – Sleep and Performance Research Center/College of Medical Sciences**

**National Institutes of Health**

**"Brown Adipose Tissue and Sleep Regulation"**

This grant funds a study to find out how brown fat interacts with our brain to regulate sleep. Brown fat is a beneficial fat that helps burn the calories stored in white fat and regulates our body temperature. In previous studies, decreased brown fat activity was associated with less sleep and less deep sleep. This work could open the door to new drugs to combat obesity, metabolic syndrome, and chronic sleep loss.

**Jordan Tampien (PI); Krisan Lehew – WSU Extension**

**Association of Washington Cities**

**"AWC- WSU Extension Pilot"**

This is renewal funding for a project that seeks to build local economies in Washington state by creating access to capital for small businesses that need it the most. The funds make it possible to expand the program—which was first established in Chewelah, Sequim, and Port Angeles—into two new communities in Wahkiakum and Thurston Counties.

**Grant Trobridge (PI) – College of Pharmacy**

**National Institutes of Health**

**"Improved Foamy Virus Vectors for AIDS Gene Therapy"**

Clinical trials of gene therapy for AIDS have revealed that a significant roadblock is inefficient delivery of the therapeutic DNA to the patient's chromosomes. This grant provides continued funding for a research study on the potential for using viral vectors from the foamy virus, which is related to the HIV virus, as a transfer agent for AIDS gene therapy.

**John White (PI); Matt Layton; Philip Lazarus; Sterling McPherson; Jeannie Padowski – College of Pharmacy/Elson S. Floyd College of Medicine/College of Nursing**

**American Beverage Association**

**"Pharmacokinetic Analysis of Caffeine (160 mg) Administered Rapidly Via Chilled Coffee or Chilled ED or Slowly Via Hot Coffee or Chilled Coffee or ED"**

This is continued funding for a study that analyzes and compares the pharmacokinetic profiles of caffeine after slow and rapid consumption of coffee (both chilled and hot) and energy drinks. The study will test claims that energy drinks are potentially toxic because they are served chilled and can be consumed rapidly with resultant high caffeine concentrations. It will clarify this issue by evaluating the impact of time of administration and drink temperature on the pharmacokinetics of caffeine.

**Marian Wilson (PI); John Roll; Matthew Layton; Celestina Barbosa-Leiker – College of Nursing; Elson S. Floyd College of Medicine**

**WSU Office of Research**

**"Internet-based Pain Self-management for Persistent Pain Populations on Methadone Maintenance"**

This is part two of an internal award under the WSU Alcohol and Drug Abuse Research Program. It funds a study to test the effectiveness of an 8-week Internet-based pain self-management program that promotes non-opioid pain management strategies in persons with persistent chronic pain who are in a methadone maintenance treatment program for opioid addiction.