Grant and Contract Award Summaries

FY 2015, 2nd quarter, October 1 – December 31, 2014

Prepared by the WSU Spokane Office of Research, this summary is divided into two sections. The top section lists New and Transfer Awards. The section below it lists renewal, continued, and supplemental funding for previously awarded projects under the title Awards for Ongoing Work.

NEW and TRANSFER AWARDS

Jane Beary (PI) - Dept. of Nutrition & Exercise Physiology

Washington State Department of Health, Office of Healthy Communities

"Maternal and Child Health Services Block Grant to the States"

This grant funds a project to promote the availability of nutrition services and improve nutrition outcomes for children and youth with special health care needs in ten Eastern Washington counties. Providing services through the medical home model, the PI will aim to increase workforce capacity to provide nutrition and feeding team services in the east region—particularly in rural and remote areas—and act as a resource for pediatric nutrition information for children with special health care needs.

Chris Blodgett (PI) - Area Health Education Center

The California Endowment

"Improving School Outcomes through Trauma Informed Education"

This grant funds a project aimed at improving school outcomes by addressing the effects of trauma due to adverse child experiences. As part of this project, the Area Health Education Center at WSU will integrate two established models, CLEAR (Collaborative Learning for Educational Achievement and Resiliency) and HEARTS (Healthy Environments and Response to Trauma) into a single, unified approach to dealing with trauma in schools. The project also includes outreach to California schools that may serve as sites for implementation and testing in a subsequent, multi-year phase of this project.

Chris Blodgett (PI) – Area Health Education Center

Highline Community College/WA State Board for Community & Technical Colleges "HEET MA PROJECT"

This is a subcontract with Highline Community College as part of a state grant given to the college under the Hospital Employee Education and Training (HEET) program. Highline is part of a college consortium that offers an adult learner program for medical assistants who are currently practicing medical skills in Washington State but do not have the required state credentialing. The contract provides funding support for AHEC to assist Highline with the development and execution of a communications and marketing plan for the program.

Shobhan Gaddameedhi (PI) - College of Pharmacy

National Institutes of Health

"Role of the circadian clock in melanocyte biology and UV-induced melanomagenesis"

This is 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.

Devon Grant (PI); Hans Van Dongen; Matt Layton – Sleep and Performance Research Center/College of Medical Sciences

US Department of Defense/Office of Naval Research

"A Double-blind, Placebo-controlled, Crossover Investigation of Caffeine Pharmacodynamics during 48 hours of Sleep Loss"

This grant funds a study to determine the pharmacodynamics of two different doses of caffeine (200 or 300 mg) versus placebo during a period of 48 hours of total sleep deprivation. Measurements will be conducted at two points in the circadian alertness rhythm within the same individual. The study will help determine the effectiveness of repeated caffeine administration during extended operations. It will also inform individualized mathematical modeling of caffeine's pharmacodynamics based on both the dosage and the timing of administration.

Zachary Hamilton (PI); Jacqueline van Wormer – Dept. of Criminal Justice and Criminology

Laura and John Arnold Foundation

"Evaluation of Washington State's Swift and Certain Policy for Community Supervision of Offenders"

This project involves a one-year study of Washington State's "Swift and Certain" program, a new approach to community supervision of offenders that calls for immediate but moderate punishment of offenders who commit minor violations while on probation or parole. The study will compare two Swift and Certain intervention cohorts with a propensity score matched historical sample and will examine outcomes that include jail/prison days, reconvictions, program utilization, and correctional and associated costs.

Hans Van Dongen (PI) - Sleep and Performance Research Center/College of Medical Sciences

LA BioMed/National Institutes of Health

"Understanding Hormonal Mechanisms of Sleep Restriction"

This is a subcontract for an NIH-funded project to study the hormonal mechanisms that underlie insulin resistance from sleep restriction, which contributes to the development of type 2 diabetes mellitus. Van Dongen will provide expertise on sleepiness and cognitive performance testing and study design, as well as data processing and analysis.

Jacqueline van Wormer (PI) - Dept. of Criminal Justice and Criminology

Island County, Juvenile and Family Court Services

"Island County Family Drug Court Process Evaluation"

This contract provides funding for WSU to help evaluate whether the Island County Family Treatment Court program has the basic components needed for an effective therapeutic drug court and determine the extent to which the program is implementing best practices within the national model for family dependency drug courts.

Judy Zeiger (PI) - Student Affairs

University of Washington, MESA

"Spokane MESA Center"

This is a contract between Spokane MESA and the Technology Alliance to offer the Youth Apps Challenge curriculum as part of in-school and after-school programming at Glover Middle School. The Youth Apps Challenge builds teacher and student capacity to develop apps and is designed to engage and interest students in computer science.

AWARDS FOR ONGOING WORK

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

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 the U.S. east coast and Mumbai, India, and Hong Kong, China. 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

Washington Rural Health Association

"Rural Health Conference Management Support FY15"

This contract provides renewal funding for the Area Health Education Center to organize and manage the Northwest Regional Rural Health Conference. The 2015 conference will be held March 18-19 in Spokane.

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.

Chris Blodgett (PI) – Area Health Education Center

Washington Rural Health Association

"Washington Rural Health Association Management Support FY15"

This contract provides renewal funding for the Area Health Education Center to support the Washington Rural Health Association in the management of its operations.

Chris Blodgett (PI) – Area Health Education Center

Washington State Department of Health

"Critical Access Hospital Management Support FY15"

This contract provides renewal funding for the Area Health Education Center to organize and manage the Northwest Critical Access Hospital Conference. The 2015 conference will be held on March 17 in Spokane.

Chris Blodgett (PI) – Area Health Education Center

Washington State Department of Learning

"MIECHV Program Data Benchmarks Plan (D/B Plan) Cohorts 3 & 6"

This is renewal funding for a contract for AHEC's work to support the federal maternal, infant, and early childhood home visiting grant program. The program facilitates collaboration and partnership at the federal, state, and community levels to improve health and development outcomes for at-risk children through evidence-based home visiting programs.

Chris Blodgett (PI) – Area Health Education Center

RAND Corporation/US Department of Justice – Office of Juvenile Justice and Delinquency Prevention "RAND National Evaluation Safe Start Year 4"

This is continued funding for a national evaluation to measure project sites' efforts to expand current partnerships between service providers that create a comprehensive service delivery system for preventing children's exposure to family and community violence and reducing its impact. The evaluation will enhance understanding of the scope of the problem of children's exposure to violence in the United States.

Chris Blodgett (PI) – Area Health Education Center

Public Health Seattle & King County/Gates Foundation

"Seattle Elementary School Mental Health Initiative Year 2"

This grant provides continued funding for AHEC to help Public Health – Seattle & King County implement its trauma intervention program in two elementary schools within Seattle Public Schools. The goal of the project is to maximize the potential for school success for all children by addressing the needs of children who have experienced multiple traumatic events, such as homelessness, parents' divorce or separation, and exposure to domestic violence.

Kenn Daratha (PI) - College of Nursing

Empire Health Foundation

"Measurement of Obesity Prevention Initiative"

This grant provides renewal funding for the researcher to provide statistical services to support the Empire Health Foundation's obesity prevention initiative. Daratha will work with seven intervention school districts and Educational Service District 101 to identify data extractions for all students for demographics, physical measurements, meal participation, fitness performance, attendance, and academic performance. In addition, he will develop browser-based data collection tools to capture responses to physical activity and healthy eating/food frequency questionnaires and will import data feeds from each school district into a common database for analysis.

Dennis Dyck (PI) – Dept. of Psychology

Washington State Department of Social and Health Services

"SOC Implementation Phase 2 Continued"

This is renewal funding for a contract with the Washington State Department of Social and Health Services to provide staffing, infrastructure, and expertise for the development of statewide evidence-based peer support programs for mental health and substance abuse. The work under this contract includes the development of initiatives to increase youth and family engagement in behavioral health policy, planning, and service delivery; training and workforce development for providers and/or mental health consumers; identification, review, and development of peer support models and programs; and research and evaluation and development and implementation of evidence-based practice.

Janet Frost (PI) - College of Education

Eastern Washington University

"The Riverpoint Advanced Mathematics Partnership-Algebra Project"

This is renewal funding for a subaward of a U.S. Department of Education grant. The subaward funds WSU's participation in the Riverpoint Advanced Mathematics – Algebra (RAMP-A) project, a collaboration between the Eastern Washington University Mathematics Department, WSU, Northeast Washington Educational Service District 101, six school districts, and one private nonprofit school. The RAMP-A project focuses on improving algebra knowledge and instructional strategies among teachers and educational administrators and increasing student achievement and interest in math.

John Roll (PI); Donelle Howell; Janet Katz; Matt Layton; Sterling McPherson; Celestina Barbosa-Leiker – College of Nursing/College of Medical Sciences

University of Washington/National Institutes of Health

"Clinical Trial Network: Pacific Northwest Node"

This grant provides renewal funding for the Pacific Northwest Node of the NIDA Clinical Trials Network (CTN). It supports a multi-institution, multiple principal investigator effort to continue CTN's mission to improve the quality of drug abuse treatment throughout the country through science.

Hans Van Dongen (PI); Paul Whitney; John Hinson; Bryan Vila; Matt Layton – Sleep and Performance Research Center/College of Medical Sciences/Dept. of Psychology/Dept. of Criminal Justice and Criminology

US Department of Defense/Office of Naval Research

"Enabling the Identification of Biomarkers for Individual Susceptibility to Fatigue: Scaling Up from Attentional Processes to Operational Performance"

This is incremental funding for a three-year study on the effects of sleep deprivation on distinct attentional systems that can be separated out. It is part of a continuing line of research looking at the effects of fatigue on cognitive function. The researchers will test participants' performance on laboratory attention tasks as well as simulated deadly force decision scenarios. Data collected will be used to enhance an individualized fatigue prediction model to enable task-specific predictions of fatigue-related performance impairment. The researchers will also look for genetic markers that explain individual differences in how people respond to fatigue related to

distinct attention systems. The study may lead to more efficient staffing of Navy ships and other around-the-clock or safety-sensitive work environments.

Hans Van Dongen (PI) - Sleep and Performance Research Center/College of Medical Sciences

University of California at Davis/National Institutes of Health

"Longitudinal Measurement of the Changing Sleep Need in Adolescence"

This is renewal funding for a subcontract of an NIH grant awarded to UC Davis for a longitudinal study on the changing sleep need in adolescents. Van Dongen helped design the study protocol related to measuring daytime performance and will assist in analyzing and interpreting daytime performance data.

Jacqueline van Wormer (PI) - Dept. of Criminal Justice and Criminology

Spokane County Superior Court/US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration

"Improved Outcomes for Spokane County Drug Court"

This is continued funding for a three-year project to help Spokane County expand and enhance treatment in its Behavioral Health Adult Felony Therapeutic Drug Court. Drug courts address the need for substance abuse treatment and other recovery support services for chemically dependent defendants who are charged with a felony drug-related offense and are considered to be at high risk of failing in less intensive rehabilitation programs. Programs like these have been shown to increase public safety, reduce recidivism, and save public dollars. This project will provide treatment for 80 additional high-risk, high-needs participants, as well as trauma-informed care training for judicial officers and service providers involved in the Spokane County Drug Court.