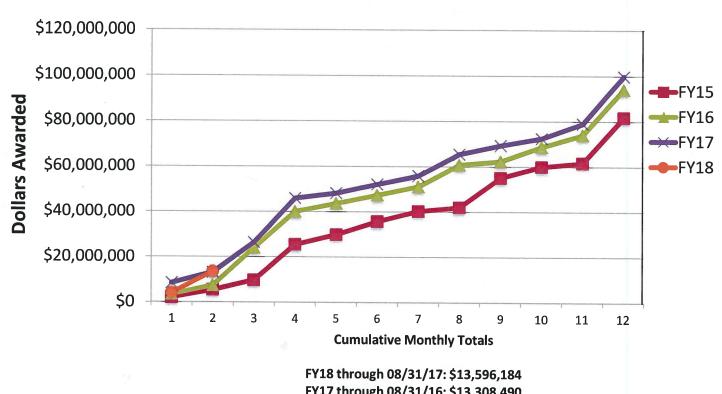
## WRIGHT STATE UNIVERSITY Cumulative Grant and Contract Awards Comparison with Previous Three Fiscal Years through August



FY18 through 08/31/17: \$13,596,184 FY17 through 08/31/16: \$13,308,490 FY16 through 08/31/15: \$7,473,813 FY15 through 08/31/14: \$5,467,002

## WRIGHT STATE UNIVERSITY GRANT AND CONTRACT AWARDS

#### PREPARED FOR BOARD OF TRUSTEES MEETING October 6, 2017\*

	T		201 0, 2011				
TYPE	NEW	AWARDS	ONGOING	AWARDS**	TOTAL AWARDS		
	Number	Dollars	Number	Dollars	Number	Dollars	
Research	57	\$3,842,964	72	\$13,104,429	129	\$16,947,393	
Instruction	3	\$245,547	2	\$101,000	5	\$346,547	
Institutional Support	0		3	\$685,444	3	\$685,444	
Public Service	14	\$1,179,262	11	\$3,130,169	25	\$4,309,431	
Student Aid	3	\$393,736	7	\$2,261,796	10	\$2,655,532	
TOTAL	77	\$5,661,509	95	\$19,282,839	172	\$24,944,348	

<sup>\*</sup> Figures include total support for awards made since the December 2016 Board of Trustees Meeting.

<sup>\*\*</sup> Ongoing awards include renewals, continuations, supplements and amendments. This report was prepared by the Office of Research and Sponsored Programs.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Supplement Industrial Agreement	Biopsy Study	10/26/2015 10/26/2017	Devicor Medical Products, Inc.	Boivin, Gregory	\$4,712	Wright State University will support the testing of biopsy devices.
Amendment State Contract	Articulation and Transfer FY2017	01/05/2011 06/30/2017	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$6,000	These funds will be used to operate the Articulation and Transfer Network, a consortium appointed by the Chancellor of the Ohio Board of Regents.
Continuation State Contract	Articulation and Transfer FY2018	01/05/2011 06/30/2018	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$1,112,323	These funds will be used to operate the Articulation and Transfer Network, a consortium appointed by the Chancellor of the Ohio Board of Regents.
Continuation Federal Grant	College Work Study Program	07/01/2017 06/30/2018	U.S. Department of Education	Barnhart, Amy	\$940,830	These funds help support the college workstudy program at WSU.
Amendment Federal Contract	Building Successful Futures	09/01/2016 12/31/2017	U.S. Department of Education	Dewberry, Brenda I.	\$257,500	Wright State will continue to generate the skills and motivation for students to succeed in high school and to enter postsecondary
						education through activities in an Upward Bound program.
Amendment Educ. Inst. Subagreement	Center for Integrated Thermal Management of Aerospace Vehicles	02/07/2014 10/31/2017	Purdue University	Roberts, Rory A. Wolff, J. Mitch	\$83,035	The WSU researchers will participate in planning and seed research that will lead to a Center for Integrated Thermal Management of Aerospace Vehicles (CITMAV).
Continuation Federal Grant	Reduced Motoneuron Excitability in Sepsis	07/01/2017 06/30/2018	DHHS, National Institute of Neurological Disorders and	Rich, Mark M.	\$325,708	This project will be the first to determine the mechanism underlying a previously unsuspected contributor to weakness in critically ill patients: reduced motoneuron
			Stroke			excitability.

### **Grants and Contracts Awarded**

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Subagreement	Development and Application of a Hydrothermal Atomic Force Microscope	06/15/2012 12/31/2017	Oak Ridge National Laboratory	Higgins, Steven R.	\$51,000	The Principal Investigator will continue to assist Oak Ridge National Laboratory in the development and application of novel hydrothermal atomic force microscopic methods to investigate the morphological and chemical controls on mineral dissolution and precipitation reactions in aqueous solutions under geological reservoir conditions.
Amendment Educ. Inst. Subagreement	Center for Geologic Storage of CO2	08/01/2014 07/31/2017	University of Illinois	Ritzi, Jr., Robert W. Gershenzon, Naum	\$15,000	The WSU team contribute geocellular modeling as well as initial and exploratory simulation of CO2 capillary trapping in the injection zone (pre-mineralization capillary trapping).
Continuation Non-Profit Subagreement	NCI Award Under DCOP Fiscal Agency Agreement	08/01/2017 07/31/2019	Dayton Clinical Oncology Program	Nevels, Dieter	\$936,120	WSU will continue to serve as the fiscal agent for Dayton Clinical Oncology Program (DCOP) funding in FY2017-2019 per the agreement (with effective date of December 23, 2001).
Continuation Non-Profit Agreement	Miscellaneous Awards Under DCOP Fiscal Agency Agreement	08/01/2016 07/31/2017	Dayton Clinical Oncology Program	Nevels, Dieter	\$30,273	This amendment will allow supplemental funding for WSU to act as the fiscal agent for the Dayton Clinical Oncology Program (DCOP) for managing Non-NIH NCI funds per master agreement Addendum #1 having an effective date of May 12, 2005.
Amendment Non-Profit Subagreement	Low Pressure Turbine 3-D Aerodynamics	10/01/2017 09/30/2018	Dayton Area Graduate Studies Institute	Wolff, J. Mitch	\$37,036	The researchers will perform experimental and computational research in the aerodynamics performance of low pressure turblne blades in collaboration with the Air Force Research Laboratory.

### October 6, 2017 Wright State University **Grants and Contracts Awarded**

Since the April 28	, 2017 Board of	<b>Trustees Meeting</b>
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Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Continuation Federal Grant	Mechanisms Underlying Excitability Regulation of	02/01/2017 01/31/2018	DHHS, National Institute of Neurological	Elbasiouny, Sherif M.	\$323,750	This project seeks to develop a fusion of experimental and computer simulation
	Motoneuron Types in ALS		Disorders and Stroke			techniques to better analyze the complex disease mechanisms of amyotrophic lateral sclerosis (ALS).
Amendment Educ. Inst. Subagreement	Design/Development and Characterization of	01/12/2015 01/30/2018	University of Dayton	Deibel, Jason A.	characterize high power microwave (HPM-THz) radiation generation fro superconducting (SC) antenna stru	This effort will investigate, model, and characterize high power microwave/terahertz (HPM-THz) radiation generation from
	Microwave/Terahertz Frequency Superconducting Antennas					superconducting (SC) antenna structures, that are excited via ultrafast DC transient pulsing.
Amendment Federal Contract	Sensor and Information Research Center for Understanding	07/27/2015 03/30/2021	DoD, Air Force, Air Force Research Laboratory	Rigling, Brian D. Garber, Fred D. Saville, Michael	\$773,000	The WSU team will undertake a multi-year effort to explore the development of methods to advance the state of the art in a variety of
	Systems (SIRCUS)			Ash, Joshua Noel Wischgoll, Thomas Rizki, Mateen M.		sensor exploitation research areas.
Continuation Federal	ERK3 Kinase Signaling in Lung	06/01/2016 05/31/2017	DHHS, National Cancer Institute	Long, Weiwen	\$338,550	The long term goal of this project is to establish the role of ERK3 as a new
Grant	Cancer					diagnostic marker and/or a therapeutic drug target, thereby developing therapeutic drugs targeting ERK3 for treating advanced lung cancer.
Supplement	Clinical Research	03/16/2016	Premier Health	Wysong, Mark	\$371,031	This funding will support clinical research
ndustrial Agreement	Coordinator Staffing Agreement at Miami	12/31/2016	Partners	Travers, Jeritary B.	2300,933	coordinator and nursing support for non- CTRA clinical trials and other Premier Health
	Valley Hospital					clinical research projects.

## Grants and Contracts Awarded Since the April 28, 2017 Board of Trustees Meeting

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Continuation Federal Grant	Wounding Therapy and Photocarcinogenesis	05/01/2017 04/30/2018	DHHS, National Institute on Aging	Travers, Jeffrey B.	\$308,933	The goal of this project is to determine whether wounding therapies, currently in use as cosmetic procedures, can prevent the occurrence of non-melanoma skin cancers in geriatric patients.
Amendment Educ. Inst. Subagreement	Development and Validation of a Virtual Airway Skill Trainer (VAST)	04/01/2014 03/31/2018	Rensselaer Polytechnic Institute	Cao, Caroline	\$83,510	The WSU team will perform the field studies to help design the simulator and to perform validation studies on the new simulator.
Continuation Federal Grant	Wright State University Veteran's Bachelor of Science Nursing Program	07/01/2017 06/30/2018	DHHS, Health Resources and Services Administration	Smith, Sherrill Jeanne	\$316,176	The purpose of the Wright State University Veteran's Bachelor of Science Nursing (WSL VBSN) Program is to facilitate the transition of military members with healthcare experience to professional nurses through a program recognizing the unique needs of the veteran student.
Amendment Federal Grant	Intergovernmental Personnel Act (IPA) Assignment of Dr. Tamera Schneider from Wright State University to the National Science Foundation	08/10/2017 08/09/2018	NSF, Miscellaneous	Schneider, Tamera	\$144,596	The assignee will serve as Program Director for the Social Psychology Program, Division of Behavioral and Cognitive Sciences, Directorate of Social, Behavioral, and Economic Sciences at the National Science Foundation.
Amendment Industrial Subagreement	Phase-Cancelled, Broadband, Graphene-based Impedance Sensor (Phase II)	08/25/2015 11/15/2017	Universal Technology Corporation	Huang, Hong	\$62,313	The goal of this project is to develop a novel RF/microwave graphene-based impedance chemical gas sensor (GIM-Sensor).

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Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Continuation Federal Grant	Platelet Activating Factor and Epidermal Cytoxicity	07/01/2017 06/30/2018	DHHS, National Heart, Lung, and Blood Institute	Travers, Jeffrey B. Sahu, Ravi P. Cool, David R. Li, Gengxin	\$374,540	The information derived from this study will result in improved understanding and novel therapeutics for patients suffering environmental skin injuries in the setting of ethanol exposure.
Supplement Industrial Agreement	Can Contrast Infused Sonography Using Air Bubbles Replace Hysterosalpingogram as the Diagnostic	07/15/2015 07/14/2018	Bayer Corporation	Lindheim, Steven R. Yaklic, Jerome Lumetta	\$5,000	This study hypothesizes that performing saline infused sonography with directed air bubbles for hysterosalpingo-contrast sonography is at least as equivalent or superior in evaluation of fallopian tube
	Evaluation of Fallopian Tube Patency Following Hysteroscopic Sterilization Using Essure					patency following hysteroscopic Essure tube sterilization in those undergoing X-ray bysterosalpingography.
Amendment Educ. Inst. Subagreement	Collaborative Research: A Cellworks Optimization Method for Air Vehicle Design	03/01/2015 02/28/2018	University of Hawaii at Manoa	Grandhi, Ramana V.	\$67,232	This project focuses on the development and demonstration of a biologically inspired methodology for the automated, multidisciplinary and multi-objective design of air vehicles.
Supplement Industrial Subagreement	Object Physics for Exploitation and Recognition Advancements	07/27/2015 07/01/2019	Leidos, Inc.	Rigling, Brian D.	\$74,000	The PI will provide research support to the sponsor related to bi-static radar systems.
	(OPERA)					

### **Grants and Contracts Awarded**

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Subagreement	TRACE	07/14/2015 10/30/2017	Industry/DOD, Defense Advanced Research Projects Agency	Rigling, Brian D.	\$125,000	Wright State University will provide innovative SAR feature extraction algorithms discriminative modeling algorithms, and real-time embedded computing trade studies to the sponsor for incorporating into an overall TRACE ATR system solution. The Wright
						State research team will support the sponsor in integrating and evaluating the TRACE software and hardware applications and support its program management activities.
Renewal State Contract	Human Performance Center of Excellence	01/27/2011 12/31/2018	Ohio Development Services Agency	Andersh, Dennis J.	\$1,125,000	The goal of the Human Performance Consortium (HPC) is to build a nationally recognized research center for the Air Force, Dayton region, and State of Ohio focused on advancing human performance technologies through research, development, training, and commercialization.
Amendment Educ. Inst. Subagreement	Mission HydroSci: A Virtual Environment for Next Generation Science Learning	08/01/2015 07/31/2018	University of Missouri	Romine, William L.	\$54,720	The project seeks to design, develop, and evaluate Mission HydroSci (MHS), a game-based 3D virtual learning environment (3D VLE) for science teaching and learning in blended or distance education.
Supplement Federal Grant	REU Supplement: IIS: Medium: Context- Aware Harrassment Detection on Social Media	09/01/2015 08/31/2018	NSF, Miscellaneous	Sheth, Amit	\$16,000	This funding will support two undergraduate students who will work as part of the team performing work under the NSF project already funded.
Amendment Federal Grant	Lapses of Attention Predicted in Semi- Structured Ecological Settings (LAPSES)	11/01/2015 12/31/2018	DoD, Office of Naval Research	Minnery, Brandon S. Harel, Assaf Sherwood, Matthew Scott Juvina, Ion	\$66,000	The aim of this project is to study the fundamental mechanisms of attention.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Contract	Employee and Job Search Semantic Engine: Phase I	01/01/2016 04/30/2018	Universal Freelancer dba EZcruiting	Sheth, Amit	\$30,000	The PI and students will conduct research and initial prototyping of an Employee and Job Search Semantic Engine.
Supplement Non-Profit Contract	Mindfulness Program Evaluation	11/15/2015 12/31/2017	Interact for Health	Kinzeler, Nicole Wilson, Josephine F.	\$4,732	Wright State University will work with Interact for Health and Jen Wright to plan and implement the evaluation of two mindfulness pilot grants, Mindful Yoga Therapy (MYT)
						and Self-care and Resilience (SCaR).
Amendment Educ. Inst. Subagreement	Improving Electrical and Mechanical Performances of Electrolyte	01/01/2016 01/15/2018	University of Dayton	Huang, Hong	\$17,986	The primary objective of this research is to develop thin film, flexible, and mechanically durable Li-ion batteries which are abuse-tolerant, have large energy densities, and
	Membranes for Flexible Solid-State Li- Ion Batteries					can operate in a wide range of temperatures.
Amendment Industrial	Growth and Characterization of	01/01/2016 12/31/2017	Azimuth Corporation	Zhuang, Yan	\$29,484	This project will explore the use of ferroelectric (FE), ferromagnetic (FM), and
Subagreement	Multiferroic Materials					multiferroic ceramic materials for potential use in the development of tunable components for the production of next generation mobile communication systems to simultaneously support multiple frequency bands or communication standards.
Continuation Non-Profit Grant	Role of ACE2 Overexpressing Endothelial Progenitor Cells in Cerebral	01/01/2017 12/31/2017	American Heart Association - National	Bihl, Ji Chen	\$77,000	The major goals of this project are to determine the protective effects of ACE2/Ang-(1-7)/Mas axis on ECs and
	Hemorrhage					neurons, vascular remodeling, and cerebral hemorrhage by alleviating the injury and
						promoting the recovery.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Non-Profit Subagreement	Center for Excellence for Human Performance and Health Science: LVC/SAPHYRE	02/01/2016 09/18/2018	Wright State Applied Research Corporation	Broderick, Timothy J. Hodge, Douglas C. Ganapathy, Subhashini Reiter, Ali	\$710,813	The funding for these projects will support AFRL in the areas of airman performance, human machine teaming (HMT), autonomy, and education and training.
Continuation Federal Grant	Signaling Mechanism of the DNA Replication Checkpoint	02/01/2017 01/31/2018	DHHS, National Institute of General Medical Sciences	Xu, Yong-Jie	\$259,000	The proposed research is relevant to part of the NIH's mission that pertains to developing fundamental knowledge that will help to reduce the burdens of human disability.
Continuation Educ. Inst. Subagreement	Intestinal Epithelial Cell Regulation of Allergic Inflammation at Distant Sites	05/01/2016 04/30/2017	Ohio State University	Paliy, Oleg Reo, Nicholas V.	\$46,000	This project will define the role of intestinal epithelial cells in induction of IgA responses during allergic sensitization.
Amendment Non-Profit Subagreement	Advanced Integrated Smart Cell Onboard Printed Electronics Development	05/09/2017 05/08/2018	Dayton Area Graduate Studies Institute	Chen, Chien-In Henry Thompson, Joshua W.	\$52,260	This research will focus on designing and depositing printed electronics integrated directly onto the packaged cell surface to provide cell monitoring of temperature, voltage, as well as simple, standardized communication.
Supplement Educ. Inst. Subagreement	Synaptic Function: Effects of the Nerve Injury, and Altered Activity	03/01/2017 02/28/2018	Georgia Tech Research Corporation	Rich, Mark M. Ladle, David R.	\$374,511	This is a three-project study with 2 CORES, dedicated to understanding how injury, regeneration, and alterations in neural activity affect synaptic network function and to explore the mechanisms that promote or impede recovery following nerve and muscle injury.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Federal	REU Supplement: PFI: AIR-TT: Market	04/01/2016 03/31/2018	NSF, Miscellaneous	Sheth, Amit	\$12,000	Funding will support the training of two undergraduates on this project.
Grant	Driven Innovations and Scaling up of Twitris - A System for					The house or the period is received a first
	Collective Social Intelligence					
Continuation Non-Profit	Developing Therapy for Myotonia	02/01/2017 01/31/2018	Muscular Dystrophy	Rich, Mark M.	\$83,842	The goal of this grant is to identify drugs that can be used to treat muscle stiffness and
Grant	Congenita		Association			weakness in the muscle disease myotonia congenita.
Amendment Federal Contract	SIRCUS TO2: Comprehensive Learning Objectives	03/31/2016 07/01/2019	DoD, Air Force, Air Force Research Laboratory	Rigling, Brian D. Garber, Fred D. Saville, Michael	\$1,107,191	The WSU team will undertake a multi-year effort to explore the development of methods to advance the state of the art in a variety of
	for Warfighter Needs (CLOWN)			Shaw, Arnab K. Wischgoll, Thomas Rizki, Mateen M.		sensor exploitation research areas.
Amendment Educ. Inst.	Characterizing Ammonium Dynamics	11/01/2016 01/31/2018	Ohio State University	Newell, Silvia Elena	\$26,826	The researcher will characterize ammonium dynamics affecting harmful cyanobacterial
Subagreement	Affecting Harmful Cyanobacterial Blooms in Lake Erie					blooms in Lake Erie.
Amendment Federal Contract	Maximizing the Collective Intelligence	05/16/2016 02/15/2018	DoD, Army Research Office	Minnery, Brandon S. Sheth, Amit	\$141,479	The WSU researchers will test whether measures of socio-cognitive diversity can be
Johnaci	of a Network Using Novel Measures of			Shalin, Valerie L.		used to enhance "wisdom of the crowd" effects within groups of collaborating
	Socio-Cognitive Diversity					analysts (e.g., teams of military intelligence analysts).
						Auto introl

## Grants and Contracts Awarded Since the April 28, 2017 Board of Trustees Meeting

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Subagreement	Broad Area Terahertz Frequency Spectroscopic Material State Awareness	05/01/2016 06/11/2018	BerrieHill Research Corporation	Deibel, Jason A.	\$8,500	This effort will study the application of terahertz (THz) frequency spectroscopic imaging techniques for use in the evaluation of materials treatments and defects or degradation in materials associated with aerospace vehicle structures and components.
Continuation Federal Grant	Characterizing Fentanyl Outbreaks: Ethnographic and Forensic Perspectives	06/01/2017 05/31/2018	DHHS, National Institute on Drug Abuse	Daniulaityte, Raminta Carlson, Robert G. Pavel Sizemore, Ioana E.	\$183,268	The main goal of the study is to characterize the problem of significant outbreak of street fentanyl use in the Dayton area.
Continuation Federal Grant	Photodynamic Therapy-Induced Immune Modulation: Mechanisms and Influence on Therapeutic Efficacy	04/01/2017 03/31/2018	DHHS, National Institute of Arthritis and Musculoskeletal and Skin Diseases	Travers, Jeffrey B. Sulentic, Courtney E.W.	\$162,800	These translational studies will define if a previously unappreciated immunomodulatory pathway is engaged following photodynamic therapy, which can be exploited to enhance treatment outcomes.
New Industrial Contract	SOPP Internship: CompDrug FY2017	07/01/2016 06/30/2017	CompDrug	Schultz, Michelle S.	\$16,000	The sponsor will provide training and fiscal support for external rotations in the SOPP Doctoral Internship program during the 2016 -2017 training year for one doctoral student.
New Educ. Inst. Contract	SOPP Practicum: Miami University FY2017	07/01/2016 06/30/2017	Miami University	Schultz, Michelle S.	\$7,400	The sponsor will provide direct client services training for one SOPP practicum student.
Amendment Industrial Subagreement	Aeromechanical Investigation of Turbine Engine High Speed Compressors	06/01/2016 06/27/2017	Universal Technology Corporation	Wolff, J. Mitch	\$21,566	The focus of this project is research into the aeromechanics of high speed compressors to enable better compressor design that will be less likely to have blade break.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment ndustrial Subagreement	TAHMT Task Order 001	07/14/2016 03/24/2019	Systems Research and Applications International	Schneider, Tamera	\$32,968	Wright State University will support research and development activities that are intended to advance the overall mission of the Human
						Trust and Interaction Branch, Human Insight and Trust (HIT) Team to foster human-robot teaming, methods to calibrate trust, and methods to foster transparency in human-machine contexts.
Amendment Educ. Inst. Contract	University of Dayton Roesch Library Archives Public History Internship	08/31/2016 04/21/2017	University of Dayton	Swanson, Drew A.	\$396	The sponsor will provide funds for a Public History intern who will participate in a wide range of archival tasks and projects assigned by the archivists.
Continuation Federal Grant	A Natural History Study of Buprenorphine Diversion, Self- Treatment, and Use of Drug Abuse Treatment Services	05/01/2017 04/30/2018	DHHS, National Institute on Drug Abuse	Daniulaityte, Raminta Carlson, Robert G. Nahhas, Ramzi	\$591,865	The overall purpose of this natural history study is to describe and analyze the nature and consequences of buprenorphine diversion among opioid dependent users.
Amendment Federal Grant	Precision High Intensity Training through Epigenetics (PHITE)	09/01/2017 08/31/2018	DoD, Office of Naval Research	Broderick, Timothy J. Kadakia, Madhavi P. Raymer, Michael L.	\$1,492,059	Consistent with Defense Science Board 2030 recommendations for warfighter performance, the PHITE program will explore the link between physical training and epigenetics.
Amendment Non-Profit Subagreement	Stochastic Metamodeling for Design Validation	10/01/2017 09/30/2018	Dayton Area Graduate Studies Institute	Bae, Ha-Rok Clark, Jr., Daniel L.	\$52,260	The goal of this project is to streamline the adaptive and interactive computational framework of addressing the verification and validation in the design exploration.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Federal Contract	Interactions with Semi-Autonomous Remotely Piloted Aircraft (RPA)	09/22/2011 10/14/2019	DoD, Air Force, Air Force Research Laboratory	Gross, David C.	\$40,000	The focus of this extension is to use the Vigilant Spirit Control Station to research, develop, integrate, and evaluate advanced controls and displays which enable a single operator to control multiple RPAs.
Amendment Federal Grant	The Role of Dynamic Representational Networks in Expertise in Visual Scene Recognition	09/01/2016 08/31/2019	DoD, Office of Naval Research	Harel, Assaf	\$140,000	The goal of the present study is to elucidate the mechanisms underlying the acquisition of expertise in scene analysis, and to establish the importance of changes in structure and dynamics of neural representations over multiple spatiotemporal scales as novel markers of expertise.
Amendment Industrial Subagreement	Terahertz Spectroscopic Chemical Sensor for Analysis of Fatigued Human Breath	02/29/2016 02/28/2018	Universal Technology Corporation	Medvedev, Ivan	\$101,664	The researcher will develop and deliver a fully integrated table top THz chemical sensor to monitor breath chemicals tentatively linked to sleep deprivation-induced fatigue from the first phase of this study.
Amendment Industrial Subagreement	Electrical and Optical Characterization	09/01/2016 05/19/2021	Wyle Laboratories	Look, David C.	\$236,000	The purpose of this project is to provide electrical and optical characterization of materials and devices of interest to the Sensors Directorate of the AFRL.
Continuation Federal Grant	Peer Movement Project (PMP)	09/30/2017 09/29/2018	DHHS, Substance Abuse and Mental Health Services Administration	Kinzeler, Nicole	\$234,598	To address the substance abuse and HIV challenges for African American college students, the SARDI program will collaborat with community partners to create the Peer Movement Project (PMP) with a goal to use
						multi-level approach to prevent the onset and reduce substance use, HIV, and viral hepatitis C infection in African American college students ages 18 to 24.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Subagreement	Low Cycle Fatigue Behavior of Additively Manufactured Iconel 718 Due to Inherent Process Induced Defects	09/01/2016 06/27/2017	Universal Technology Corporation	Gockel, Joy E.	\$32,170	The researchers will take a two-pronged approach to investigate the LCF response of additively manufactured IN 718 due to bulk (internal) and surface (external) failure mechanisms.
Amendment Educ. Inst. Subagreement	Contact-Free, Antenna-Free CW THz Optoelectronic Probe	09/01/2016 12/31/2017	University of Notre Dame	Brown, Elliott	\$13,421	This project will investigate the effects of negative differential resistance in GaN tunneling devices using a new type of noncontact integrated circuit probe based on photomixing, and the switching and
						oscillation behavior of GaN resonant tunneling diodes both experimentally and by modeling.
Amendment Federal Grant	Dayton Veterans Affairs Medical Center IPA Agreement	07/01/2017 06/30/2019	Veterans Affairs Medical Center	Baker-Nolan, Julie	\$83,424	Dr. Nolan will coordinate key elements of grant protocols, recruit, screen, and prepare subjects for fMRI scans.
Amendment Industrial Subagreement	Performance Understanding for Layered Sensing Exploitation: Rigorous Assessment of Technologies for Exploitation	09/01/2016 12/31/2017	InfoSciTex	Rigling, Brian D. Mossing, John C.	\$76,094	The primary goal of this program is to develop fundamental research tools in the areas of sensor exploitation algorithm performance understanding and performance prediction.
Amendment Federal Contract	Interactions with Semi-Autonomous Remotely Piloted Aircraft (RPA)	09/22/2011 10/14/2019	DoD, Air Force, Air Force Research Laboratory	Gross, David C.	\$650,000	The focus of this extension is to use the Vigilant Spirit Control Station to research, develop, integrate, and evaluate advanced controls and displays which enable a single operator to control multiple RPAs.

## October 6, 2017 Wright State University Grants and Contracts Awarded

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Continuation Educ. Inst. Subagreement	Anti-TNF Monotherapy versus Combination Therapy with Low Dose Methotrexate in Pediatric Crohn's Disease (COMBINE)	11/01/2016 10/31/2017	University of North Carolina at Chapel Hill	Saeed, Shehzad	\$30,399	The goal of this project is to assess whether combination therapy with an immunomodulator medication (methotrexate and biologic therapy or monotherapy with biologic therapy alone results in better and sustained outcomes in children with Crohn's disease.
Amendment Industrial Subagreement	Extended Scene	10/31/2016 01/30/2018	Invertix Corporation	Schmitz, James L.	\$16,690	The researcher will investigate new algorithms for the production of new products using data obtained from a non-imaging sensor
Amendment Federal Agreement	Dayton Veterans Affairs Medical Center IPA Agreement	10/01/2016 09/30/2017	Veterans Affairs Medical Center	Rapp, Christine M.	\$29,676	Ms. Rapp will be assisting in growing keratinocytes and measuring cytokines from cell and murine tissues.
Amendment Federal Agreement	Veterans Affairs Medical Center IPA Agreement	10/01/2016 09/30/2017	Veterans Affairs Medical Center	Zhang, Wenfeng	\$25,332	Ms. Zhang will be assisting in growing keratinocytes and measuring cytokines from cell and murine tissues.
Amendment Federal Agreement	Dayton Veterans Affairs Medical Center IPA Agreement	10/01/2016 09/30/2017	Veterans Affairs Medical Center	Cates, Elizabeth E.	\$7,464	Ms. Cates will be responsible for overseeing the day to day activities of Dr. Traver's research. She will be involved in subject recruitment, study visits, and all correspondence and follow-up per protocol guidelines.
Amendment Federal Agreement	Dayton Veterans Affairs Medical Center IPA Agreement	10/16/2016	Veterans Affairs Medical Center	Romer, Eric J.	\$47,456	Dr. Romer will be responsible for the design and execution of experiments related to the project.

## Grants and Contracts Awarded Since the April 28, 2017 Board of Trustees Meeting

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Federal Agreement	Veterans Affairs Medical Center IPA Agreement - Kemp	10/01/2016 09/30/2017	Veterans Affairs Medical Center	Kemp, Michael	\$55,998	Dr. Kemp will examine UV-dependent DNA repair and DNA damage signaling responses in cultured human keratinocytes, mouse skir and human skin biopsies.
Amendment Industrial Contract	Continuation of Ground Water Protection and Monitoring for Compliance with	01/01/2017 12/31/2017	Cemex	Ritzi, Jr., Robert W.	\$4,999	Data collection and statistical analysis characterizing natural variations in ground water levels and chemistry in the Silurian carbonate aquifer system surrounding future CEMEX quarry operations.
	Zoning of Southwestern Quarry Operations for Xenia, Beavercreek, and Bath Townships in Greene County, Ohio			Markay Michael		
New State Subagreement	Ohio's Strategic Prevention Framework for Prescription Drugs (SPF Rx) - WSU	07/01/2016 06/30/2017	Ohio Department of Mental Health and Addiction Services	Fruth, Jason D.	\$317,375	Wright State University and collaborative partners will use a Public Health approach in coordinating Ohio's Strategic Prevention Framework (SFP) Rx Workgroup in the
						assessment, planning, capacity building, and cultural competency components of the project and a participatory empowerment evaluation approach to the evaluation component.
Continuation Federal Grant	Supplemental Educational Opportunity Grant Program (SEOG) 2017/2018	06/01/2017 06/30/2018	U.S. Department of Education	Barnhart, Amy	\$395,380	These funds support SEOG grants for students.
Continuation Federal Grant	PELL Grant Program 2017/2018	04/01/2017 06/30/2018	U.S. Department of Education	Barnhart, Amy	\$856,092	These funds support PELL grants for students.

### **Grants and Contracts Awarded**

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Type	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Industrial Grant	Alarm Tones	12/01/2016 12/31/2017	Center for Operator Performance	Gallimore, Jennie J.	\$3,150	The ultimate objective of a potential research project on control room auditory alarms will be to develop a guidance document for specifying alarm design parameters that bes convey the information required in a given event scenario.
New Industrial Agreement	Clinical Research Coordinator Staffing Agreement at Miami Valley Hospital	01/01/2017 12/31/2017	Premier Health Partners	Burnside, Beth A	\$703,193	This funding will support clinical research coordinator and nursing support for non-CTRA clinical trials and other Premier Health clinical research projects.
Amendment Industrial Contract	ShadowBox Training II	10/01/2014 06/01/2018	Center for Operator Performance	Gallimore, Jennie J.	\$26,250	The researchers will address unanswered questions in the use of the ShadowBox technique to capture tacit knowledge of experts and train novice FCC board operators.
New Industrial Grant	Validation of Affymetrix Clariom S Arrays for Clinical Diagnostics	01/01/2017 01/31/2017	Ischemia Care LLC	Markey, Michael	\$1,414	The company Ischemia Care is interested in testing the new generation of inexpensive microarrays as a tool for clinical diagnostics in stroke patients. The aim is to improve patient outcomes and reduce healthcare costs. This study tests the data generated from these arrays versus existing data from more expensive methods.
New Industrial Subagreement	CT: TOUR	08/04/2016 12/31/2017	Theravance	Polenakovik, Hari M.	\$26,000	Clinical trial registry.
New Industrial Subagreement	CT: EDELWEISS	11/15/2016 04/30/2018	Chiltern International, Inc.	Lindheim, Steven R.	\$130,853	Clinical trial.

## October 6, 2017 Wright State University Grants and Contracts Awarded

Type	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Other Gov't. Agreement	Preventing Obesity, Diabetes, and Heart Disease and Stroke In Ohio Communities	09/30/2016 09/29/2017	Public Health Dayton and Montgomery County	Rogers, Nikki L.	\$88,041	The contractor will 1) engage a variety of Montgomery County stakeholders to promote chronic disease prevention and the National Diabetes Prevention Program; 2) build a healthy lifestyle network within the service community; and 3) promote protocols/policies to facilitate sustained
						chronic disease prevention information/referrals within/across healthcare and community stakeholders.
New Industrial Subagreement	CT: EFFECT	12/08/2016 02/28/2017	Biogen Idec MA Inc.	Pickoff, Arthur S.	\$4,500	Clinical trial.
New Non-Profit Agreement	Analysis of Anions in Glen Helen	06/28/2016 12/31/2016	Glen Helen	McGowin, Audrey E.	\$460	The funding supports the purchase of reagents and supplies for students to perform water quality analysis in Yellow Springs Creek and Birch Creek in Glen Helen Nature Preserve.
New Industrial Subagreement	Distributed Passive Radar Networks for Target Detection in Non-Homogeneous Environments	03/01/2017 02/28/2018	Defense Engineering Corporation	Rigling, Brian D.	\$50,000	The goal is to develop a unified framework for understanding how detection performance relates between active MIMO radar and passive MIMO radar sensing applications in non-homogeneous environments.
New Federal Contract	"Up-Armoring" At-Risk Military Couples: A Prospective Study of Committed Romantic	03/16/2017 01/16/2020	DoD, Air Force, Air Force Research Laboratory	Cigrang, Jeffrey A.	\$342,000	"Up-Armoring" At-Risk Military Couples: A Prospective Study of Committed Romantic Relationships in Transition to Their First Permanent Duty Station.
	Relationships in Transition to Their First Permanent Duty Station					

### Grants and Contracts Awarded

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Non-Profit Contract	A Public Voice (APV 2017)	01/09/2017 10/01/2017	C.F. Kettering Foundation	Dustin, Jack L.	\$1,750	The PI and volunteer students will recruit residents and area leaders/policy makers to A Public Voice forums that will be focused on
						safety and justice. The Kettering Foundation will provide a guide for deliberation and survey questions that query deliberation
						participants about their views on safety and justices issues.
New Industrial Subagreement	Initial Interface for Synthetic Test Generation Tool	01/25/2017 05/25/2017	EDAptive Computing, Inc.	Emmert, John M.	\$40,000	The researcher will develop a CAD tool for maliciously modifying existing integrated circuit designs. This effort focuses on the interface for reading in and writing out circuit files.
Amendment Educ. Inst. Subagreement	Ohio LSAMP Alliance	09/01/2016 08/31/2017	Ohio State University	Klingbeil, Nathan W.	\$1,000	As a member of the Ohio Alliance, WSU faculty will help regional high school students and graduates expand STEM skills to enhance their success in a college experience.
New Non-Profit Subagreement	Vulnerability Detection and Analysis for the Unmanned Systems Autonomy Services	05/01/2017 08/31/2017	Wright Brothers Institute, Inc.	Zhang, Junjie	\$90,620	The researchers will be detecting and analyzing security vulnerabilities for the Unmanned Systems Autonomy Services architecture (UxAS) used by AFRL.
	Architecture (UxAS)					

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Federal Grant	REU Site: Undergraduate Research in Intelligent	05/01/2017 04/30/2020	NSF, Research Experiences for Undergraduates	Zhang, Xiaodong	\$380,574	An REU site will be established at Wright State University that will operate as a
	Autonomous Vehicles					gateway through which to attract more talented young minds to the cutting edge
	Werner Landbrender					research of autonomous vehicles and to
						develop technical and research skills they will need to be successful in their future
						careers in science, technology, engineering
						and mathematics (STEM).
New Non-Profit Contract	Baseline Inventory of Frogs and Frog Pathogens at Dairymen's	05/01/2017 04/30/2018	Dairymen's, Inc.	Rooney, Thomas	\$5,940	This project includes an inventory of frogs and toads in the wild, along with the incidence of two wildlife diseases in those populations.
lew Other Gov't. Agreement	Stacked Decks versus Risky Business for a Universal Population of High School Youth	02/01/2017 12/31/2017	Dayton Urban Minority Alcoholism and Drug Abuse Outreach Program	Wilson, Josephine F.	\$21,200	SARDI and UMADAOP staff will compare two gambling prevention interventions designed for youth, Stacked Decks and Risky Business, in order to validate Risky Business as an evidence-based prevention
	Kimerice					intervention for a general population.
lew ndustrial	Power and Thermal	12/19/2016	Acumentrics SOFC	Roberts, Rory A.	\$68,086	This project focuses on the development and
ubagreement	Management System for Hypersonic	12/18/2017	Corp.	Wolff, J. Mitch		testing of a bench top power and thermal
dbagreement	Vehicles					management system for hypersonic vehicles
continuation	Wright Rural Health	06/01/2017	HealthPath	Roman, Brenda	\$100,000	This project supports the implementation of
Ion-Profit	Initiative	05/31/2018	Foundation of Ohio			a longitudinal rural clerkship experience
Brant	Implementation					for third year medical students; 2) an inter-
	Proposal					professional rural training program for nursing, medical, and pharmacy students;
						and 3) the planning for a rural residency

## October 6, 2017 Wright State University Grants and Contracts Awarded

Type	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract	
New State Subagreement	Travel Support to the 2017 NASPA Symposium on Military-Connected Students	12/01/2016 02/28/2017	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$1,800	The funding supported the travel of Mr. Jared Shank to attend the 2017 NASPA Symposium on Military-Connected Students.	
New Non-Profit Subagreement	First Principles Calculations of Solution Hardening Kinetics	05/01/2017 04/30/2018	Dayton Area Graduate Studies Institute	Farajian, Amir Wirth, Lucs J	\$52,260	The aim of this project is the accurate quantum mechanical calculations of diffusion processes in metal and alloys, and the resultant changes in mechanical properties.	
Continuation Federal Grant	Accelerating Primary Care Transformation Wright (APCT-Wright)	07/01/2017 06/30/2018	DHHS, Health Resources and Services Administration	Binder, Stephen Bruce Carlson, Robert G. Richmond, Misty Bowman, Marjorie A. Reynolds, Peter L. Colon, Roberto J.	\$579,095	The project team will accelerate the transformation of primary care at Wright State in Family Medicine, Pediatrics, Internal Medicine and the Pediatric and Family Medicine NP programs through faculty development for community preceptors, enriched curriculum for residents and NP students, and the creation of an academic primacy care fellowship.	
New Non-Profit Subagreement	KAST – Knowledge Analytics using Semantic Technologies	05/15/2017 05/14/2018	Dayton Area Graduate Studies Institute	Cheatham, Michelle Andreen Shimizu, Cogan M	\$52,260	This PhD research project involves ingesting and visualizing multi-modal data with a strong spatial-temporal component.	
New Federal Grant	The PIPELINE Network: Supporting the Development of Physics Innovation and Entrepreneurship Education through Institutional Engagement	09/01/2016 08/31/2019	NSF, Miscellaneous	Petkie, Douglas T. Deibel, Jason A.	\$35,053	To design and develop a program that will introduce innovation and entrepreneurship concepts into the physics curriculum and institutional programs at several colleges and universities across the U.S.	

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Non-Profit Subagreement	Nanomaterial-Polymer Nanocomposites with Enhanced Dielectric Constant and Thermal Conductivity:	05/15/2017 05/14/2018	Dayton Area Graduate Studies Institute	Aga, Rachel S Williams, III, Richard Allan	\$44,130	The researchers aim to introduce a novel approach of fabricating nanomaterial-polymer nanocomposites.
	Exploring an Additive Approach to Fabricating Nanocomposites					
New Non-Profit Subagreement	Metabolomics Analyses of Fecal Extracts in a 'Humanized' Microbiome Mouse Model of Toxicant Exposure	05/01/2017 04/30/2018	Henry M. Jackson Foundation	Reo, Nicholas V.	\$158,776	The major objective is to examine the effects of US military-relevant toxicants on the gut microbiome and its local environment and, conversely, assess the microbiome-based chemical changes to the toxicant.
New Industrial Contract	Laundry Sample Analysis	05/01/2017 12/31/2017	Procter & Gamble Company	Arlian, Larry G.	\$15,000	The Principal Investigator will conduct an analysis of mite and allergen removal via machine washing.
New Federal Contract	Gambling Disorder: Neuroimaging of Reward and Anti- Reward Circuitry	05/01/2017 04/30/2018	Veterans Affairs Medical Center	Elman, Igor	\$103,000	The proposed research involves the use of human subjects and it is focused on mechanisms of human disease i.e., abnormal reward and stress responsivity in gambling disorder and in cocaine use disorder.
New Non-Profit Subagreement	Multiscale, Multiphysics, Multifidelity Modeling of Aircraft Power and Thermal Systems	05/01/2017 04/30/2018	Dayton Area Graduate Studies Institute	Roberts, Rory A. Wolff, J. Mitch Butt, Nathaniel	\$44,130	Using the T2T model, the vehicle level thermal effects will be observed and the aircraft can be optimized on a systems level instead of a subsystems level.

### Grants and Contracts Awarded

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Non-Profit Subagreement	Integrated Sense, Assess and Augment (ISAA)	04/01/2017 01/26/2018	Wright State Applied Research Corporation	Elbasiouny, Sherif M.	\$50,000	The objective of the Integrated Sense, Assess and Augment (ISAA) program is to identify, integrate, and test specific sense, assess, and augment tools and methodologies and to identify those most likely to achieve significant human performance gains in demanding Air Force mission environments.
New Industrial Subagreement	Temperature Dependent Creep of Novel Solder Materials	03/31/2017 09/30/2017	DfR Solutions LLC	Young, Henry Daniel	\$16,699	The researchers will study the creep deformation of two novel solder materials.
New Non-Profit Subagreement	Multi-Fidelity Analysis Methods for Multidisciplinary Design Optimization	05/01/2017 04/30/2018	Dayton Area Graduate Studies Institute	Roberts, Rory A. Henz, Alexander	\$52,260	The researchers will work on the development of transient design optimization methodology for air vehicles with implicit path dependent behavior in the time domain.
Amendment Industrial Subagreement	Autonomous Aerial Vehicles for Force Health Protection Response	01/05/2017 04/30/2018	Universal Energy Systems, Inc.	Gallagher, John C.	\$67,000	The researchers will seek to address a technical gap by employing small operator directed semi-autonomous air vehicles (AAVs) that will be controlled remotely to enter a chemical plume and form a continuously morphing map of the plume as it develops.
New Non-Profit Subagreement	Community Partnership Grant FY2017	04/07/2017 12/31/2017	Global Ties U.S.	Wanderi, Joy W.	\$6,500	Funds received from the sponsor will be used to support UCIE's programming for its International Visitor Leadership Program.
New State Subagreement	Travel Support to the 2017 Annual MCMC Meeting - H. Tsuchida	03/30/2017 05/31/2017	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$1,000	The funding will support Hideo Tsuchida's travel to attend the 2017 Annual MCMC Meeting.
New State Subagreement	Travel Support to the 2017 Annual MCMC Meeting - J. Shank	03/30/2017 05/31/2017	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$1,000	The funding will support Jared Shank's travel to attend the 2017 Annual MCMC Meeting.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Federal Contract	NIST SURF Fellowship Gaithersburg	05/01/2017 09/30/2017	National Institute of Standards and Technology	Banks, Brandi	\$9,336	These funds will support research fellowships for three undergraduate students at an NIST facility Gaithersburg, MD.
New Educ. Inst. Subagreement	A Novel, Low-cost Marker and Touch- free Portable Wound Measurement Device for Monitoring Wound Developing and Healing Processes	04/22/2017 03/16/2018	Ohio State University	Pei, Yong Vasoya, Miteshkumar M	\$15,000	This funding will support training to assist in validating the market potential of technologies and launching start-up companies.
New Federal Contract	Real-Time Detection of Cellular Respiratory Bio-Markers of Early Stage Infections Using Terahertz Sensing	05/01/2017 10/31/2018	DoD, Army Research Office	Medvedev, Ivan Excoffon, Katherine	\$233,204	The research team comprised of Drs.  Medvedev (Physics) and Excoffon (Biology) will study the variability of respiratory chemical profiles for a variety of cellular species, as well as a range of metabolic, homeostatic, and infectious conditions.
New State Subagreement	NASA Lunar Mining Robot - Senior Design Team	09/01/2016 08/31/2017	Ohio Space Grant Consortium	Thomas, Scott Keith Hendrickson, Ryan	\$5,000	The WSU researchers will design and fabricate a lunar mining robot that will compete in the NASA Robotic Competition in May, 2017.
New Educ. Inst. Subagreement	Light Endoscope System for Imaging, Light Delivery, and Therapy Response Monitoring	04/22/2017 03/16/2018	Ohio State University	Sunar, Ulas	\$15,000	A prototype of a novel, multi-functional endoscopic imaging, treatment, and monitoring platform has been developed in our lab. This platform can significantly improve detection and destruction of cancer, and
						reduce side effects in normal tissue, thereby improve survival rates and quality of life for cancer patients.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New State Subagreement	Nutrient and Sediment Retention Potential by Controlled Pond and Riparian Tile Buffer Systems	05/01/2017 05/31/2019	Ohio Environmental Protection Agency	Jacquemin, Stephen James	\$79,584	The purpose of this project is to provide nutrient, runoff, and sediment monitoring data to assess the efficiency of the use of a new sustainable agricultural technique - saturated riparian buffers.
New Industrial Subagreement	CT: Theravance 112	10/01/2016 09/30/2018	Theravance, Inc.	Burdette, Steven D.	\$72,895	Clinical trial.
New Educ. Inst. Subagreement	Mobility-Metformin for overweight & obese children and adolescents with bipolar spectrum disorders treated with second-generation antipsychotics	09/01/2016 08/31/2017	University of Cincinnati	Weston, Christina G.	\$22,496	The purpose of this study is to determine if adding metformin to a healthy lifestyle program would help children and teens control weight gain caused by certain medications. This study involves children and teens ages 8-17 years who are overweight with certain mood disorders and who may start or are currently taking a second-generation antipsychotic.
New Non-Profit Subagreement	Molecular Imaging of RAS for the Discovery of Novel Biomarkers in Chronic Kidney Disease	07/01/2016 09/30/2017	Henry M. Jackson Foundation	Elased, Khalid M.	\$25,000	This project aims to test the hypothesis that treatment of diabetic mice with anti-diabetic medication or RAS blockers attenuates renal injury and excretion of RAS biomarkers.
New Non-Profit Subagreement	Applications in Computational and Experimental Electromagnetics (ACE-EM)	05/01/2017 04/30/2018	Wright State Applied Research Corporation	Deibel, Jason A. Barton, Christopher C. Sharma, Amit Raj Tebbens, Sarah	\$110,000	The project will study the fundamental interactions between electromagnetic waves and antenna structures in the presence of plasmas.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Industrial Subagreement	Radio Frequency Signal Detection in Spectrally Contested and Spectrally	02/15/2017 11/30/2017	MacAulay-Brown, Inc.	Wu, Zhiqiang	\$22,500	The Wright State University researcher will conduct an investigation on the development of RF signal detection and parameter estimation algorithms in spectrally-contested
	Congested					and spectrally-congested environments.
	Environments					The east of this project is to prove rechnical
Federal Grant	eDarkTrends: Monitoring cryptomarkets to identify emerging trends of illicit synthetic opioids use	06/01/2017 05/31/2015	DHHS, National Institute on Drug Abuse	Lamy, Francois Sheth, Amit Daniulaityte, Raminta Carlson, Robert G. Nahhas, Ramzi	\$223,715	The main objective of this project is to develop an innovative software system, eDarkTrends, that will provide a NPS-dedicated early warning system focusing on synthetic opioids capable to 1) identify yet unknown synthetic opioids sold on cryptomarkets; 2) provide cross-reference with data from drug-focused web-forums using existing NIDA supported eDrugTrends
						platform, and; 3) assess identified synthetic opioids' potential harmful consequences based on web-forum content.
Industrial	Nitrate Monitoring in Glen Helen Nature Preserve	05/08/2017 07/27/2017	YSI, Incorporated	McGowin, Audrey E.	\$6,672	The primary aim of the work in Glen Helen is to evaluate how land use changes affect water quality in Yellow Springs Creek, Birch Creek, and ultimately The Little Miami River.
Non-Profit	Stochastic Metamodeling for Design Validation	05/01/2017 09/30/2017	Dayton Area Graduate Studies Institute	Bae, Ha-Rok	\$10,185	The goal of this project is to streamline the adaptive and interactive computational framework of addressing the verification and validation in design exploration.
	Infant Mortality HUB	04/01/2017	Ohio Commission	Winfrey, LaPearl L.	\$50,000	The purpose of this project is to provide
	2017	11/30/2017	on Minority Health	Meyer, Cheryl		overview and evaluation recommendations of
Contract						Commission-funded Infant Mortality HUB grants and evaluation plans.

### **Grants and Contracts Awarded**

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Amendment Educ. Inst. Subagreement	All Solid-State Lithium Electrochemical Technology	02/15/2016 12/31/2018	University of Dayton	Grossie, David A.	\$1,500	This study is a continuation of work focused on the creation of an all solid-state lithium-ior battery with high energy density which lacks flammable components.
New Non-Profit Grant	Stress Hormone (ACTH) and Behavior Response to Different Euthanasia Methods	06/15/2017 12/15/2018	American Association for Laboratory Animal Science	Boivin, Gregory	\$33,310	The proposed studies will be the first to compare the stress levels of different euthanasia techniques on mice, and the first to compare single versus group housed euthanasia practices.
Amendment Industrial Subagreement	Performance Understanding for Layered Sensing Exploitation: Valuable Insights Through Analysis of Layered Sensing	06/01/2017 03/16/2020	InfoSciTex	Rigling, Brian D.	\$75,000	The primary goal of this program is to develop fundamental research tools in the areas of sensor exploitation algorithm performance understanding and performance prediction.
New Non-Profit Grant	Wright State Geophysical Field Camp	06/01/2017 08/31/2017	SEG Foundation	Hauser, Ernest C.	\$4,000	Funding will be used for logistical support (mileage, room & board) for the WSU student seismic line for 2017 (Seismic Data Collection EES 4010/6010) to be collected at a scientifically attractive site farther afield in southern Indiana.
New Non-Profit Subagreement	A Thermo-fluids Analysis of Aircraft Thermal Energy Management and Precision Airdrop	08/01/2017 07/31/2018	Dayton Area Graduate Studies Institute	Huang, George	\$46,296	The goal of this project is to prove technical analysis and support to the existing efforts in the Control Design and Analysis Branch of Air Force Research Center (RQQA)

Туре	Title Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New State Subagreement	Support for Travel to and Review of the Medical Education Training Campus	11/30/2016 06/30/2017	Ohio Department of Higher Education	Smith, Sherrill Jeanne	\$1,550	The PI traveled to the Medical Education Training Campus to examine the military's medic training for potential overlaps within the current nursing program, and to determine if/what credit could be awarded for the military training.
New Non-Profit Grant	Participant Stress Experience in Live Disaster Exercises	07/01/2017 06/30/2018	Association of Community Health Nursing Educators	Farra, Sharon L.	\$2,395	The use of moulaged "victims" in disaster exercises has been described as stressful to some participants. The purpose of this pilot research is to describe stress levels in participants in live disaster exercises.
New Non-Profit Grant	Children's Strengths and Difficulties and Their Glycosylated Hemoglobin (HbA1c)	01/01/2017 12/31/2017	Dayton Children's Hospital Foundation	Breyer, Paul R. Pascoe, John M.	\$10,651	This study explores psychosocial predictors of a biological outcome: HbA1c levels in children with Type 1 diabetes mellitus.
New Industrial Agreement	Circulating tumor DNA exposure in peripheral blood using a novel process: A feasibility study	06/10/2017 06/09/2018	Quantgene	Hellan, Minia Ouellette, James R.	\$4,000	This study represents a feasibility study to determine the potential of circulating tumor DNA exposure in peripheral blood using a novel process in a sample of patients with cancer.
New Federal Grant	Collaborative Research: Characterizing Active Learning Environments	07/01/2017 06/30/2020	NSF, Grants for Scientific Research	Traxler, Adrienne L.	\$73,485	This project will combine social network analysis techniques with classroom observations to study active learning environments in college physics classrooms.
Continuation Educ. Inst. Contract	University of Dayton Roesch Library Archives Public History Internship	08/28/2017 04/23/2018	University of Dayton	Swanson, Drew A.	\$7,680	The sponsor will provide funds for a Public History intern who will participate in a wide range of archival tasks and projects assigned by the archivists.

## October 6, 2017 Wright State University Grants and Contracts Awarded

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New State Subagreement	Wright State University Project to Provide Corequisite Remediation at Scale	06/07/2017 12/31/2018	Ohio Department of Higher Education	Sahin, Ayse Arzu Littrell, Timothy Jason Kelly, Peggy Ann Wellinghoff, Lisa Jean Otto, Ray J. Farrell, Ann M.	\$149,547	Wright State researchers will develop a model for offering corequisite remediation at scale for three mathematics pathways: quantitative reasoning, introductory statistics and calculus.
Amendment Educ. Inst. Subagreement	MAVEN Extended Mission for FY17-18	10/01/2016 09/30/2018	University of Colorado	Fox, Jane Lee	\$166,970	Wright State will participate in the MAVEN (Mars Atmosphere and Volatile EvolutioN) mission in terms of providing models to help understand the atmosphere of Mars, the escape rates of species, and aid in understanding the data from the instruments on the spacecraft.
New Other Gov't. Contract	Pre-Hospital Management of Special Pathogens/Infectious Disease Patients; Web- Based Continuing Education	05/02/2017 12/31/2017	City of Dayton, Miscellaneous	Gruenberg, James	\$10,630	This program will provide specific focus on responder health and safety, and patient care issues regarding special pathogens/infectious diseases.
New Industrial Agreement	Models for Product Location and Reslotting at a Warehouse	07/01/2017 06/30/2019	OpSimplex LLC	Parikh, Pratik	\$22,680	We will develop analytical and computational models to determine the best location of a product in the warehouse and how often to reslot (change this location) based on the supply and demand of this product. The objective will be to lower the cost of labor and improve response time.
New Other Gov't. Subagreement	Evaluation Services for Montgomery County Juvenile Court	07/01/2017 06/30/2018	Montgomery County Juvenile Court	Kinzeler, Nicole	\$23,310	The SARDI Program in BSOM will provide evaluation services to Montgomery County Juvenile Court's behavioral change programs.

Type	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Renewal Non-Profit Subagreement	Wright Brothers Institute Operations	07/01/2017 06/30/2019	Wright Brothers Institute, Inc.	Andersh, Dennis J.	\$680,658	Wright State University will provide personne to manage and assist in the operations of the Wright Brother Institute.
Continuation Other Gov't. Contract	Greene County Records Center and Archives Student Internship	07/01/2017 12/22/2017	Greene County Records Center and Archives	Swanson, Drew A.	\$6,500	A Public History graduate student, Erix Infante, will serve a paid internship at the Greene County Records Center and Archives. His work will benefit the Center and its patrons, while providing him valuable archival experience and instruction.
New State Grant	Health Professions Affinity Community (HPAC): WSU	07/01/2017 06/30/2018	Ohio Department of Education	Pascoe, John M.	\$99,443	Health Professions Affinity Community (HPAC) is a community based program for youth (typically grades 5-12). The program
						enables the young participants to identify health disparities in their respective communities and implement / evaluate an intervention that they develop with support from HPAC "Coaches" (or Specialists).
New State Subagreement	Support for OCTANE Day	01/04/2017 06/30/2017	Ohio Department of Higher Education	Brun, Carl F.	\$750	To further the work of implementing the secondary career technical alignment initiative, Wright State personnel will provide supportive effort for the Ohio Career Technical Articulation Network Engagement (OCTANE) event.
New Federal Grant	Novel Oscillation and Amplification Circuits with Resonant Tunneling Diodes	07/15/2017 06/30/2020	NSF, Miscellaneous	Brown, Elliott	\$190,625	The Wright State researcher will examine novel resonant-tunneling switching circuits that can greatly increase oscillation power.
New Federal Agreement	Dayton Veterans Affairs Medical Center IPA Agreement	08/01/2017 09/30/2017	Veterans Affairs Medical Center	Simmons, Gordon R	\$13,840	Mr. Simmons will assist in IRB regulatory support throughout the study lifecycle. He will provide research regulatory support as needed for Dr. Travers' grant.

## October 6, 2017 Wright State University Grants and Contracts Awarded

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Federal Grant	Collaborative Research: Engaged Student Learning: Re- conceptualizing and Evaluating a Core Computer Science Course for Active Learning and STEM Student Success	08/15/2017 07/31/2020	NSF, Miscellaneous	Bryant, Adam R.	\$81,308	The WSU researchers will create module content for the new operating systems course and evaluation of the new course.
New Non-Profit Grant	Nutrient and Sediment Retention Potential of Treatment Trains in Grand Lake St. Marys Watershed	07/01/2017 06/30/2018	St. Marys Community Foundation	Jacquemin, Stephen James	\$25,980	Through this project, the PI will assess the efficacy of two flow through wetland treatment train systems to reduce nutrient and sediment loads prior to discharge into waters of the state.
New Industrial Grant	Quality Modeling and Process Improvements in Injection Molding	06/09/2017 08/31/2017	Caterpillar Trimble Control Technologies LLC	Ciarallo, Frank W.	\$21,800	Wright State personnel will collaborate with Trimble Navigation Limited to better understand and operationally control an injection molding process, as well as the support development of operational parameters that meet Trimble's quality and throughput goals.
Amendment Educ. Inst. Agreement	Refinement of OSU's Scuffing Models for Lubricated Rough Surface Contacts of Rollers and Gears	01/01/2014 12/31/2017	Ohio State University	Li, Sheng	\$60,000	The WSU researcher will work to enhance and optimize existing scuffing models of The Ohio State University (OSU) developed for point contacts of rough surfaces (roller-to-roller or ball-on-disk) and gear pairs.
Continuation State Subagreement	Support for Position of Senior Associate Director, SCTAI, FY2018	07/01/2017 06/30/2018	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$99,604	This position will be responsible for the operation and direct administrative functions of the Secondary Career-Technical Alignment Initiative of the Ohio Articulation and Transfer Network.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
Continuation State Subagreement	Support for Position of Associate Director, SCTAI, FY2018	07/01/2017 06/30/2018	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$87,549	This position will be responsible for the implementation and communication functions of the Perkins-funded Secondary Career-Technical Alignment Initiative of the Ohio Articulation and Transfer Network.
New Educ. Inst. Subagreement	Investigating the Neural Basis for Proximal Vergence of Eye Movements	04/01/2017 06/07/2017	Ohio State University	Kashou, Nasser H.	\$120	The Imaging of Convergence Insufficiency Treatment Effects (ICITE) study is a two- phase study designed to compare the form functional magnetic resonance imaging (fMRI) signal during vergence eye movements.
New Industrial Subagreement	Two-dimensional Transition Metal Dichalcogenide Ceramics Synthesis	07/17/2017 07/16/2018	Azimuth Corporation	Huang, Hong	\$18,000	The researchers will develop the emerging two dimension transitional metal dichalcogenides to enable new functions and/or to greatly enhance performances in optical and electronic devices.
Continuation Non-Profit Subagreement	Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship Program 2017/2018	08/01/2017 07/31/2018	American Society for Engineering Education	Barnhart, Amy	\$54,918	The SMART Scholarship recipients will collaborate with their mentors to support the AFRL/HE Human Measurement and Signal INTelligence (H-MASINT) program.
Continuation State Contract	General Operating Support: Art Galleries	07/01/2017 06/30/2018	Ohio Arts Council	Cebulash, Glen	\$6,906	This grant will continue to provide partial support for the operation of the University Art Galleries.
New State Contract	Wright State Choose Ohio First Program	07/01/2017 06/30/2021	Ohio Department of Higher Education	Sudkamp, Thomas A.	\$377,000	Wright State's Choose Ohio First Scholarship program will support the economic growth of the Dayton, the Miami Valley, and Southwest Ohio regions by enhancing the production of graduates in the critical STEMM areas needed by industry.

## Grants and Contracts Awarded Since the April 28, 2017 Board of Trustees Meeting

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New State Subagreement	Supporting the Alignment of Military Medic Coursework to Nursing Programs	07/19/2017 10/31/2017	Ohio Department of Higher Education	Smith, Sherrill Jeanne	\$1,163	The PI will assist the sponsor in exploring military medic coursework and its potential alignment with nursing programs, for the purposes of awarding college credit for military training, experience, and coursework
New Federal Grant	EAGER: Bio-Inspired Low Probability of Detection Secure RF Waveform Design	09/01/2017 08/31/2019	NSF, Grants for Scientific Research	Wu, Zhiqiang	\$125,000	The researcher will take a bio-inspired approach to solve one of the most important problems in radio frequency (RF) waveform design: enhancing the security of RF communication.
New Federal Grant	The Microcystis microbiome: Interactions in the cyanobacterial phycosphere	08/15/2017 07/31/2020	NSF, Miscellaneous	Newell, Silvia Elena	\$150,000	The researcher will establish a quantitative ecological model for nutrient exchange within a microbial consortium.
New Industrial Grant	Background Color II	09/01/2017 05/31/2018	Center for Operator Performance	Gallimore, Jennie J.	\$36,000	The overall objective of this project is to improve the understanding of principles involved in selecting display color palettes to increase operator effectiveness.
New State Grant	Residency Traineeship Program for Psychiatric Residents in Dual Diagnosis - MI/DD	07/01/2017 06/30/2018	Ohio Department of Developmental Disabilities	Gentile, Julie P.	\$80,000	This funding will provide FY2018-FY2019 funds for a faculty position for training in psychiatric services to the mentally disabled.
New Federal Grant	Microvesicles as a Novel Transmitter for UVB-Induced Bioactive Products	08/10/2017 07/31/2018	DHHS, National Institute of Arthritis and Musculoskeletal and Skin Diseases	Bihl, Ji Chen Chen, Yanfang Travers, Jeffrey B.	\$195,360	This project is designed to test the hypotheses that: 1) UVB generates MVP in human skin via a process blocked by antioxidants and PAF-R antagonists; 2) UVB MVP contain potent signaling molecules that could explain systemic effects of UVB.

Туре	Title	Duration	Sponsor	Investigator(s)	Amount	Abstract
New Federal Grant	EAGER: Novel Bio- inspired 3D Hybrid Materials for Surface- Active Devices	09/01/2017 08/31/2018	NSF, Miscellaneous	Mukhopadhyay, Sharmila M.	\$150,000	The researchers will explore the possibility of creating 3D surfaces that combine the advantages of nanomaterials with the durability of bulk solids to provide novel platforms for catalysts, sensors, and bioscaffolds.
New Federal Grant	Regularized adaptive methods for classes of nonlinear partial differential equations	08/01/2017 07/31/2018	NSF, Miscellaneous	Pollock, Sara	\$32,848	In this project, the PI will develop efficient computational methods for challenging nonlinear problems that arise in physical and scientific modeling in order to approximate solutions to a variety of nonlinear partial differential equations.
Continuation Educ. Inst. Subagreement	Comparing Interventions for Opioid Dependent Patients Presenting in Medical EDs	09/01/2017 08/31/2018	New York University School of Medicine	Rapp, Richard C.	\$50,064	The WSU researcher will participate in developing and implementing the overall study with an emphasis on the part of the study relating to strengths-based case management.
				Total Funded	\$24,944,348	