

## 2015 Oklahoma Applied Research Awards

Project Number	PI	Organization	Project Title	Award Amount
AR15-005	Dr. Richard Kopke	Hough Ear Institute	Characterization of cochlear hair cell regeneration through knockdown of the Hes1 gene product in mice after noise-induced deafness	\$300,000
AR15-013	Dr. Craig Shimasaki	Moleculera Labs Inc.	The development and clinical validation of high throughput screening to identify neuronal autoantigens in patients with neuropsychiatric disorders	\$300,000
AR15-016	Mr. Randall Maxwell	Compression Solutions Inc.	DVT pump with communications abilities	\$89,850
AR15-017	Dr. Ranjith Ramanathan	Oklahoma State University	Enhancing the value of dark cutters by postharvest techniques	\$90,000
AR15-022	Dr. Ronald Wassel	Charlesson LLC	Fenofibrate eye drop for the treatment of diabetic retinopathy	\$241,176
AR15-026	Mr. Jonathan Lancaster	HydroHoist Marine Group Inc.	Development of next-generation bacteria resistant mushroom growing tray	\$89,543
AR15-032	Dr. Badia Koudsi	Optecks LLC	Next-generation full-color 3D display	\$200,000
AR15-037	Dr. Rico Buchli	Pure Protein LLC	Smart high resolution HLA-chip for anti-HLA antibody screening and monitoring	\$300,000
AR15-039	Mr. Lloyd Salsman	Frontier Electronic Systems Corporation	Scaling up nanomanufacturing processes For nanostructured Li-ion battery systems	\$300,000
AR15-040	Dr. Pankaj Sarin	Oklahoma State University	Mechano-chemical recovery of platinum group metals (PGMs) from metal-foil supported spent auto catalysts	\$89,941
AR15-049	Dr. Guolong Zhang	Oklahoma State University	Development of next-generation antibiotic alternatives	\$300,000
AR15-054	Dr. Evgueni Kadossov	XploSafe LLC	Novel sorbent for toxic inorganic oxyanions	\$90,000
AR15-057	Dr. Brian Grady	United Guar LLC	Optimal chemical modification of guar for downhole applications	\$300,000
AR15-061	Dr. David Goad	SensiQ Technologies Inc.	Low cost automated biosensor platform	\$107,689
AR15-062	Dr. Li Song	The Board of Regents of the University of Oklahoma	Prototype design of a virtual energy meter for enhanced building operations	\$90,000
AR15-066	Dr. Evgueni Kadossov	XploSafe LLC	Validation of explosives training aids for commercialization	\$45,000
AR15-070	Dr. James Manimala	Oklahoma State University	Lightweight, compact, structurally-integrated acoustic liners for improved low-frequency performance	\$73,650

## 2015 Health Research Awards

Project Number	PI	Organization	Project Title	Award Amount
HR15-015	Dr. Richard Kopke	Hough Ear Institute	Restoring synaptic connections in the cochlea using a novel brain metabolite	\$90,000
HR15-016	Dr. Yuchen Qiu	The Board of Regents of the University of Oklahoma	Quantitative image analysis for predicting early response of ovarian cancer patients to chemotherapy	\$134,967
HR15-017	Dr. Carol Dionne	The Board of Regents of the University of Oklahoma Health Sciences Center	Work performance in men with trans-femoral amputation	\$134,792
HR15-021	Dr. Sharukh Khajotia	The Board of Regents of the University of Oklahoma Health Sciences Center	Modulation of biofilm growth due to salivary biodegradation of resin restorations	\$135,000
HR15-041	Dr. Xi-Qin Ding	The Board of Regents of the University of Oklahoma Health Sciences Center	The role of inositol 1,4,5-trisphosphate receptor in cone photoreceptor degeneration in CNG channel deficiency	\$135,000
HR15-072	Dr. Ralf Janknecht	The Board of Regents of the University of Oklahoma Health Sciences Center	Enzyme RCL is a novel promoter of breast cancer	\$135,000
HR15-078	Dr. Courtney Griffin	Oklahoma Medical Research Foundation	Novel triggers of endothelial cell necroptosis	\$135,000
HR15-079	Dr. Jamie Rhudy	University of Tulsa	Biofeedback training in conditioned pain regulation (BT-CPR)	\$135,000
HR15-082	Dr. Christopher Sansam	Oklahoma Medical Research Foundation	Protein acetylation in the control of DNA replication initiation	\$135,000
HR15-084	Dr. Tabitha Garwe	The Board of Regents of the University of Oklahoma Health Sciences Center	Under-triage in the elderly trauma patient: An argument for tailored geriatric trauma triage criteria	\$76,087
HR15-089	Dr. Guangpu Li	The Board of Regents of the University of Oklahoma Health Sciences Center	PTP-MEG2 function in Trk trafficking and neurotrophin signaling	\$135,000
HR15-104	Dr. Anna Csiszar	The Board of Regents of the University of Oklahoma Health Sciences Center	Early-life endocrine factors determining late-life cancer incidence	\$135,000
HR15-106	Dr. Zoltan Ungvari	The Board of Regents of the University of Oklahoma Health Sciences Center	IGF-1 and cerebrovascular dysfunction	\$135,000
HR15-108	Dr. Anne Kasus-Jacobi	The Board of Regents of the University of Oklahoma Health Sciences Center	Wound healing mechanisms modulated by novel antimicrobial peptide	\$90,000
HR15-136	Dr. Yun Zheng Le	The Board of Regents of the University of Oklahoma Health Sciences Center	Mechanism and treatment of atrophic AMD	\$135,000
HR15-141	Dr. Aikaterini Thanou	Oklahoma Medical Research Foundation	Transcutaneous vagus nerve stimulation for the treatment of SLE	\$135,000
HR15-142	Dr. Sundararajan Madihally	Oklahoma State University	Building 3D liver organoid from bottoms-up for drug screening	\$135,000
HR15-145	Dr. Harini Bagavant	Oklahoma Medical Research Foundation	Periodontal disease: Cause or consequence of systemic lupus erythematosus	\$135,000
HR15-151	Dr. Umesh Deshmukh	Oklahoma Medical Research Foundation	Innate immunity in pathogenesis of Sjogren's syndrome	\$135,000
HR15-152	Dr. Marie Hanigan	The Board of Regents of the University of Oklahoma Health Sciences Center	Glycan-based serum biomarkers for breast cancer	\$135,000

HR15-161	Dr. Adam Duerfeldt	The Board of Regents of the University of Oklahoma	Exploration of bacterial ClpP as a treatment strategy for hospital-acquired infections	\$135,000
HR15-165	Dr. David Stanford	The Board of Regents of the University of Oklahoma Health Sciences Center	Single cell mitochondrial heteroplasmy	\$135,000
HR15-166	Dr. Lawrence Rothblum	The Board of Regents of the University of Oklahoma Health Sciences Center	Targeting ribosome biogenesis in cancer	\$135,000

## 2015 Intern Partnership Awards

Project Number	PI	Organization	Project Title	Award Amount
IP15.1-008	Dr. Kaveh Ashenayi	University of Tulsa	Development of remote modular controller	\$29,902
IP15.1-009	Dr. Kaveh Ashenayi	University of Tulsa	Design of next generation compression therapy device	\$29,953
IP15.1-014	Dr. John Hale	University of Tulsa	Next generation host remote access (NGHRA)	\$29,275
IP15.1-020	Dr. Patrick McCann	Spiers New Technology Inc.	Silicon carbide high voltage motor inverter	\$28,200
IP15.1-022	Dr. Jerald Dawkins	True Digital Security	Client side attack simulation (CSAS)	\$60,000
IP15.2-004	Dr. Surendra Singh	University of Tulsa	Design and development of process plants	\$60,000
IP15.2-005	Dr. Surendra Singh	University of Tulsa	Design and development of aerostructures	\$60,000
IP15.2-008	Dr. Kaveh Ashenayi	University of Tulsa	3D CAD design & development to achieve efficiencies for next generation product lines	\$59,463
IP15.2-012	Dr. Kaveh Ashenayi	University of Tulsa	Design and implementation of test plans for the power take-off (PTO) devices	\$59,703
IP15.2-021	Dr. Robert Leland	Oral Roberts University	In situ measurement device for internal corrosion prevention	\$34,360

## 2015 Plant Science Awards

Project Number	PI	Organization	Project Title	Award Amount
PS15-011	Dr. Charles Chen	Oklahoma State University	Establishing translational genomics for Oklahoma wheat improvement	\$96,000
PS15-012	Dr. Elison Blancaflor	Noble Research Institute LLC	Using chemical genetics to uncover novel regulators of root system architecture and hormone responses in plants	\$100,000
PS15-016	Dr. Ramanjulu Sunkar	Oklahoma State University	Comparative epigenomics of drought tolerance in Arabidopsis accessions	\$100,000