New Research Grants & Contracts

July 2025

Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Noel Aloysius – Assistant Professor, Natural Resources and Chemical and Biomedical Engineering	**Neil Fox** – Professor, Atmospheric Sciences **Theodoros Skevas** – Associate Professor, Applied Social Sciences	Missouri River Basin monitoring and modeling and development of engineering tools, standards, decision support tools	USDA Agricultural Research Service	**$1,012,500**
Eric Bailey – Associate Professor; State Extension Beef Nutrition Specialist	**Harley Naumann** – Associate Teaching Professor; Extension State Forage and Grazing Specialist	Carbon balance analysis of tall fescue pastures in Missouri: a life cycle assessment	Missouri Beef Industry Council	**$288,710**
Mandy Bish – Assistant Professor; State Extension Plant Pathologist	———	Increasing farm sustainability and local food security through grafted tomatoes	Missouri Department of Agriculture	**$3,500**
Thomas Bonnot – Assistant Research Professor, Natural Resources	———	Development of achievable, desired future conditions for priority geographies	Missouri Department of Conservation	**$72,000**
Elizabeth Bryda – Curators' Distinguished Professor, Veterinary Pathobiology; Director, Rat Resource and Research Center	**Craig Franklin** – Professor, Veterinary Pathobiology; Director, Mutant Mouse Resource and Research Center	Postdoctoral training in comparative medicine – year 47	NIH Office of the Director	**$305,281**
Elizabeth Bryda – Curators' Distinguished Professor, Veterinary Pathobiology; Director, Rat Resource and Research Center	**Kun-Eek Kil** – Assistant Research Professor, Radiochemistry and Radiopharmaceutical Chemistry	MU Rodent Testing Center for Somatic Cell Genome Editing	NIH Office of the Director	**$423,027**
Dunpeng Cai – Assistant Professor, Surgery	———	Harnessing endogenous ADAR1-mediated RNA editing to correct FBN1 mutations in Marfan syndrome	American Heart Association	**$200,000**

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Albert Chan – Associate Professor, Cardiology	———	Medtronic coronary interventional cardiology fellowship grant AY 2025-26	Medtronic	**$7,000**
Shi Jie Chen – Curators' Distinguished Professor, Biological Physics	———	Computational structural biology of HIV-1 RNA	NIH National Institute of Allergy and Infectious Diseases	**$172,150**
Theodore Choma – J. Vernon Luck Sr. Distinguished Professor, Orthopaedic Surgery	———	AOSNA fellowship award AY25-26	AO Spine North America	**$15,000**
Brett Crist – Professor, Orthopaedic Surgery	———	AY25-26 COTA trauma fellowship award	Center for Orthopaedic Trauma Advancement	**$2,500**
Yuan Dai – Professor, Chemical and Biomedical Engineering	———	NSP Engineering Research Center for carbon utilization redesign for biomanufacturing (CURB)	NSF Division of Engineering Education and Centers	**$1,068,353**
Rankeya Datta – Assistant Professor, Mathematics	———	Uniform phenomena in commutative algebra	NSF Division of Mathematical Sciences	**$116,251**
Dongsheng Duan – Curators' Distinguished Professor, Molecular Microbiology and Immunology and Neurology	**Gang Yao** – Professor, Biological and Biomedical Engineering	Whole body single AAV microgene therapy in canine DMD	NIH National Institute of Neurological Disorders and Stroke	**$2,936,755**
Jennifer First – Assistant Professor, Social Work	———	Gravel tree stormwater systems	U.S. Department of Agriculture	**$127,488**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Brett Froeliger – Professor, Psychiatry; Director, Cognitive Neuroscience Systems Core Facility	**Muaid Ithman** – Professor of Psychiatry; Vice Chair, Clinical Operations	Neural mechanisms underlying dissociable effects of cTBS in psychostimulant abuse	NIH National Institute on Drug Abuse	**$3,481,642**
Karen Funkenbusch – Extension Assistant Professor, Occupational Therapy	———	Comprehensive agricultural assessment services	Missouri Department of Elementary and Secondary Education	**$45,400**
Shaoping Hou – Associate Professor, Physical Medicine and Rehabilitation and Pathology and Anatomical Sciences	———	Spinal dopamine receptor mechanisms regulating the micturition reflex after spinal cord injury	NIH National Institute of Neurological Disorders and Stroke	**$2,807,839**
Edvin Isufi – Assistant Professor, Radiology	———	A multicenter, open label, ascending dose study to evaluate safety of RVP-001 and to identify an appropriate dose to detect CNS lesions in adult patients	Reveal Pharmaceuticals	**$14,500**
Jay Johnson – Associate Professor, Animal Welfare and Stress Physiology	———	Integrating functional genomics, behavior, and health measures to mitigate the cumulative effects of in utero heat stress on swine welfare	USDA National Institute of Food and Agriculture	**$150,560**
John Kabrick – Assistant Cooperative Professor, Natural Resources	**Morgan Davis** –Assistant Professor, Natural Resources	Applying biochar and subsoiling treatments to soils in log landings to mitigate compaction and increase productivity	Society of American Foresters	**$1,475**
Keith Kenter – Professor, Orthopaedic Surgery	———	AANA sports medicine fellowship award (AY25-26)	Arthroscopy Association of North America	**$3,771**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Syamantak Khan – Assistant Professor, Radiation Oncology	———	Novel OrganoPET assay for precision therapy of head and neck cancer	NIH National Institute of Dental and Craniofacial Research	**$747,001**
Yeji Kim – Assistant Professor, Learning, Teaching and Curriculum	———	Towards transformative social studies education for refugee-background students in secondary classrooms	National Council for the Social Studies	**$5,000**
Cory Koedel – Professor, Economics and Public Policy	———	Layoff and crime	Russell Sage Foundation	**$15,000**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Crystal Lim – Chair and Associate Professor, Health Psychology	**Constance Brooks** – Executive Director, Thompson Center for Autism and Neurodevelopment; Clinical Professor, Health Psychology **Nikole Cronk** – Professor, Family and Community Medicine **Andrew Frey** – Professor, Social Work **Eric Hart** – Associate Chair and Clinical Professor, Health Psychology **Rose (O'Donnell) Kaemmerer** – Associate Clinical Professor, Health Psychology **Kimberly Kimchi** – Associate Clinical Professor, Health Psychology **Kerri Nowell** – Associate Clinical Professor, Health Psychology **Aaron Thompson** – Director and Professor, School of Social Work	Missouri interdisciplinary behavioral health psychology internship program	Health Resources and Services Administration	**$1,350,000**
John Lory – Extension Associate Professor, Plant Science and Technology	**Stephen Anderson** – William A. Albrecht Distinguished Professor of Soil and Environmental Sciences	Improve farmer profitability and sustainability with on-farm nitrogen fertilizer trials	USDA Agricultural Research Service	**$100,000**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Tanu Malik – Associate Professor, Electrical Engineering and Computer Science	———	Reproducible containers for advancing process-oriented collaborative analytics	NASA Goddard Space Flight Center	**$744,396**
Jordan Malof – Assistant Professor, Electrical Engineering and Computer Science	———	Climate TRACE phase 7	WattTime	**$93,124**
Joan Masters – Senior Director, Partners in Prevention	**Megan Jones** – Associate Director, Wellness Resource Center	Smoke-free Mizzou	Truth Initiative	**$19,981**
Peter Mueser – Research Fellow, Economics	———	Analysis of program outcomes: evaluation of outcomes for participants in selected programs	Missouri Department of Elementary and Secondary Education	**$38,000**
Kate Nelson – Associate Professor, Natural Resources	———	Planning: CRISES: building collective action for sustainable habitats	National Science Foundation	**$5,919**
Jaume Padilla – Professor, Nutrition and Ex and Exercise Physiology	———	IPA - Naiwei Chen	Virginia Department of Health	**$15,269**
Yi Pan – Doctoral Student, Translational Biosciences	———	ASH graduate hematology award	American Society of Hematology	**$80,000**
Catherine Parker – Assistant Professor, Emergency Medicine	———	Transition to clerkship boot camp: preparing M3 students for emergency medicine rotations	Society for Academic Emergency Medicine Foundation	**$960**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Muhammad Rasel Parvej – Assistant Professor; State Extension Specialist, Soil Testing and Interpretation	———	Spatial and temporal variation of soil sampling effect on phosphorus and potassium recommendations for soybeans	Mid-South Soybean Board	**$30,000**
Allison Pease – Assistant Professor, Natural Resources	———	GRRI CESU – Leadership, coordination, and administrative oversight for the great rivers cooperative ecosystem studies unit	National Park Service	**$35,000**
Amy Petry – Assistant Professor, Monogastric Nutrition	**Jay Johnson** – Associate Professor, Animal Welfare and Stress Physiology	Establishing a functional fiber index for the modern sow	USDA National Institute of Food and Agriculture	**$650,000**
Alejandro Plastina – Associate Professor, Agricultural Finance; Director, Rural and Farm Finance Policy Analysis Center	———	State and regional farm financial analysis, 2025	U.S. Department of Agriculture	**$1,431,000**
Amy Ramsdell – Director, Heart of Missouri Regional Professional Development Center	———	FY26 Heart of Missouri Regional Professional Development Center consolidated contract – behavior specialist	U.S. Department of Education	**$116,000**
Amy Ramsdell – Director, Heart of Missouri Regional Professional Development Center	———	FY26 Heart of Missouri Regional Professional Development Center consolidated contract – DCI Consultants	U.S. Department of Education	**$2,863,200**
Praveen Rao – Associate Professor, Electrical Engineering and Computer Science	**Deepthi Rao** – Assistant Professor, Pathology	CC* integration-small: harnessing FABRIC for scalable language model training and inference	NSF Directorate for Computer and Information Science and Engineering	**$500,000**

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Punyaslok Rath –Assistant Research Professor, Civil and Environmental Engineering	**William Buttlar** – Glen Barton Chair in Flexible Pavement Technology, Civil and Environmental Engineering	Phase II- implementation of balanced mixture design in Missouri test sections with modifiers	Federal Highway Administration	**$200,000**
Lixing Reneker – Associate Professor, Ophthalmology	**Salman Hyder** – Zalk Missouri Professor of Tumor Angiogenesis and Biomedical Sciences **Victoria Vieira-Potter** – Associate Professor, Nutrition and Exercise Physiology	Targeting sex hormone receptors for treatment of meibomian gland dysfunction	NIH National Eye Institute	**$422,199**
Cecilia Rocha – Research Assistant Professor; State Extension Specialist, Livestock Systems	———	Validation of estrous synchronization programs with reused CIDRs to reduce expenses and waste in cow calf operations	Illinois Beef Association	**$20,169**
Caroline Rogers – Graduate Student, Geological Sciences	———	Tracing mantle variability using quaternary basalts in Utah	Geological Society of America	**$2,500**
Andrew Scaboo – Associate Professor, Plant Science and Technology	**Feng Lin** – Assistant Professor, Plant Science and Technology	National USDA uniform soybean tests / soybean cyst nematode screening	United Soybean Board	**$6,374**
James Schiffbauer – Marie M. and Harry L. Smith Endowed Professor, Geological Sciences; Director, X-Ray Microanalysis Laboratory	**Tara Selly** – Research Associate Professor, Geological Sciences **Lydia Tackett** – Visiting Associate Professor, Geological Sciences	A multiproxy exploration of the terminal Ediacaran Stage at the Nevada National Security Site	NSF Division of Earth Sciences	**$519,422**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Joshua Shinn – Extension Engagement Specialist; Field Specialist, Community Development	———	Growing the Veteran R.E.A.D.S. Program	Missouri Humanities Council	**$5,000**
Haval Shirwan – Curators' Distinguished Professor and Chair, Molecular Microbiology and Immunology	**Jussuf Kaifi** – Associate Professor, Surgery **Esma Yolcu** – Professor, Molecular Microbiology and Immunology and Pediatrics	Developing a novel agonist of CD137 for cancer immunoprevention	NIH National Cancer Institute	**$761,094**
Jon Simonsen – Professor, Applied Social Sciences	———	Farm business management analysis (FBMA) program (2025-26)	Missouri Department of Elementary and Secondary Education	**$77,000**
Erin Sparks – Associate Professor, Plant Science and Technology	———	Systems-level characterization of *Pythium* pathogenesis, an emerging threat to maize production	USDA National Institute of Food and Agriculture	**$44,608**
Erin Sparks – Associate Professor, Plant Science and Technology	———	Effect of rye shading on corn roots and shoots in traditional and short stature corn	USDA National Institute of Food and Agriculture	**$32,213**

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Principal Investigator (PI)	Co-Investigators	Award	Sponsor	Total Funds
Sharan Srinivas – Associate Professor, Industrial and Systems Engineering and Marketing	**Prasad Calyam** – Curators' Distinguished Professor, Electrical Engineering and Computer Science; Director, Cyber Education, Research and Infrastructure Center **Suchithra Rajendran** – Assistant Professor, Industrial and systems Engineering and Marketing	PFI-TT: cloud-based route management platform for optimizing last-mile logistics of electric truck and drone operations (PAWR supplement)	NSF Directorate for Computer and Information Science and Engineering	**$49,999**
Hank Stelzer – Associate Professor; State Extension Specialist, Forestry	———	Four cooperative feral hog outreach specialist positions	Missouri Department of Conservation	**$420,000**
Lisa Washburn – Associate Vice Chancellor for Extension and Engagement; Associate Professor, Public Health	———	Rural health care scholars program	Missouri Department of Health and Human Services	**$400,000**
Rachel Wolpert – Associate Professor, Occupational Therapy	———	Compass: a novel transition program to reduce disability after a stroke	NIH National Institute of Child Health and Human Development	**$687,302**
Kui Xie – Dean, College of Education and Human Development; Joanne H. Hook Dean's Chair in Educational Renewal	———	Hybrid2: Creating equitable spaces for science discourse in blended learning environments	U.S. Department of Education	**$539,366**
Esma Yolcu – Professor, Molecular Microbiology and Immunology and Pediatrics	———	Employing PD-L1-modified biomaterials to induce islet allograft tolerance following perihepatic transplantation in nonhuman primates	Juvenile Diabetes Research Foundation International	**$211,547**

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Laine Young-Walker – Professor and Robert J. and Betty Douglas Distinguished Chair, Psychiatry	———	ECPBS MACC 2025	Boone County, Missouri	**$42,000**
Ruojie Vanessa Zhang – Assistant Research Professor, Food Science	**Azlin Mustapha** – Professor, Food Science **Zipei Zhang** – Assistant Professor, Food Science	Natural-inspired strategies to enhance microbial safety of dairy foods	USDA National Institute of Food and Agriculture	**$277,407**
Zipei Zhang – Assistant Professor, Food Science	**Mengshi Lin** – Curators' Distinguished Professor, Food Science **Azlin Mustapha** – Professor, Food Science	Assisting specialty crop exports, sustainable packaging innovation lab (ASCE-SPIL)	USDA Foreign Agricultural Service	**$117,172**
Xiaoqin Zou – Curators' Distinguished Professor, Physics and Biochemistry	**Xiao Heng** – Associate Professor, Biochemistry **Hongmin Sun** – Associate Professor, Medicine	Integrative approaches for predicting protein interactions and applications	NIH National Institute of General Medical Sciences	**$2,353,030**
Xiaoqin Zou – Curators' Distinguished Professor, Physics and Biochemistry	———	A molecular dissection of BK channelopathy in neurological disorders	NIH National Institute of Neurological Disorders and Stroke	**$978,029**