

Collaboration Initiative

Team Seed Grants

July 1, 2022



Proposal Title	Researchers		Campus
Brain Signal Oscillations During Gait in Parkinsons Disease: Potential for Treatment	Carolin Curtze Aviva Abosch	PI	UNO UNMC
Development of Hydrogel Ionic Circuit-Based Transcutaneous Electrical Stimulation Device for Long-Gap Peripheral Nerve Repair	Bin Duan Christos Argyropoulos Siwei Zhao	PI	UNMC UNL UNMC
Effects of Prenatal Atrazine Exposure on Health and Fertility Outcomes in a Swine Model	Amy Desaulniers Shannon Bartelt-Hunt Eleanor Rogan Sarah Sillman Muhammad Zahid	PI	UNL UNL UNMC UNL UNMC
Estimating Landscape-Level Contributions in Ecosystem Goods & Services from the Conservation Reserve Program in Nebraska	Melissa Wuellner Simanti Banerjee Pricila Iranah Jayne Jonas-Bratten Andrew Little Gregory Pec Yi Qi Letty Reichart Tirthankar Roy Daniel Uden	PI	UNK UNL UNK UNK UNL UNK UNL UNK UNL UNL UNL
Fatty Acid Synthesis and Ovarian Steroidogenesis	John Davis Andrea Cupp DJ Murry	PI	UNMC UNL UNMC

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Framework for Human-Robot Interactions in Healthcare Facility Operations	Kyungki Kim Melissa Christian Erica Ryherd Dung Hoang Tran John Windle	PI	UNL UNMC UNL UNL UNMC
Future Artificial Intelligence through Biomimetic Living Micro-Brain	Sasitharan Balasubramaniam Pei-Chi Huang Srivatsan Kidambi	PI	UNL UNO UNL
Gut Microbiome-Focused Approaches for Improving Treatment of Acute Radiation Injuries	Amanda Ramer-Tait Andrew Benson Becky Deegan Audrey Lazenby Jeff Price	PI	UNL UNL UNMC UNMC UNL
Harnessing the Regulation of Nuclear Receptor Signaling to Limit Hepatic Steatosis and Fibrosis	Xinghui Sun Kusum Kharbanda Joseph Vetro	PI	UNL UNMC UNMC
Human Macrophage-Intracellular Francisella Tularensis Interactome	Marilynn Larson Tomas Helikar	PI	UNMC UNL
Hydrogen Sulfide as a Biomarker in Patients with Peripheral Arterial Disease	Song-Young Park Yeongjin Gwon Paras Kumar Mishra Iraklis Pipinos Matthew Zimmerman	PI	UNO UNMC UNMC UNMC UNMC

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Improving Spring Flood Prediction Based on Multi-Physical and Data-Driven Convergent Modeling	Jongwan Eun Kwangsung Oh Incheol Kim Tirthankar Roy	PI No No No	UNL UNO UNL UNL
Intelligent System Research to Address Health Related Misinformation, Distrust, and Impeded Decision-making	Joel Elson Dhundy Bastola Jason Johanning Sharon Obasi Tenace Kwaku Setor	PI	UNO UNO UNMC UNK UNO
Large Animal Model of Controlled Vascular Calcification	Alexey Kamenskiy Jason MacTaggart	PI	UNO UNMC
The Molecular Mechanism of Genome Stability in the Mitochondria of Flowering Plants	Piero Bianco Alan Christensen	PI	UNMC UNL
Nebraska Education Policy Research Lab	Tami Williams Xiaoyue Zoe Cheng Kelly Gomez Johnson Taeyeon Kim Md Mahbubul Majumder C Ostler Aprille Phillips Josie Schafer Morgan Vogel	PI	UNO UNO UNO UNL UNO UNO UNK UNO UNO
A Novel Self-Amplifying mRNA Vaccine Platform Against Swine Influenza Virus	Hiep Vu Paul H Davis	PI	UNL UNO

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Palmitoleate Protects Against Zika Virus Infection in Trophoblasts by Activating Innate Immunity	Sathish Kumar Natarajan Ann Anderson Berry Murali Ganesan Corri Hanson	PI	UNL UNMC UNMC UNMC
Quark: An Intelligent Adaptive Education Platform for Quantum Cybersecurity	Abhishek Parakh Mahadevan Subramaniam Sherri Weitl-Harms	PI	UNO UNO UNK
Synthetic Biomimetic Environment (BEASTS) to Investigate the Role of Stiffness in Altered Redox Signaling and Inflammation in Placenta during HDP	Ann Anderson Berry Corri Hanson Srivatsan Kidambi Sathish Kumar Natarajan Melissa Thoene	PI	UNMC UNMC UNL UNL UNMC
Synthetic Biomimetic Environment (BEASTS) to Investigate the Role of Stiffness in Altered Redox Signaling and Inflammation in Placenta during HDP	Paras Kumar Mishra Song-Young Park	PI	UNMC UNO
Wearable Device for Continuous and Noninvasive Measurement of Pulse Wave Velocity	Eric Markvicka Kate Cooper Ran Dai Brian Lowes Stephen Rennard	PI	UNL UNO UNMC UNMC UNMC