

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
A Cybersecurity Educational Platform by Automatically Generating Personalized Feedback	Myoungkyu Song		UNO
		Leen-Kiat Soh Harvey Siy Rui Zhao	UNL UNO UNO
A global soil spectral calibration and prediction network to characterize the global soils	Yufeng Ge		UNL
		Pei-Chi Huang Nuwan Wijewardane	UNO UNL
An Integrated Computational and Experimental Approach to Dissect the Emergence of Antimicrobial Resistance (AMR)	Rajib Saha		UNL
		Diganta Dutta Samodha Fernando	UNK UNL
An integrated computational and experimental study to investigate the metabolic regulation of Staphylococcus aureus	Ken Bayles		UNMC
		Rajib Saha Vinai Chittezham Thomas Paul Fey	UNL UNMC UNMC
Characterization of Hydro-Mechanically Coupled Fluid Transport in Deformable Porous Media and Application to Convection-Enhanced Drug Delivery	Seunghee Kim		UNL
		Chi Zhang Sangjin Ryu	UNMC UNL
Copper in Lipid Metabolism and Energy Homeostasis	Jaekwon Lee		UNL
		Hyun-Seob Song Saraswathi Viswanathan Seung-Hyun Ro	UNL UNMC UNL

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
Developing and Alternative Cementitious Material from Raw Corn Stover and Bioethanol Production Plants Waste Products	Mahmoud Shakouri		UNK
		Cody Stolle Jiong Hu	UNL UNL
Development and Application of Next-Generation Biomedical X-ray Imaging	Matthias Fuchs		UNL
		Philipp Streubel Bin Duan	UNMC UNMC
Development of a novel mouse model to study the health and behavioral consequences of alcohol-associated intestinal dysbiosis	Derrick Samuelson		UNMC
		Amanda Ramer-Tait	UNL
Development of Biomimetic Model for Alcohol-Induced Liver Injury	Paul Thomes		UNMC
		Carol Casey Srivatsan Kidambi	UNMC UNL
Education, Migration, and Teacher Preparation	Ted Hamann		UNL
		Janet Eckerson Chandra Diaz DeBose Stephanie Wessels Amanda Morales Theresa Catalano	UNK UNK UNL UNL UNL
Embracing the uncertainty: Make big data bigger and radiomics models better	Huijing Du		UNL
		Hongfeng Yu Chi Zhang Qi Zhang Dandan Zheng	UNL UNL UNL UNMC

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
Enhancing antiretroviral drug pharmacokinetics using anti-inflammatory galunisertib combination to treat HIV/AIDS	Shetty ravi Dyavar		UNMC
		Tony Podany Courtney Fletcher Siddappa Nagadenahalli Dhundy Bastola	UNMC UNMC UNMC UNO
Fighting Dementia: Clinical Translational effects of learning a new language	Ladan Ghazi Saidi		UNK
		Cary Savage Douglas Schultz	UNL UNL
Forcibly Removed: Workshop and Symposia on the Lived Experiences of Displaced Persons	Lory Dance		UNL
		Cindy Krafka Margaret Huettl Abla Hasan Frances Kaye Shams Al-Badry Tiffani Luethke Michelle Warren	UNO UNL UNL UNL UNL UNK UNK
HBV infection accelerates liver fibrosis development: role of matrix stiffness	Srivatsan Kidambi		UNL
		Murali Ganesan Larisa Poluektova Natalia Osna	UNMC UNMC UNMC
Immune Evasion and Persistence by Intracellular Francisella tularensis	Marilynn Larson		UNMC
		Tomas Helikar	UNL
Investigation of the Molecular Dialogue Between the Desmosome and Adherens Junction using a Single Cell Pair Stimulation Platform	Ruiguo Yang		UNL
		Keith Johnson James Wahl	UNMC UNMC

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
Linking child stunting and cognitive development, microbiome, livestock, and water quality: A One Health pilot study in Rwanda	Elizabeth VanWormer		UNL
		Stephen Obaro Chittaranjan Ray Daniel Snow Andrew Benson Abbie Raikes Helen Raikes	UNMC UNL UNL UNL UNMC UNL
Mechanotransduction of plant invaders: quantifying entry mechanisms of parasitic plants	Joseph Turner		UNL
		Paul Twigg You Zhou Daniel Schachtman	UNK UNL UNL
miRNA-based Therapeutic Strategy for Diabetic Breast Cancer	Surabhi Chandra		UNK
		Paras Kumar Mishra	UNMC
Moving From Good Data to Good Outcomes: An Exploratory Project for Explainable Artificial Intelligence	John Windle		UNMC
		Stephen Scott	UNL
Multi-physical and Multi-scale Analysis of Water Infiltration through Frozen Soils	Jongwan Eun		UNL
		Chittaranjan Ray Jong-Hoon Youn Yeongjin Gwon	UNL UNO UNMC
Proteolytic regulation of mitochondrial function as a tumor suppressive mechanism in breast cancer	Oleh Khalimonchuk		UNL
		Vimla Band	UNMC

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
Role of Microbiota and Lipid metabolism in colitis and associated Carcinogenesis	Punita Dhawan		UNMC
		Dhundy Bastola Geoffrey Talmon Amanda Ramer-Tait	UNO UNMC UNL
Security and Hackability Considerations of Driverless Tractors and Agricultural Robots	Santosh Pitla		UNL
		Cody Stolle George Grispos	UNL UNO
Spatial Analysis of Health Care Accessibility and Usage in Nebraska	Sajda Qureshi		UNO
		Martina Clarke Timi Barone John Windle Yi Qi Jason Combs Paul Burger	UNMC UNO UNMC UNL UNK UNK
Stretch Mechanotransduction for MSC Osteogenesis	Jung Yul Lim		UNL
		Bin Duan Ruiguo Yang	UNMC UNL
Structure Based Inhibitors Design Targeting RNA Polymerase against Flavivirus Infection	Shi-Hua Xiang		UNL
		Sean Avedissian Corey Hopkins Nick Palermo	UNMC UNMC UNL
Multidisciplinary Approach	Mario Scalora		UNL
		Stephen Scott Hau Chan Magie Hall Peter Muhlberger	UNL UNL UNO UNL

Collaboration Initiative Seed Grant Award Recipients

July 1, 2020



Proposal Title	PI Name	Co-PI Name	Participating Campuses
Understanding the molecular mechanism of bean-derived peptides in regulating blood pressure through the gastrointestinal-renal axis	Kaustav Majumder		UNL
		Matthew Zimmerman Kaushik Patel Regis Moreau	UNMC UNMC UNL
Wearable bioelectronic device to detect changes in health status	Eric Markvicka		UNL
		Kate Cooper Stephen Rennard Jenna Yentes	UNO UNMC UNO