

## Collaboration Initiative

### Team Seed Grants

July 1, 2021



Proposal Title	Researchers		Campus
Affirming Transdiagnostic CBT for Anxiety and Depression for Transgender and Gender Diverse Adults: Pilot Clinical Trial	Debra Hope Becca Brock Richard Mocarski	PI	UNL UNL UNK
Applying mammalian hibernation biochemistry to organ preservation in transplantation: a strategy for improving post-transplant outcomes and donor organ utilization.	Shaheed Merani Marian Urban Matthew Andrews	PI	UNMC UNMC UNL
Community-Provider Partnership in the Development of Multidisciplinary Gender-Affirming Communication Services: Building Toward a Clinical Trial	Angela Dietsch Miechelle McKelvey Richard Mocarski Debra Hope	PI	UNL UNK UNK UNL
A comprehensive strategy to rapidly develop kinase targeting PROTACs	Amarnath Natarajan Michael Naldrett Sophie Alvarez Y Albala	PI	UNMC UNL UNL
Design of Microfluidic Device based on Cytoskeletal Modifications to Understand Breast Cancer Cell Metastasis and Proliferation in Diabetes	Diganta Dutta Jung Yul Lim Surabhi Chandra	PI	UNK UNL UNK
Developing a new drug screening platform to identify radioprotective compounds	Becky Deegan Tomas Helikar Babu Guda Robert Powers	PI	UNMC UNL UNMC UNL
Effect of omega-3 PUFAs on metabolic disruption in IUGR offspring	Dustin Yates Jessica Petersen James Wilson	PI	UNL UNL UNO
Evaluating the Release of Silver Nanoparticles from Nano-food Packaging: A Systematic Characterization, Modeling, and Exposure Assessment	Yusong Li Xiaoyue Zoe Cheng Bing Wang Lucia Fernandez Ballester Mathias Schubert	PI	UNL UNO UNL UNL UNL
Genome-scale Kinetic Modeling of Pancreatic Cancer Metabolism	Pankaj Singh Rajib Saha	PI	UNMC UNL

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Harnessing dry bean genetic diversity to modulate the gut microbiota and limit intestinal inflammation	Amanda Ramer-Tait Andrew Benson Peter Mannon	PI	UNL UNL UNMC
Harnessing walking variability to reduce falls in older adults	Nikolaos Stergiou Iason Konstantzos Iraklis Pipinos Aaron Likens Spyridon Mastorakis	PI	UNO UNL UNMC UNO UNO
H2S Therapeutics for Myocardial Ferroptosis in Diabetes	Paras Kumar Mishra Song-Young Park Thomas Porter	PI	UNMC UNO UNMC
Hydrodynamics-based separation of circulating tumor DNAs from blood in microfluidic environments	Jae Sung Park Ruiguo Yang Hyung Joon Kim	PI	UNL UNL UNMC
Integrative systems biology approach to understand the immune response to liver transplant and identify novel potential drug targets for improved immunosuppression	Tomas Helikar Hanh Vo DJ Murry	PI	UNL UNMC UNMC
Lipid mediator driven metabolic pathways that alter luteal cell function and fate	John Davis DJ Murry Andrea Cupp	PI	UNMC UNMC UNL
Machine learning applications for gait signatures in patients with peripheral artery disease.	Sara Myers James Dong Iraklis Pipinos Basheer Qolomany Fadi ALSaleem	PI	UNO UNMC UNMC UNK UNL
Maternal Diabetes and Mitochondrial Dysfunction in Fetal Heart	Jennifer Wood Paras Kumar Mishra	PI	UNL UNMC
Metabolic interactions between Chlamydia, the host epithelial cells, and the microbiome	Rey Carabeo Lisa Rucks Rajib Saha Scot Ouellette	PI	UNMC UNMC UNL UNMC

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mHealth Research Intervention Platform	Deepak Khazanchi Bunny Pozehl Chi Chi Zimmerman	PI	UNO UNMC UNMC
Micro-assembled Organoids-in-gels for High Throughput Screening	Stephen Morin Jingwei Xie Ruiguo Yang	PI	UNL UNMC UNL
Multi-Actor Deterrence Analysis Methodology	Michelle Black Elsbeth Magilton Deanna House Lana Obradovic Tyler White	PI	UNO UNL UNO UNO UNL
Novel -Conjugated Oligo and Polyelectrolytes that Target Antibiotic-Resistant Staphylococci	Shudipto Dishari Vinai Chittezhham Thomas Rajib Saha	PI	UNL UNMC UNL
A Novel Function of Ecdysoneless in HPV-Driven Oncogenesis	Sameer Mirza Peter Angeletti	PI	UNMC UNL
Novel pathways regulating amino acid metabolism in obesity	Saraswathi Viswanathan Edward Harris Robert Powers James Eudy Carol Casey	PI	UNMC UNL UNL UNMC UNMC
Optimizing Movement and Physical Activity After Anterior Cruciate Ligament Injury	Liz Wellsandt Christopher Wichman Mike Wellsandt Michael Rosenthal Matthew Tao Eric Markvicka Brian Knarr	PI	UNMC UNMC UNMC UNMC UNMC UNL UNO
Overcoming the Resistance and Frailty in older adults with acute myeloid leukemia (AML)	Ram Mahato Janelle Beadle Vijaya Bhatt	PI	UNMC UNO UNMC

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Pathway mediators of Ovarian microenvironment and their contributions to female fertility	Andrea Cupp DJ Murry John Davis Jessica Petersen	PI	UNL UNMC UNMC UNL
PCMarkers: Machine-learning-driven early detection of Pancreatic Cancer	Sukhwinder Kaur Lynette Smith Surinder Batra Chi Zhang	PI	UNMC UNMC UNMC UNL
Pharmacological Antagonism of the Mitochondrial Protease CLXP as a Target for Breast Cancer Drug Discovery	Paul Trippier Oleh Khalimonchuk	PI	UNMC UNL
A pilot study to interpret time intervals of heart sounds and ECG signals to screen for cardiac disease in rural populations	Edward O'Leary Hani Haider Hamid Vakilzadian	PI	UNMC UNMC UNL
Pore Engineering for Bone Applications: Lightweight, High-Performance, Precision 3D-Printed Ceramic Scaffolds	Bai Cui Jason Untrauer Bin Duan Li Tan	PI	UNL UNMC UNMC UNL
Quantum Design of Materials for New Information Technologies	Ralph Skomski Renat Sabirianov David Sellmyer	PI	UNL UNO UNL
Resilience in agricultural working landscapes	Craig Allen Francisco Munoz-Arriola Tala Awada Parvathi Chundi Melissa Wuellner	PI	UNL UNL UNL UNO UNK
The Role of Zinc Homeostasis in the Gut-Lung Microbiome Axis and Impact on Host Defense Against Bacterial Pneumonia	Daren Knoell Amanda Ramer-Tait Derrick Samuelson	PI	UNMC UNL UNMC

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Strategies to mitigate intergenerational prescription opioid abuse	Gurudutt Pendyala Ann Anderson Berry Rick Bevins Babu Guda Steven Lisco Sowmya Yelamanchili	PI	UNMC UNMC UNL UNMC UNMC UNMC
Synthetic Antioxidants to Treat Low Back Pain in a Novel Translational Model	Rebecca Wachs Becky Deegan Rick Bevins	PI	UNL UNMC UNL
Systems-level characterization of the Pancreatic ductal adenocarcinoma microbiome	Maher Abdalla Christopher D'Angelo Kate Cooper	PI	UNMC UNMC UNO
University of Nebraska Standards-based, Technology-Rich Inquiry in Virtual Education (NU STRIVE) for P12 Science and Health Education	Nealy Grandgenett Peggy Moore Chandra Diaz DeBose Dawn Simon Gwen Nugent Kendra Schmid H. Dele Davies Katie Shirazi Adam Rosen	PI	UNO UNMC UNK UNK UNL UNMC UNMC UNO UNO
Widespread Engagement using the Biology of Spiders (WEBS)	Eileen Hebets Mary Harner Trish Wonch Hill Kevin Smith Taylor Ruth Heather Akin Mary Harner Christine Cutucache Michael Dodd	PI	UNL UNK UNL UNL UNL UNL UNK UNO UNL