



Proposal Title	Researcher	PI	Campus
Anharmonic soft semiconductor under pressure	Yinsheng Guo Xiao Zeng Wai-Ning Mei	PI	UNL UNL UNO
Assessing Integrated Nutrient Management Opportunities to Achieve Agricultural and Environmental Sustainability in Nebraska	Javed Iqbal Amy Schmidt Bijesh Maharjan Bijesh Maharjan Aaron Yoder Amy Schmidt	PI	UNL UNL UNL UNL UNMC UNL
Assessing the effects of stress-induced changes in glycosylation on colonization by gut pathogens	Kurt Piepenbrink Pi-Wan Cheng Jennifer Auchtung	PI	UNL UNMC UNL
Augmented Reality for Avatar-Based Metronomes to Improve Human Movement	Spyridon Mastorakis Iason Konstantzos Iraklis Pipinos Aaron Likens Nikolaos Stergiou	PI	UNO UNL UNMC UNO UNO
Biomechanics of post-operative treadmill walking rehabilitation in children with cerebral palsy	David Kingston Brian Knarr Matthew Halanski Nickolas Nahm	PI	UNO UNO UNMC UNMC
Combining Chemogenetics/Optogenetics with Biomaterials for Regenerative Medicine	Jingwei Xie Ken Wakabayashi	PI	UNMC UNL



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Community Participatory Based Research on Health Disparities Among Immigrants and Refugees in Central Nebraska	Michelle Warren	PI	UNK
	Richard MocarSKI		UNK
	Athena Ramos		UNMC
	Cristian Dona		UNO
	Chance Bell		UNK
	Chandra Diaz DeBose		UNK
	Christine Chasek		UNK
	Laurinda Weisse		UNK
	Trey Andrews		UNL
	Lory Dance		UNL
Ben Malczyk	UNK		
Community Perspectives on the Requirement of Psychosocial Assessment for Gender Affirmation Medical Care in Comparison: Pilot Data to Inform a Federal Proposal Resubmission	Debra Hope	PI	UNL
	Richard MocarSKI		UNK
	Sharon Obasi		UNK
Decreasing Morbidity of Hip Dysplasia in Cerebral Palsy: Extending Novel Guided Growth Strategies to the Hip	Matthew Halanski	PI	UNMC
	Jorge Zuniga Ulloa		UNO
Detecting the Walking Phases with Raised Oxygen Costs for Targeted Therapy	Philippe Malcolm	PI	UNO
	Iraklis Pipinos		UNMC
	Keegan Moore		UNL
Development and In-Vivo Evaluation of Mechanically and Chemically Optimized Elastomeric Nanofibrillar Grafts for Vascular Repair	Stephen Morin	PI	UNL
	Jason MacTaggart		UNMC
	Kaspars Maleckis		UNO



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Development and testing of a cultural app to improve CRC screening among Latinos (CApp-SAL)	Evi Farazi	PI	UNMC
	Daisy Dai		UNMC
	Roma Subramanian		UNO
	Athena Ramos		UNMC
	Kendra Ratnapradipa		UNMC
	Shinobu Watanabe-Galloway		UNMC
Development of Marinopyrroles and Pyrrolomycins against the Human Parasite Toxoplasma gondii	Paul H Davis	PI	UNO
	Rongshi Li		UNMC
Development of ultra-high dose-rate (Flash) cancer radiotherapy	Donald Umstadter	PI	UNL
	Ran Dai		UNMC
	Subodh Lele		UNMC
	Sumin Zhou		UNMC
	Ying Yan		UNMC
Ecosystem impacts of recreation along the Niobrara National Scenic River	David Manning	PI	UNO
	Paul Ayayee		UNO
	Jessica Corman		UNL
Efficient Airport Foreign Object Detection with Small Unmanned Aerial System, Adaptive Lighting, and Machine Learning.	Xin Zhong	PI	UNO
	Iason Konstantzos		UNL
	Victor Huang		UNO
Enhancing Equity in Trauma-Related Mental Health by Implementing mHealth in Primary Care	Trey Andrews	PI	UNL
	Danae Dinkel		UNO
	Shinobu Watanabe-Galloway		UNMC
	Maggie Emerson		UNMC



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Evaluation of Blood and Placental Biomarkers of Oxidative Stress in Mother-Infant Dyads and Relationships with Carotenoid Levels	Melissa Thoene Sathish Kumar Natarajan Zeljka Korade Corri Hanson Ann Anderson Berry	PI	UNMC UNL UNMC UNMC UNMC
Examining the lived experiences of BIPOC initial teacher certification candidates in rural and urban Nebraska	Rebecca Nelson Amanda Witte Ferial Pearson Chandra Diaz DeBose Sandra Rodriguez-Arroyo Amanda Morales	PI	UNK UNL UNO UNK UNO UNL
A framework for evaluating the current and future contributions of the Conservation Reserve Program to ecosystem goods and services in the state of Nebraska	Melissa Wuellner Andrew Little Yi Qi Daniel Uden Tirthankar Roy Dustin Ranglack Pricila Iranah Letty Reichart	PI	UNK UNL UNL UNL UNL UNK UNK UNK
Hemodynamics and hemorheology during the no-reflow phenomenon in cerebral ischemia	Jae Sung Park Ruiguo Yang Hyung Joon Kim	PI	UNL UNL UNMC
High-speed super-resolution imaging using Hessian-SIM executed in the GPU environment	Piero Bianco Kwangsung Oh	PI	UNMC UNO



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Impact of Conservation Reserve Program (CRP) lands on ecosystem health: biodiversity from soils to landscapes	Roxi Kellar	PI	UNO
	Sabrina Russo		UNL
	Brian Wardlow		UNL
	Ran Wang		UNL
	Zhenghong Tang		UNL
	Daniel Schachtman		UNL
	Gregory Pec		UNK
Improving Mobility in Patients with Peripheral Artery Disease Using Specially Designed Tennis Shoes	Hafizur Rahman	PI	UNO
	James Dong		UNMC
	Iraklis Pipinos		UNMC
	Sara Myers		UNO
Improving the Wellbeing of Rural Early Childhood Education Professionals	Danae Dinkel	PI	UNO
	Daisy Dai		UNMC
	Jolene Johnson		UNMC
	Matthew Bice		UNK
In vitro models of insect wing vein networks for studying insect blood circulation	Sangjin Ryu	PI	UNL
	Ying Hu		UNO
	Seunghee Kim		UNL
Influence of Cerebellar Dysfunction on Turning While Walking	Carolyn Curtze	PI	UNO
	Diego Torres-Russotto		UNMC
	Sarah Doss		UNMC



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Investigation of potential phage-mediated processes in an aquatic and insect study system	Patrick Reid Paul Ayayee Joshua Santarpia Mike Wiley	PI	UNMC UNO UNMC UNMC
Maternal/Infant Microbiome in Rural Populations	Tiffany Moore Jonathan Clayton Daisy Dai Juan Cui Terri Mathews Gurudutt Pendyala Heather Rasmussen Danae Dinkel Katrina Cordts Alyson Hanish	PI	UNMC UNO UNMC UNL UNMC UNMC UNL UNO UNMC UNMC
Mineral dysregulation-induced metabolic diseases in the liver	Edward Harris Karuna Rasineni Jaekwon Lee	PI	UNL UNMC UNL
Mitochondrial dysfunction in mutant HADHA cardiomyocytes is via impaired cardiolipin remodeling	Sathish Kumar Natarajan William Rizzo Donald Becker Oleh Khalimonchuk	PI	UNL UNMC UNL UNL



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Nebraska Education Policy Research Lab (NEPRL)	Tamara Williams Kelly Gomez Johnson Kay Keiser Michael Teahon Md Mahbubul Majumder Xiaoyue Zoe Cheng Josie Schafer	PI	UNO UNO UNO UNK UNO UNO UNO
Novel Immunotherapy-Targeted Therapy to Enhance NK Killing in Non-Hodgkins Lymphoma	Paul W Denton Pankaj Singh Dalia ElGamal	PI	UNO UNMC UNMC
Novel mechanisms mediating the beneficial effects of SOD1 against ethanol-induced organ injury	Saraswathi Viswanathan Edward Harris Carol Casey	PI	UNMC UNL UNMC
Networks-Based Investigation of the Gut Microbiome and Inflammatory Profile in Chronic Lymphocytic Leukemia	Dalia ElGamal Kate Cooper Christopher D'Angelo	PI	UNMC UNO UNMC
Nutritional and functional enhancement of yellow pea for human health	Dipak Santra Mahesh Pattabiraman Kaustav Majumder Amit Mitra	PI	UNL UNK UNL UNL
Omega 3- fatty acid: Potential for mitigation of neurodevelopmental outcomes from in utero opioid exposure in a chronic stress rat model	Ann Anderson Berry Charmayne Adams Ashley Blount Corri Hanson Gurudutt Pendyala	PI	UNMC UNO UNO UNMC UNMC



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Rapid Discovery of Novel Antifungal Peptides with Machine Learning Algorithms to Improve Safety, Quality, and Shelf-Life of Clean Label Food Products	Changmou Xu Yuzhen Zhou Gus Wang	PI	UNL UNL UNMC
Reducing loneliness in aging adults with mild cognitive impairment through smart assistant-powered technology: Testing intervention efficacy, optimal delivery modality, & mediation pathway	Valerie Jones Julie Blaskewicz Boron Marcia Shade Changmin Yan	PI	UNL UNO UNMC UNL
Trends in Violent Hospital Admissions and Crime during the COVID-19 Pandemic	Charity Evans Gaylene Armstrong Crystal Krause	PI	UNMC UNO UNMC
Ultrasonic monitoring of State of Charge and Health of Lithium-ion Batteries	Jinying Zhu Xiaoyue Zoe Cheng Congrui Jin	PI	UNL UNO UNL
Understanding the role of the gastrointestinal microbiota in modulating the antihypertensive effect of hydrolysed egg white	Kaustav Majumder Matthew Zimmerman Amanda Ramer-Tait	PI	UNL UNMC UNL