

VCU Quest projects and recipients listed by primary ONE VCU Research initiative

Enriching the Human Experience

“Quantum Fields and Knots: An Integrative Approach”

Marco Aldi, Ph.D., College of Humanities and Sciences; Allison Moore, Ph.D., College of Humanities and Sciences; Nicola Tarasca, Ph.D., College of Humanities and Sciences

“Archives and Post-Conflict Memory”

Rola Khayyat, VCUarts Qatar

“An Immersive Dynamic Virtual Ambulation Platform To Reduce Risk of Injury Following Sports-Related Concussion”

Jessie Oldham, Ph.D., School of Medicine; Zina Trost, Ph.D., School of Medicine

“Combining Arts-Health Interventions To Supercharge Creative Aging in Old and Young”

Sharon Ott, School of the Arts; Elizabeth Byland, School of the Arts; Sara Wilson McKay, School of the Arts

“Building the Past: Architecture at Kom Aushim from Late Antiquity to the Modern Era”

Bethany Simpson, Ph.D., VCUarts Qatar

Achieving a Just and Equitable Society

“Bones as an Alternative Matrix for the Detection of New Synthetic Opioids in Cold Cases: Introducing New Animal Models for Bone-Blood Correlation Studies”

Emanuele Alves, Ph.D., College of Humanities and Sciences

“Computing in the Commonwealth: An Environmental Scan and Consensus-Based Framework for Understanding Virginia’s Specialized Secondary Computing Education Opportunities”

Jonathan Becker, Ph.D., School of Education

“Centering Youth Voice Amidst Equity Resistance Campaigns”

Andrene Castro, Ph.D., School of Education; Kevin Clay, Ph.D., School of Education

“Equity Within Housing Programs in Virginia”

Chelsie Dunn, L. Douglas Wilder School of Government and Public Affairs

“Multisited Ethnography of Dental Safety Net Policy Implementation in Virginia”

Sarah Raskin, Ph.D., L. Douglas Wilder School of Government and Public Affairs

Optimizing Health

“Roles of Innate Immunity Pathways in Alcohol Response Behaviors”

Jill Bettinger, Ph.D., School of Medicine; Laura Mathies, Ph.D., School of Medicine

“Improving Early Detection and Intervention for Alcohol Problems Among Young Adults: Harnessing the Untapped Potential of Family Health History and the Electronic Health Record”

Karen Chartier, Ph.D., School of Social Work; Jonathan DeShazo, Ph.D., College of Health Professions

“An Integrated Experimental and Deep Learning Framework To Identify Synergistic Drug Combination Against Prostate Cancer”

Swadesh Das, Ph.D., School of Medicine; Preetam Ghosh, Ph.D., College of Engineering

“Role of Dickkopf1 (DKK1) in Head and Neck Cancer”

Hisashi Harada, Ph.D., School of Dentistry; Wook-Jin Chae, Ph.D., School of Medicine

“A Novel Paradigm of Feature Screening for High-Throughput Survival Data”

Chenlu Ke, Ph.D., College of Humanities and Sciences

“Anti-CD3 Nanoparticles for Use in Treating Atherosclerosis”

Michael Lacy, Ph.D., College of Health Professions; James Ferri, Ph.D., College of Engineering

“Role of Fatty Acid Amide Hydrolase in Acute Kidney Injury to Chronic Kidney Disease Transition”

Ningjun Li, M.D., School of Medicine

“Single-Cell Gene Expression Analysis of Organophosphate Neurotoxicity in the Hippocampus”

Joseph McClay, Ph.D., School of Pharmacy

“Trans-Synaptic Spread of Pathogenic Tau to Selectively Vulnerable Hippocampal Neurons”

A. Rory McQuiston, Ph.D., School of Medicine

Supporting Sustainable Energy and Environments

“Mapping Ideal Sites for Urban Agriculture as Green Infrastructure in the City of Richmond”

Jonathan Jones, Ph.D., VCU Life Sciences