Crossroads Research Fellow
The Crossroads Project, Henry Luce Foundation

James Howard Hill Jr.
Assistant Professor
Department of Religious Studies
College of Arts and Sciences
2022 Scientific and Technological Activities Commission’s Outstanding Early Career Award
American Meteorology Society

Joseph Ripberger
Associate Professor
Department of Political Science
College of Arts and Sciences
CAREER: An Altruistic Game Theoretic Framework to Characterize Environmental Responsiveness of Residential Electricity Consumption
National Science Foundation

Jie Cai
Assistant Professor
School of Aerospace and Mechanical Engineering
College of Engineering
CAREER: UAV-Based Radar Suite for Bulk-Snow Characterization and Risk Management
National Science Foundation

Jay McDaniel
Assistant Professor
School of Electrical and Computer Engineering
College of Engineering
CAREER: Untangling Chaotic Electromagnetic Transient Phenomena in Power Systems Mixed with Volatile Inverter-Based Renewable Energy Resources

National Science Foundation

Paul Moses
Assistant Professor
School of Electrical and Computer Engineering
College of Engineering
CAREER: Decoding the Dynamics of Complex Fluids Near Surfaces and Interfaces
National Science Foundation

Sepideh Razavi
Assistant Professor
School of Chemical, Biological and Materials Engineering
College of Engineering
CAREER: Intelligent Multi-Contrast Imaging Platform for Needle-Based Interventions
National Science Foundation

Qinggong Tang
Associate Professor
School of Biomedical Engineering
College of Engineering
CAREER: The Genetic and Developmental Basis of Body Size Evolution in Nematodes

National Science Foundation

Gavin Woodruff
Assistant Professor
Department of Biology
College of Arts and Sciences
CAREER: Forecast-informed Flexible Reservoir System Modeling Enabled by Artificial Intelligence Algorithms Using Subseasonal-to-seasonal Hydroclimatological Forecasts
National Science Foundation

Tiantian Yang
Assistant Professor
School of Civil Engineering and Environmental Science
College of Engineering
CAREER: Neuro-navigation Guided Non-invasive Brain Stimulation for Individualized Precision Rehabilitation in Stroke
National Science Foundation

Yuan Yang
Assistant Professor
School of Biomedical Engineering
College of Engineering
Department of Commerce Build Back Better Regional Challenge Grant
$35M from U.S. Department of Commerce, Economic Development Administration

Biotech Core Facility
$7.1M from U.S. Department of Commerce, Economic Development Administration

Lead PI:
John Klier
Dean
College of Engineering

Co-PIs: Dimitrios Papavassiliou, Vassilios Sikavitsas, Zahed Siddique, Michele Galizia, Joyce Burch, Chongle Pan, Talayeh Razzaghi

Oklahoma Biotech Startup Programs
$6.9M from U.S. Department of Commerce, Economic Development Administration

Lead PI:
Thomas Wavering
Instructor
Division of Entrepreneurship and Economic Development
College of Business

Co-PIs: David Kinsinger, Keith Brigham, John Hanak
COBRE Award: Oklahoma Center of Medical Imaging for Translational Cancer Research
$11.3M from U.S. Department of Health and Human Services, National Institutes of Health

Leadership Team:

Javier Jo
Professor
School of Electrical and Computer Engineering
College of Engineering

Hong Liu
Professor
School of Electrical and Computer Engineering
College of Engineering

Robert Mannel
Professor
Department of Obstetrics and Gynecology
College of Medicine

Kathleen More
Professor
Department of Obstetrics and Gynecology
College of Medicine
Hailstone
$7.8M from U.S. Department of Defense, Air Force

Lead PI:
Mark Yeary
Professor
School of Electrical and Computer Engineering
College of Engineering

Co-PIs: Caleb Fulton, Nathan Goodman, Robert Palmer, Jay McDaniel, Justin Metcalf
Oklahoma COBRE in Structural Biology (Phase 3)
$5.7M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI: 
**Ann West**
Professor
*Department of Chemistry and Biochemistry*
*College of Arts and Sciences*
RII Track-2 FEC: Cost-effective Conversion of Natural Gas and Biomass to Hydrogen and Performance Carbons

$4M from National Science Foundation

Lead PI:
Steven Crossley
Professor
School of Chemical, Biological and Materials Engineering
College of Engineering

Co-PIs: Daniel Resasco, Bin Wang, Ngoc Bui
Improving Outcomes in Endovascular Treatment of Intracranial Aneurysms: Combining Additive Manufacturing, In-silico Modeling, and Shape Memory Polymers

$3.7M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI: Chung Hao Lee
Associate Professor
School of Aerospace and Mechanical Engineering
College of Engineering

Co-PI: Yingtao Liu
OU Child Care Access Means Parents in School Program
$3.7M from U.S. Department of Education

Lead PI:
Kyong-Ah Kwon
Associate Professor
Department of Instructional Leadership and Academic Curriculum
College of Education

Co-PIs: Courtney Dewhirst, Brittany Hott, Rebecca Waggoner,
Diane Horm, Erin Casey
Potentiating a Systemic Antitumor Response by Interstitial Localized Ablative Immunotherapy to Synergize with Immune Checkpoint Therapy for Metastatic Pancreatic Tumors

$3M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Wei Chen
Professor
School of Biomedical Engineering
College of Engineering
OU Elevate: Implementing Equitable Multi-Context Faculty Evaluations and Workload Distributions

$3M from National Science Foundation

Lead PI:
Lori Snyder
Professor
Department of Psychology
College of Arts and Sciences

Co-PIs: Megan Elwood Madden, Amy Cerato, Keri Kornelson, Georgia Kosmopoulou, Sarah Ellis, Carol Silva, Mashhad Fahes, Natalie Youngbull
Integrating Socially Led Co-design Into Consent-based Siting of Interim Storage Facilities

$2.9M from U.S. Department of Energy

Lead PI:
Kuhika Gupta
Associate Director for Energy and Nuclear Projects
Institute for Public Policy Research and Analysis
Vice President for Research and Partnerships

Co-PIs: Hank Jenkins-Smith, Joseph Ripberger, Carol Silva
Novel Electrically Small Wideband Time-varying Antennas
$2.5M from Boeing Defense and Space Group

Lead PI: Jessica Ruyle
Associate Professor
School of Electrical and Computer Engineering
College of Engineering

Co-PI: Hjalti Sigmarsson
Single Stage Surgical Intervention for Treatment of Severe Traumatic Brain Injury
$2.4M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Michael Detamore
Professor
School of Biomedical Engineering
College of Engineering
Deciphering the Mechanism of Action of Carnitine, a Novel Treatment for Chronic Chagas Disease
$2.4M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
**Laura-Isobel McCall**
Assistant Professor
*Department of Chemistry and Biochemistry*
*College of Arts and Sciences*
The Horus Digital Polarimetric Phased Array Radar: Weather Observations and Further Enhancements
$2.3M from U.S. Department of Commerce, National Oceanic and Atmospheric Administration

Lead PI:
Robert Palmer
Professor
School of Meteorology
College of Atmospheric and Geographic Sciences

Co-PIs: David Bodine, Boon Leng Cheong, Caleb Fulton, Pierre Emmanuel Kirstetter, Hjalti Sigmarsson, Guifu Zhang, Tian-You Yu, Mark Yeary, David Schwartzman, Jorge Salazar-Cerreño
Intelligent Repurposing of Hydrocarbon Wells System to Harness the Geothermal Potential of Oklahoma Sedimentary Basin
$2.1M from U.S. Department of Energy

Lead PI:
Saeed Salehi
Associate Professor
School of Petroleum and Geological Engineering
College of Earth and Energy

Co-PI: Runar Nygaard
Native American Youths Enjoy Science - YES Oklahoma
$2M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI: Cecil Lewis
Professor
Department of Anthropology
College of Arts and Sciences

Co-PI: Cara Monroe
Happy Teacher Wellness Intervention: Creating a Culture of Head Start Staff Well-Being and Competence
$1.9M from U.S. Department of Health and Human Services

Lead PI:
**Kyong-Ah Kwon**
Associate Professor
Department of Instructional Leadership and Academic Curriculum
College of Education

Co-Pls: Sherri Castle, Brenda Lloyd-Jones, Mia Kile, Timothy Ford, Yong Ju Jung, Seulki Jang
Devices Suitable for Sectional Isolation
$1.8M from Welltec Inc.

Lead PI: Catalin Teodoriu
Professor
School of Petroleum and Geological Engineering
College of Earth and Energy

Co-PI: Ahmad Ghassemi
A Multi-level Mass Spectrometry Pipeline for the Analysis of Whole Proteoforms and Their Complexes
$1.8M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Luca Fornelli
Assistant Professor
Department of Biology
College of Arts and Sciences
Wastewater-Based Epidemiology to Monitor Infectious Pathogens in the State of Oklahoma
$1.6M from State of Oklahoma, Department of Health

Lead PI: Jason Vogel
Professor
School of Civil Engineering and Environmental Science
College of Engineering

Co-PIs: Ralph Tanner, Keith Strevett, Kara De León
Shift from Unilateral to Bilateral Sensory-Motor Connectivity in Chronic Hemiparetic Stroke
$1.6M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Yuan Yang
Assistant Professor
School of Biomedical Engineering
College of Engineering
A Chemoenzymatic Approach to Accessing Novel Isoprenoid Scaffolds
$1.6M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Shanteri Singh
Assistant Professor
Department of Chemistry and Biochemistry
College of Arts and Sciences
The Effect of Medicaid Expansion on Mortality Disparities and Poverty
$1.4M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI: Joel Mueller
Research Assistant Professor
Department of Geography and Environmental Sustainability
College of Atmospheric and Geographic Sciences
An LCMS-guided Bioanalytical Approach for Rational Natural Product Library Design and Optimization

$1.4M from U.S. Department of Health and Human Services, National Institutes of Health

Lead PI:
Laura-Isobel McCall
Assistant Professor
Department of Chemistry and Biochemistry
College of Arts and Sciences

Co-PI: Robert Cichewicz
Establishing an Integrated Soil, Land use, Weather, Climate Monitoring Network in Peru
$1.3M from Universidad National Agraria La Molina

Lead PI:
Bradley Illston
Adjunct Assistant Professor
School of Meteorology
College of Atmospheric and Geographic Sciences

Co-PIs: Kirsten de Beurs, Jennifer Koch, David Ebert, Timothy Filley
Geothermal Drilling Research of Super Hot Rocks
Phase 1
$1.2M from DeepPower Inc

Lead PI:
Saeed Salehi
Associate Professor
School of Petroleum and Geological Engineering
College of Earth and Energy
CAREER: Integrating Genomic, Paleoclimatic, and Morphological Approaches to Unravel the Evolutionary History of Fossil and Extant Marine Fishes over Time

$1.2M from National Science Foundation

Lead PI:
Dahiana Arcila
Assistant Professor
Department of Biology
College of Arts and Sciences
Project SPIDER (OSEP 84.325D Doctoral Preparation Proposal)
$1M from University of North Florida

Lead PI: Brittany Hott
Associate Professor
Department of Educational Psychology
College of Education
Report on Homelessness in Oklahoma
$1M from Oklahoma Housing Finance Authority

Lead PI: Bryce Lowery
Associate Professor
Division of Regional and City Planning
College of Architecture

Co-PIs: Christina Miller, David McLeod, Kimberly Welch
Surveillance of Pathogens in Sewage in Oklahoma City in 2022
$1M from City of Oklahoma City

Lead PI: Jason Vogel
Professor
School of Civil Engineering and Environmental Science
College of Engineering

Co-Pi: Ralph Tanner, Keith Strevett, Bryce Lowery, Kara De León
Classical to Quantum Transition of Self-Organization
$1M from W. M. Keck Foundation

Lead PI:
Doerte Blume
Professor
Department of Physics and Astronomy
College of Arts and Sciences

Co-PIs: Alberto Marino Valle, Grant Biedermann
Development of Compatibility Assessment Model for Existing Pipelines for Handling Hydrogen-Containing Natural Gas

$1M from U.S. Department of Transportation

Lead PI: Ramadan Ahmed
Professor
School of Petroleum and Geological Engineering
College of Earth and Energy

Co-PI: Catalin Teodoriu
PIPP Phase I: International Center for Avian Influenza Pandemic Prediction and Prevention
$1M from National Science Foundation

Lead PI: Xiangming Xiao
Professor
Department of Microbiology and Plant Biology
College of Arts and Sciences

Co-PIs: Jeffrey Basara, Rafal Jabrzemski, Henry Neeman, Yuanwei Qin, Andrea Contina
PIPP Phase I: Next Generation Surveillance Incorporating Public Health, One Health, and Data Science to Detect Emerging Pathogens of Pandemic Potential
$1M from National Science Foundation

Lead PI: 
David Ebert
Professor
School of Electrical and Computer Engineering
College of Engineering

Co-PIs: Dean Hougen, Hank Jenkins-Smith, Bradley Stevenson, Charles Nicholson, Jason Vogel, Michael Wimberly, Talayeh Razzaghi, Chao Lan, Thirumalai Venkatesan, Anni Yang
Patent Awards

Amy Cerato
Professor
School of Civil Engineering and Environmental Science

Boon Leng Cheong
Assistant Professor
Advanced Radar Research Center

Lee Fithian
Associate Professor
Division of Architecture

Roger Harrison
Professor
School of Chemical, Biological and Materials Engineering

Jeffrey Harwell
Professor
School of Chemical, Biological and Materials Engineering

Jay McDaniel
Assistant Professor
School of Electrical and Computer Engineering

Robert Palmer
Professor
School of Meteorology

Andres Cavieres Pinilla
Associate Professor
Division of Architecture

Rakhi Rajan
Associate Professor
Department of Chemistry and Biochemistry

Hamidreza Shabgard
Associate Professor
School of Aerospace and Mechanical Engineering

Bor Jier (Ben) Shiau
Professor
School of Petroleum and Geological Engineering

Hjalti Sigmarsson
Associate Professor
Advanced Radar Research Center

Rui Q Yang
Professor
School of Electrical and Computer Engineering

Bayrammurad Saperov
Associate Professor
Department of Chemistry and Biochemistry

Mark Yeary
Presidential Professor
School of Electrical and Computer Engineering
Award for Excellence in Research in Engineering and Applied Science

Steven Crossley
Professor
School of Chemical, Biological and Materials Engineering
College of Engineering
Neal Lane Award for Excellence in Research in the Natural Sciences

Si Wu
Associate Professor
Department of Chemistry and Biochemistry
College of Arts and Sciences
Award for Excellence in Research, Design, and Creative Expression in the Humanities and the Fine Arts

Hans Butzer
Dean
College of Architecture
Award for Excellence in Research, Design, and Creative Expression in the Humanities and the Fine Arts

Rilla Askew
Associate Professor
Department of English
College of Arts and Sciences
Award for Excellence in Research, Design, and Creative Expression in the Humanities and the Fine Arts

Rilla Askew
Associate Professor
Department of English
College of Arts and Sciences

Hans Butzer
Dean
College of Architecture
Award for Excellence in Research in the Social Sciences

Joseph Ripberger
Associate Professor
Department of Political Science
College of Arts and Sciences
Award for Excellence in Transdisciplinary, Convergent Research

Happy Teacher Project

Kyong-Ah Kwon
Associate Professor
Instructional Leadership and Academic Curriculum
College of Education

Carolyn Cheema
Assistant Professor
Rehabilitation Sciences
College of Allied Health

Seulki Jang
Assistant Professor
Psychology
College of Arts and Sciences

Mia Kile
Associate Professor
Interior Design
College of Architecture

Corey Pettier
Assistant Professor
Educational Psychology
College of Education

Jessica Tsotsoros
Associate Professor
Occupational Therapy
College of Allied Health

Michael Baxter, DO
Assistant Professor
Pediatrics
School of Community Medicine

Tim Ford
Associate Professor
Educational Leadership and Policy Studies
College of Education

Wonkyung Jang
Assistant Professor
Instructional Leadership and Academic Curriculum
College of Education

Brenda Lloyd-Jones
Associate Professor
Human Relations
College of Arts and Sciences

Ken Randall
Professor
College of Allied Health
Co-Director of Office of Community Engagement at OU-Tulsa

Le Wang
Professor
Economics
College of Arts and Sciences

Sherri Castle
Assistant Director of Research
Early Childhood Education Institute
College of Education

Diane Horm
Director
Early Childhood Education Institute
College of Education

Yong Ju Jung
Assistant Professor
School of Library and Informational Studies
College of Arts and Sciences

Julie Miller-Cribbs
Associate Professor
School of Social Work
College of Arts and Sciences

Susan Sisson
Assistant Professor
Nutritional Sciences
College of Allied Health
Award for Excellence in Research Service and Administration

Gayle Parker
Senior Award Administrator
Office of Research Services
IN MEMORIAM

Award for Excellence in Research Service and Administration

Susan Cates
Senior Award Administrator
Office of Research Services