

# INTRODUCTION Anthony N. Caruso



Exiting the global pandemic, the University of Missouri-Kansas City research expenditures have doubled. The major change is due to the new energy of faculty and staff who embrace, and have been provided greater resources for, the critical mission of research.

**Community Impact:** A key indicator of our success is the six-fold increase in Other Sponsored Activity funding over the past decade. We've grown from just under \$10 million to more than \$50 million. These funds primarily support community and public service projects aimed at creating sustainable and positive change, often benefiting vulnerable and underserved communities.

**Expanded Grant Acquisition:** Our researchers have also made marked progress in securing research awards and contracts. The ratio of proposals-to-awards and the amount of requested-to-funded dollars have both increased by 8% year-over-year, indicating that our faculty better understand funding agencies' needs and are communicating concepts with greater clarity.

**Humanities Awards:** Research is infused in every academic unit throughout the UMKC experience, and the humanities have seen a remarkable rise in activity across campus. Our faculty's achievements range from Fulbright scholarships to an increase in National Endowment for the Humanities awards, with a noticeable inflection in the digital humanities.

**Cross-Disciplinary Collaboration:** The recent strategic reorganization of our academic units has fostered a new sense of enthusiasm and collaboration among faculty. The reorganization has led to the highest number of cross-disciplinary proposals in our university's history, highlighting a spirit of cooperation and shared purpose.

**Expenditure Growth:** Earlier this year, we submitted a total research expenditures value of \$54.5 million to the National Science Foundation – Higher Education Research and Development survey, meaning that we have more than doubled in that category in just four years. This growth is significant because it makes UMKC eligible to advance from a Carnegie Classification Research 2 to a Research 1 designation.

These achievements and year-over-year trends are a testament to the adaptability, dedication and collaborative spirit of our faculty and professional staff researchers. Together, they are responding to what the community needs to create meaningful impact.

Sincerely,

Anthony Caruso
Vice Chancellor for Research (Interim)
Vice Chancellor for Strategic Initiatives
Curators' Professor of Physics and Electrical Engineering

# RESEARCH EXPENDITURES

Research expenditures represent the funds spent on research by the university. In FY23, the highest research expenditure is Other Sponsored Activity (OSA) (55%), followed by Research (44%), both from federal sources. For definitions of OSA, Instruction and Research, see Appendix B. We believe the IuII in expenditures in FY23 is due to a lag in expenditures from labs not returning to full operation after COVID-19, despite a large increase in awarded funding.

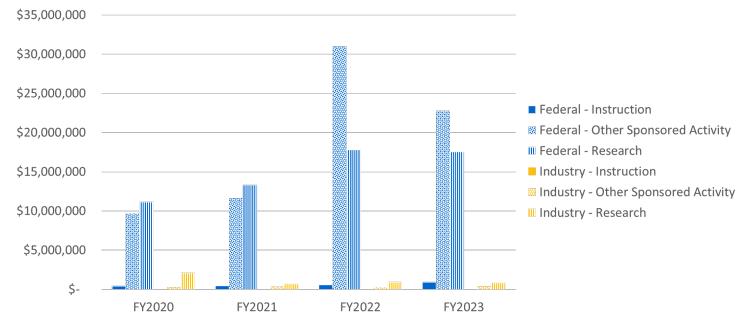


Figure 1. Research expenditure: FY20-23.



Figure 2. Research expenditures as reported to National Science Foundation (NSF) Higher Education Research and Development (HERD): FY14-23.

# **AWARDS**

Since FY18 the number of awards has steadily increased. Data for FY22 show the highest number of external awards at 357 and the awarded amount at \$82,636,222. Granular proposal and award breakdown by sponsor type and by division/unit are shown in the appendices.

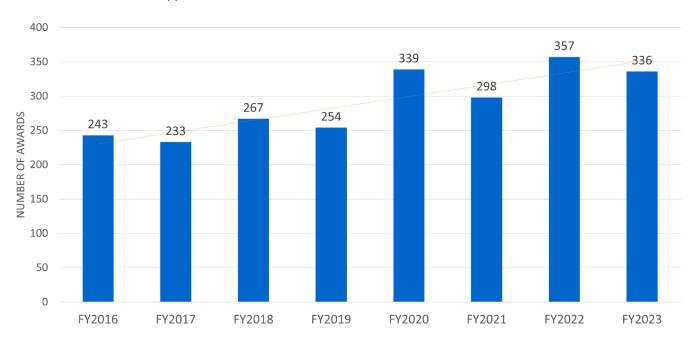
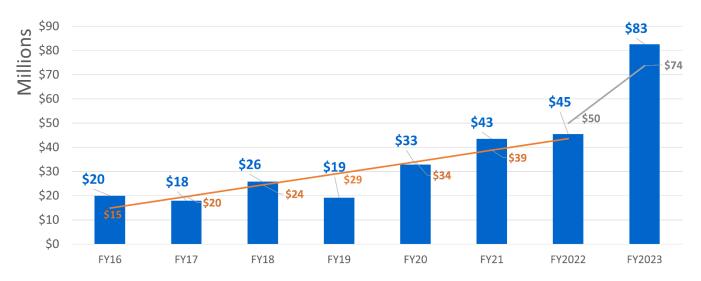


Figure 3. Number of external awards by fiscal year: FY16-23.



**Figure 4. Total award amount with fit lines: FY16-23.** Graph displays total award amounts received from FY16-23. An inflection fit (shown as the crossing of the orange and gray linear fits) has been applied to the data to highlight the trend of award amounts over time (i.e., exponential growth).

# **PROPOSALS**

In FY23, for every dollar awarded, \$3 was proposed. The consistent improvement in the ratio of awarded-to-proposed dollars is an indicator of enhanced alignment with the sponsors and overall proposal quality.

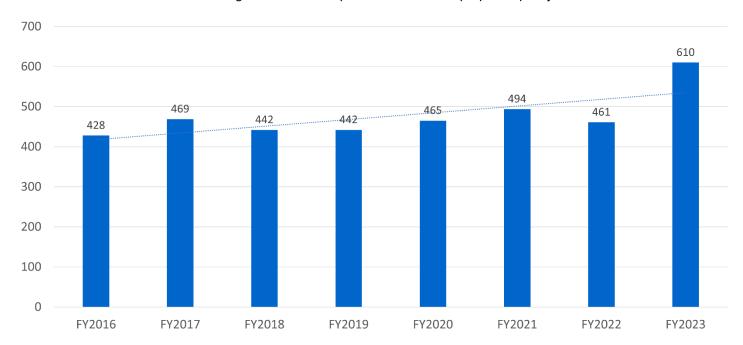


Figure 5. Total number of proposals: FY16-23.

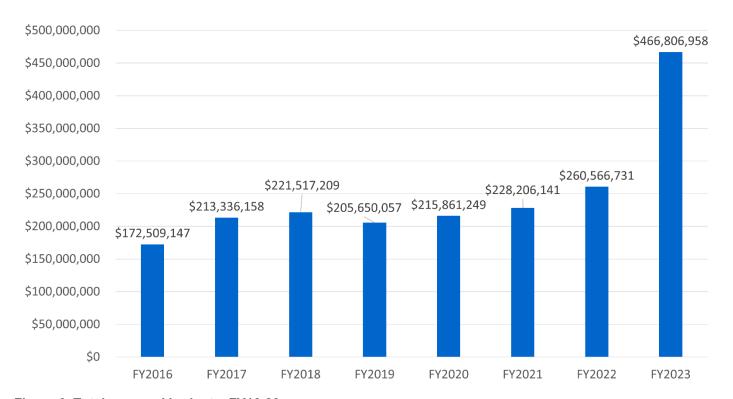


Figure 6. Total proposal budgets: FY16-23.

# **SUCCESS RATE**

Success or hit rate serves as a measure of efficacy in obtaining awards from the submitted proposals. The results presented in Figure 7 show the success rate focusing on research proposals and corresponding research awards. The overall positive slope more directly illustrates the improvement in the success rate of proposals across the period.

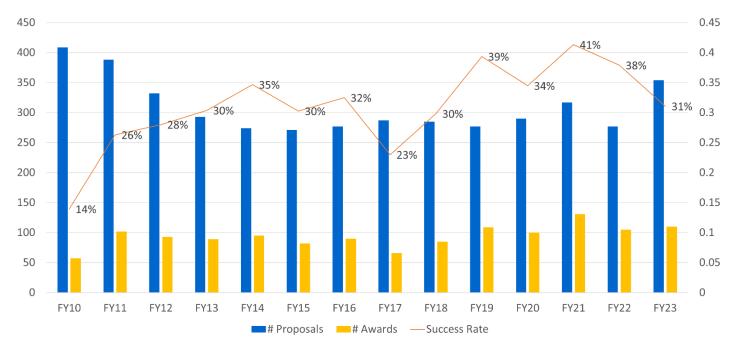


Figure 7. Success rate of research proposals compared with awards, year over year: FY10-23.

## RESEARCH COMPLIANCE

The UMKC Research Compliance Office of the Office of Research Services (ORS) provides operational and staffing support for the UMKC Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), Institutional Biosafety Committee (IBC) and the Radiation Safety Committee. Export Control and Facility Security are performed through a centralized effort with the University of Missouri System.

| Number of Protocols/Authorized Users (RSC)                    |      |      |      |      |      |      |      |      |      |      |
|---|------|------|------|------|------|------|------|------|------|------|
|   | CY14 | CY15 | CY16 | CY17 | CY18 | CY19 | CY20 | CY21 | CY22 | CY23 |
| IRB   |      |      |      |      |      |      |      |      |      |      |
| Not Human Subjects Research                                   | 147  | 78   | 141  | 129  | 146  | 99   | 115  | 315  | 264  | 243  |
| Exempt (New and Amendments)                                   | 78   | 207  | 144  | 149  | 182  | 246  | 158  | 185  | 157  | 238  |
| Expedited/Full Board (New, Amendments and Continuing Reviews) | 177  | 331  | 331  | 321  | 360  | 312  | 109  | 136  | 129  | 102  |
| IACUC (New Applications)                                      | 9    | 7    | 3    | 3    | 5    | 10   | 4    | 6    | 4    | 4    |
| IACUC (Renewals)  | 14   | 7    | 6    | 9    | 17   | 15   | 9    | 11   | 12   | 8    |
| IBC (New)   | 33   | 24   | 26   | 53   | 23   | 8    | 17   | 5    | 7    | 4    |
| IBC (Renewals)  | 22   | 12   | 13   | 15   | 28   | 25   | 33   | 14   | 9    | 28   |

NOTE: IRB data is based on calendar year.

**Table 1. Number of protocols and authorized users for IRB, IACUC and IBC: CY14-CY23.** The table displays the number of protocols (IRB, IACUC and IBC) and Authorized User Permits granted to institutional researchers. For the definition of Not Human Subjects Research, see Appendix B. The Radiation Safety Committee is also overseen by ORS Compliance and presently accounts for three total permits.

# OFFICE OF TECHNOLOGY COMMERCIALIZATION

The UMKC Office of Technology Commercialization facilitates UMKC researchers in protecting university intellectual property and transferring it to the marketplace.

#### **Business Functions:**

The UMKC Office of Technology Commercialization provides the following functions:

- Education of faculty on intellectual property and technology transfer while encouraging invention disclosures
- Review disclosures for patentability, freedom to operate and marketability
- Maintain federal and grant compliance regarding intellectual property
- Filing of provisional and non-provisional patent applications
- Facilitate commercialization of technologies and collaboration with outside organizations via non-disclosure, interinstitutional and collaboration agreements
- Actively market and promote technologies to commercial entities
- Negotiate, draft and maintain option and license agreements
- Review and handling of Material Transfer Agreements (MTAs)
- · Negotiation and review of industry sponsored research agreements

|                                | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 |
|--------------------------------|------|------|------|------|------|------|
| Invention Disclosures Received | 25   | 18   | 12   | 21   | 16   | 24   |
| Patent Applications Filed      | 17   | 12   | 11   | 14   | 10   | 18   |
| Patents Issued                 |      | 4    | 4    | 1    | 1    | 3    |

Table 2. Invention disclosures, patent applications filed, patents issued: FY18-23.

# APPENDIX A PROCESS

The data in this report primarily represent FY23 and data stretching back up to fourteen years is included to illustrate long-term trends. The data are derived from values reported by the Office of Research Services (ORS) to the University of Missouri Board of Curators. The award data differ from earlier annual reports that used the UM President's Dashboard; the dashboard is no longer available – equal comparisons over the time period(s) were of primary importance. Award data are pulled from two sources [1]; duplicates were identified by the Office of Finance and Administration and removed manually. To match legacy and contemporary data, values reported to the Board of Curators are presented as ratios to keep the relative award and proposal totals consistent.

Following reporting protocol established by ORS: (a) values from the Data Science and Analytics Innovation Center (DSAIC) are counted under the School of Science and Engineering; (b) the Regional Professional Development Center (RPDC) is assigned to the School of Education, Social Work and Psychological Sciences; and (c) the Collaborative to Advance Health Services (CAHS) is reported to the School of Nursing and Health Studies.

## **APPENDIX B**

## ACRONYMS AND DEFINITIONS

## **Acronym List**

| Acronym | Expanded Form  |
|---------|--|
| DeptID  | Department Identification  |
| F&A     | Facilities and Administration                                    |
| GASB    | Government Accounting Standards Board                            |
| HERD    | Higher Education Research and Development Survey*                |
| IPEDS   | Integrated Postsecondary Education Data Systems                  |
| NACUBO  | National Association of College and University Business Officers |
| OSA     | Other Sponsored Activity   |
| PCS     | Program Classification Structure                                 |
| PSRS    | PeopleSoft Signature Routing Sheet                               |

<sup>\*</sup>The primary source of information on R&D expenditures at U.S. colleges and universities.

## **EXPLANATION OF TYPES OF RESEARCH**

#### PCS 11 – Instruction

*Instruction* refers to on-campus and off-campus general academic instruction and community education. Examples of funded instruction include:

- Teaching
- Course and curriculum development
- Academic advising and development
- Instructional or training workshops for individuals who are not university students
- · Support for writing textbooks, videos, or software to be used as instructional materials
- Community service projects where academic credit is earned

#### PCS 22 - Research

Research at UMKC falls into three classifications: Basic, Applied and Developmental. Basic Research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view. Basic Research can be characterized by the following:

- Contributions to generalizable knowledge
- Intent to publish or disseminate results
- Aim to discover new facts/information
- Training teaching individuals in research techniques in the same facilities used for R&D

Applied Research is original investigation undertaken in order to acquire new knowledge. It is, however, solution specific in that it is directed primarily towards a specific, practical aim or objective. Applied Research is characterized by the following:

- Contributions to generalizable knowledge
- Supporting, refining, or refuting other research
- Intent to publish or disseminate results
- Aim to discover new facts/information
- Data collection, evaluation, analysis or reporting involving experimental or non-standard interventions
- Tracking subjects/participants over time and providing analysis
- Training teaching individuals in research techniques in the same facilities used for R&D

Developmental/Experimental Research is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to produce new products or processes or to improving existing products or processes. Developmental Research is characterized by the following:

- Systematic investigations
- · Supporting, refining, or refuting other research
- Production of research outcomes
- Intent to publish or disseminate results
- Data collection, evaluation, analysis or reporting involving experimental or non-standard interventions
- Tracking subjects/participants over time and providing analysis
- Training teaching individuals in research techniques in the same facilities used for R&D
- Research on teaching effectiveness

#### PCS 32: Other Sponsored Activity (also referred to as Public Service)

Other Sponsored Activity (OSA) at UMKC encompasses a broad range of activities that are primarily aimed at providing service and benefits to groups or individuals external to the institution, without a primary focus on producing research outcomes or generalizable knowledge. These activities may involve the application of knowledge and expertise to serve the public or specific external entities, but they are not primarily intended to contribute to scholarly research or instructional objectives. Other Sponsored Activity can be characterized by the following:

- · Service-oriented projects targeting specific community needs or organizational goals
- Activities that do not primarily aim to test hypotheses, develop theories, or contribute directly to research literature
- Engagements that involve delivering professional services such as program evaluations, where the results are intended for the exclusive use of the contracting entity
- Involvement in community service projects, support for cultural institutions like libraries and museums, and educational outreach that extends beyond the university's traditional academic functions
- Projects where data collection, evaluation, and analysis occur, but without the use of experimental or nonstandard interventions typically associated with research
- Services that include cooperative extension activities, public broadcasting contributions, and other forms of public engagement without the intent to disseminate findings in academic or professional forums

## INSTITUTIONAL REVIEW BOARD

Not Human Subjects Research means that the activity does not meet one or both of the definitions of "human subject" and "research" as defined under 45CFR46.102, see: <a href="https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/revised-common-rule-regulatory-text/index.html#46.102">https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/revised-common-rule-regulatory-text/index.html#46.102</a>

## APPENDIX C

## 15-YEAR GROWTH OF RESEARCH PRODUCTIVITY

In 2019, UMKC restructured to form the School of Biological and Chemical Sciences, which moved the Chemistry department from the College of Arts and Sciences to the School of Biology. Additionally, the Division of Theater moved to the UMKC Conservatory to focus the Conservatory on all performing arts offered at UMKC. As part of UMKC Forward, the university planned for, and implemented, a re-organization which led to three new academic units: School of Science and Engineering (SSE), School of Humanities and Social Sciences (SHSS) and School of Education, Social Work and Psychological Sciences (SESWPS). The new structure led to the discontinuation of the School of Computer Science and Engineering (SCE), the College of Arts and Sciences (CAS) and the School of Education.

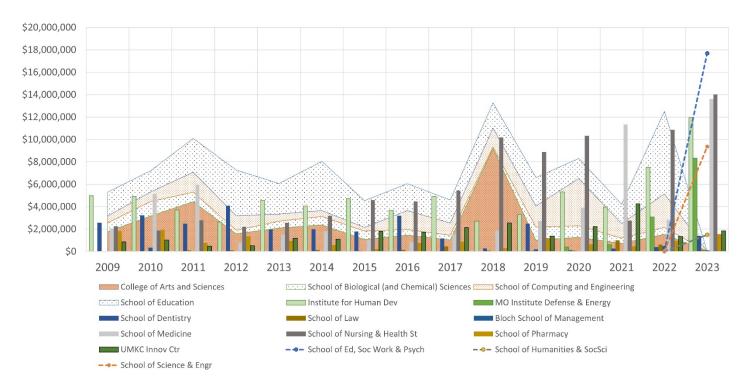


Figure 8. The growth of externally funded research; FY09-23, by unit.

When looking at awards by year, over the past 15 years, the new, restructured units appear as lines; the units that were not restructured appear as columns; and the units that stopped appear as a 100% stacked area chart (showing the proportion of total combined amount). The centers and institutes independent of academic units are represented with shades of green. The large spike from SESWPS in 2023 is correct, built primarily from Department of Elementary and Secondary Education (DESE) funds.

# **APPENDIX D**

# **AWARDS BY PURPOSE**

UMKC delineates its sponsored funding into three foundational pillars: Instruction, Research, and Other Sponsored Activity.

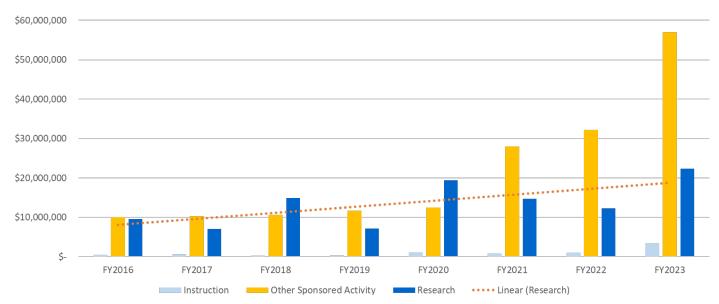


Figure 9. Classification totals with a trendline on research, FY16-23.

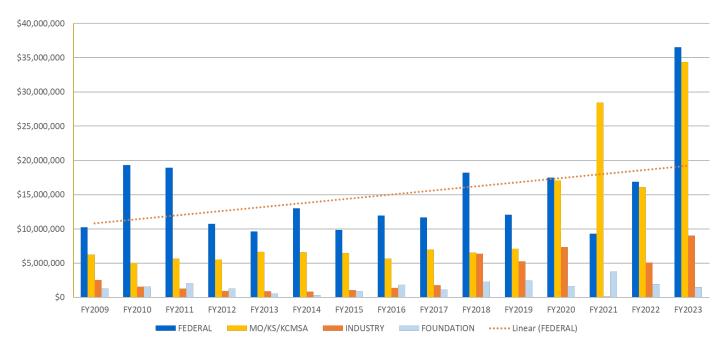


Figure 10. Types of sponsors by year, trendline federal, FY09-23.

## **APPENDIX E**

# NEW AWARDS FY22[3]

## Institute for Human Development

**Michael Abel**, DESE Stronger Together Missouri Preschool Development Renewal Grant-Abel, Missouri Department of Elementary and Secondary Education, \$379,564

Michael Abel, Kauffman Kindergarten Readiness Assessment for VI, Kauffman Fund for Greater Kansas City, \$150,000

**Michael Abel**, DESE Quality Assurance Report Pilot – Cohort #6, Missouri Department of Elementary and Secondary Education, \$888,113

**Michael Abel**, DESE PDG Workforce Development YR3, Missouri Department of Elementary and Secondary Education, \$899,776

Michael Abel, PPE of PDG with MUIPP, Missouri Department of Elementary and Secondary Education, \$129,600

**Kelli Barton**, UMKC-IHD Improving the Health of People with Mobility Limitations and People with Intellectual/Developmental Disabilities-Barton, Centers for Disease Control and Prevention, \$350,953

**Kelli Barton**, Missouri Traumatic Brain Injury Project 2021-2026, Missouri Department of Health and Senior Services, \$164,048

Kelli Barton, South Dakota TBI Needs Assessment, University of South Dakota, \$6,818

Kelli Barton, Kansas Cognitive Care Network to Advance Access and Support to Rural Kansas, OCCK, INC, \$23,652

Nancy Carter, ACED Northland-Clay County 2022, Developmental Disabilities Resource Board, \$46,500

**Nancy Carter**, Adult Continuing Education for People with Developmental Disabilities (ACED) 2022, Developmental Disability Services of Jackson County – eitas, \$250,000

Nancy Carter, ACED Northland-Platte County 2022, Platte County Board of Services, \$28,500

**Danielle Chiang**, Team for Infants Endangered by Substance Abuse (TIES) KCMO 2021-2022, Children's Mercy Hospital, \$50,000

**Danielle Chiang**, Team for Infants Endangered by Substance Abuse (TIES) KDHE-MIECHV 2021-2022, Children's Mercy Hospital. \$87.000

George Gotto, SC Only MO Quality Outcomes Survey, Missouri Department of Mental Health, \$24,599

**George Gotto**, Self Advocacy and Technical Assistance Center (SARTAC), Self Advocates Becoming Empowered, \$295,000

**George Gotto**, Expanding the Public Health Workforce within the Disability Networks in Missouri-UCEDD, Administration for Community Living, \$113,670

George Gotto, UMKC-IHD DD Vaccinations-MODMH, Missouri Department of Mental Health, \$171,072

**George Gotto**, Evaluation for Missouri Rape Prevention & Education YR3, Missouri Department of Health and Senior Services, \$52,747

**George Gotto**, Missouri Protection & Advocacy Vaccinations Project, Missouri Protection and Advocacy Services, \$65,000

**Christina Hileman**, Missouri Follows the Person Housing-5 YR Project, Missouri Department of Social Services, \$81,402 **Christina Hileman**, Money Follows the Person Habitat for Humanity-5 YR Project, Missouri Department of Social Services, \$15,336

Christina Hileman, Interurban House Evaluation, InterUrban ArtHouse, \$15,000

**Kyla Mundwiller**, People First of Missouri Steering Committee 2021-2022, Missouri Department of Mental Health, \$53,545

Michelle Reynolds, Vanderbilt Kennedy UCEDD/TN Pathfinder, Vanderbilt University, \$13,500

Michelle Reynolds, Nisonger Ohio State Ambassador Series, Ohio State University, \$10,000

Michelle Reynolds, Project 1-DDD Front Door-PA22001, Missouri Department of Mental Health, \$20,000

Michelle Reynolds, Project 2-SC Capacity Building-PA22002, Missouri Department of Mental Health, \$97,754

Michelle Reynolds, Project 3-Self-Determination-PA22003, Missouri Department of Mental Health, \$10,000

Michelle Reynolds, Self-Advocate Capacity Building-Arc of Massachusetts, The Arc of Massachusetts, \$4,770

**Michelle Reynolds**, Tennessee National Center on Deaf-Blindness (NCDB) Project – South Eastern States, Vanderbilt University, \$4,000

**Michelle Reynolds**, Empowering Youth with Intellectual and Developmental Disabilities to Manage Their Healthcare Transitions-Family Voices ACL HCT, Family Voices (National), \$37,330

Michelle Reynolds, Self-Advocate Capacity Building-ICI Boston MA, University of Massachusetts, \$5,230

**Michelle Reynolds**, Kentucky National Center on Deaf-Blindness (NCDB) Project-South Eastern States, University of Kentucky, \$4,000

Michelle Reynolds, Virginia CFI Pre-ETS Ambassadors, Virginia Commonwealth University, \$11,140

Michelle Reynolds, HSRI PCP Training for North Dakota Aging Services, Human Services Research Institute, \$26,700

**Michelle Reynolds**, Expanding the Public Health Workforce within the Aging and Disability Networks in Missouri, Administration for Community Living, \$115,789

**Michelle Reynolds**, Connecticut State Department of Education/RESC Alliance, Regional Education Service Centers, \$12,100

**Cassie Webb**, Exploring Health Disparities: A Study of Data Comparing Individuals with IDD And The General Population In Missouri, Missouri Department Of Mental Health, \$125,000

#### Libraries

Anthony LaBat, Show Me Steps: Georgia Archives Institute, Missouri State Library, \$2,460

## Missouri Institute for Defense & Energy (MIDE)

Mujahid Abdulrahim, Augmented Reality Headset, SKYPAD TECH INC, \$15,000

Roy Allen, Standardized Dispenser and Non-Lethal Payloads for Small Tactical Vehicles, Fortem Technologies, \$78,844

**Roy Allen**, Afterburner/ramburner Implementation on a Small COTS Turbojet for Attritable/Reusable Super/Hypersonic Unmanned Aerial Vehicle (A/R UAV) Applications, Velontra, \$15,000

**Rebecca Best**, Bridging the Civil-Military Gap: What Happens When Soldiers Become Civilians Again?, National Endowment for the Humanities, \$99,997

**Anthony Caruso**, UMKC Bid for KC-NSC 705147 PFN Improvements, Honeywell Federal Manufacturing and Technologies, \$60,000

**Anthony Caruso**, Dynamhex uses AI to help organizations quantify, manage and scale climate impact, Dynamhex, \$15.000

**Anthony Caruso**, FX21A-TCS01-0206 Keeping Cool without Fossil Fuel - concentrated solar powered air-conditioning for reduced power consumption in austere operating conditions and at fixed USAF bases, Hyperborean, \$15,000

ZhiQiang Chen, Satellite Imagery Detection of Natural Disasters, Hypergiant, \$15,000

**Angela Cottrell**, From Seed to Table: Military Veteran Training for Sustainable Container Farming Initiatives, National Institute of Food and Agriculture, \$599,391

Travis Fields, Medium Fidelity Wargaming with Coras Cloud, CorasCloud, Inc, \$214,050

**Thiagarajan Ganesh**, Coherent Seismic Event Feasibility Study for TechSprint-RCA08-Vibrational, Liberty Alliance, \$111,204

Alexander Green, Soldier-borne TACYBER Feasibility Study for TechSprint-RCA08, Liberty Alliance, \$111,204

**Ahmed Hassan**, Predicting and Intensifying Susceptibility via Waveform Optimization (PRISON), BAE Systems, \$769,441

**Daniel McIntosh**, Equity-Forward Workforce Development Pipeline for Naval STEM Superiority, Office of Naval Research, \$758,280

#### **Provost Operations**

**Alexis Petri**, The Alliance of Persons with Disabilities (PWD) and Intersectionality for Inclusion, Networking, and Transition Opportunities in STEM (TAPDINTO-STEM), Auburn University, \$390,829

#### **KCUR**

Scott Canon, KCUR's Kansas News Service Reporter, REACH Healthcare Foundation, \$50,000

Cynthia Janovy, Reporting about Missouri politics 7-1-2021 to 6-30-2023, William T Kemper Foundation, \$75,000

Cynthia Janovy, Capacity building and audience research for KCUR, Ewing Marion Kauffman Foundation, \$350,000

Cynthia Janovy, NPR Kauffman Audience Research, National Public Radio, \$30,000

Cynthia Janovy, Report for America, Report for America, \$25,747

**Daniel Margolies**, American Homefront - WUNC project funded by CPB - 1-1-2021 to 12-31-2022, WUNC Public Radio, LLC, \$72,800

Sarah Morris, CPB American Rescue Plan Act Stabilization Grant, Corporation for Public Broadcasting, \$268,713

**Sarah Morris**, Capacity building for KCUR racial equity, diversity, and inclusion, Ewing Marion Kauffman Foundation, \$15,000

Sarah Morris, MO Arts Council 2021-22, Missouri Arts Council, \$44,391

## School of Dentistry

**Cynthia Amyot**, Which Way to Lean? A National Study of Women Dental Faculty Members' Career Aspirations and Choices – Part Two, ADEAgies Foundation, \$11,000

**Erin Bumann**, Adverse Childhood Experiences and Tooth Eruption, College of Diplomates of The American Board of Pediatric Dentistry, \$10,000

**Erin Bumann**, Dynamics of Mandibular Bone Development, National Institute of Dental and Craniofacial Research, \$156,500

**Erin Bumann**, Diversity Supplement for Wnt5a/Ror2 Signaling in Jaw Bone Development, National Institute of Dental and Craniofacial Research, \$29,816

**Erin Bumann**, Dynamics and Molecular Mechanisms of Jaw Bone Development, Robert Wood Johnson Foundation, \$420,000

**Timothy Cox**, Gene regulatory networks that establish mandible and maxilla patterning, University of Colorado Denver, \$33,570

**Emma Kaz Frick**, A Clinical Study to Evaluate the Dental Stain Removal Efficacy of a New Toothbrush with Replaceable Brush Head, Procter & Gamble Co, \$62,276

**Emma Kaz Frick**, A Clinical Study to Evaluate the Dental Stain Removal Efficacy of a New Toothbrush with Replaceable Brush Head - Particip Supp, Procter & Gamble Co, \$2,500

**Emma Kaz Frick**, P&G Protocol 2022033: Clinical Effect of Dental Prophylaxis on Extrinsic Stain Removal, Procter & Gamble Co, \$77,145

**Emma Kaz Frick**, P&G Protocol 2022033: Clinical Effect of Dental Prophylaxis on Extrinsic Stain Removal - Particip Supp, Procter & Gamble Co, \$2,500

**JoAnna Scott**, 2022 MDHA Workforce of Missouri Registered Dental Hygienists, Missouri Dental Hygienists' Association, \$1,254

**Meghan Wendland**, Improving Oral Health Teledentistry Sealants, Missouri Department of Health and Senior Services, \$45.397

**Meghan Wendland**, Improving Oral Health Teledentistry Sealants - Partic Supp, Missouri Department of Health and Senior Services, \$75,286

#### School of Education

**Karin Chang**, Teachers and Students for Community-Oriented Research and Education: Linking Industry Partners, Faculty, and Teachers (TSCORE-LIFT), University of Kansas Medical Center Research Institute, Inc., \$22,544

**Michelle Maher**, Collaborative Research: Practices and Research on Student Pathways in Education from Community College and Transfer Students in STEM (PROSPECT S-STEM), National Science Foundation (NSF) Directorate of Education and Human Resources, \$240,733

**Jacob Marszalek**, AlphaStim Intervention for Veterans and Military Personnel with Traumatic Brain Injury: Actual Practice, Tampa Veterans Research and Education Foundation, \$48,751

Joan McDowd, Grandparents Support Network, Mid-America Regional Council (MARC), \$86,054

Johanna Nilsson, UMKC Empowerment Program, Jewish Vocational Service of Kansas City, \$1,500

John Pragman, DCI Consultants, Missouri Department of Elementary and Secondary Education, \$525,000

**John Pragman**, Missouri Assessment Program Design Project, Missouri Department of Elementary and Secondary Education, \$5,238,193

**John Pragman**, Comprehensive Literacy State Development Program Training, Missouri Department of Elementary and Secondary Education, \$12,000

**John Pragman**, FY22 Kansas City Area Supervisor Office Space, Missouri Department of Elementary and Secondary Education. \$9.010

**John Pragman**, Literacy Instruction & Intervention Specialist (DYSLEXIA), Missouri Department of Elementary and Secondary Education, \$36,750

**John Pragman**, Teacher Recruitment & Retention Specialist, Missouri Department of Elementary and Secondary Education, \$100,000

**John Pragman**, School-Wide Positive Behavior Support (SW-PBS) Consultant, Missouri Department of Elementary and Secondary Education, \$393,750

**John Pragman**, Special Ed Improvement Consultant, Missouri Department of Elementary and Secondary Education, \$157,500

John Pragman, RPDC Director Support, Missouri Department of Elementary and Secondary Education, \$70,000

John Pragman, Non-traditional Event(s) Program, Missouri Department of Elementary and Secondary Education, \$7,500

John Pragman, MELL (Title I.A), Missouri Department of Elementary and Secondary Education, \$120,000

John Pragman, MELL (ELL) (Title III.A), Missouri Department of Elementary and Secondary Education, \$8,000

John Pragman, Mathematics Consultant, Missouri Department of Elementary and Secondary Education, \$105,000

**John Pragman**, Literacy Instruction & Intervention Specialist (DYSLEXIA), Missouri Department of Elementary and Secondary Education, \$68,250

**John Pragman**, Literacy and Language Consultant K-12, Missouri Department of Elementary and Secondary Education, \$105.000

**John Pragman**, Literacy and Language Consultant K-3, Missouri Department of Elementary and Secondary Education, \$105,000

**John Pragman**, Leadership Specialist (ESSER II), Missouri Department of Elementary and Secondary Education, \$100,000

**John Pragman**, Leadership Specialist (Title II.A), Missouri Department of Elementary and Secondary Education, \$100.000

**John Pragman**, Leadership Specialist (Title I.A), Missouri Department of Elementary and Secondary Education, \$100,000

**John Pragman**, Continuous Improvement Consultants (DCI-E), Missouri Department of Elementary and Secondary Education, \$100,000

John Pragman, Career Advisor, Missouri Department of Elementary and Secondary Education, \$50,000

John Pragman, DCI Travel Expenses, Missouri Department of Elementary and Secondary Education, \$29,000

John Pragman, IDEA Compliance, Missouri Department of Elementary and Secondary Education, \$105,000

Polly Prendergast, Child Care Workforce Funding Grant, Family Conservancy, \$10,000

**Jennifer Waddell**, DESE Teacher Recruitment and Retention Grant, Missouri Department of Elementary and Secondary Education, \$30,000

#### School of Humanities and Social Sciences

**Sandra Enriquez**, Redlining and Residential Segregation in Kansas City and Beyond: Community Dialogues with Dr. Sheryll Cashin, Freedom's Frontier National Heritage Area, \$2,000

Christie Riemann, New Letters Magazine MAC Grant 2022-2023, Missouri Arts Council, \$16,133

#### School of Law

Lee Moore, Low Income Taxpayer Clinic, Internal Revenue Service, \$87,000

**Jeffrey Thomas**, UMKC Tenant Assist Initiative Submission for MHDC House, Missouri Housing Development Commission, \$576,661

## School of Management

**Christopher Garmon**, Investigating Effects of State Surprise Billing Regulations on Commercial Insurance Plan Enrollees, The Ohio State University, \$36,149

Brent Never, State of Missouri FY2021 Disparity Study, Missouri Office of Administration, \$496,982

#### School of Medicine

Jannette Berkley-Patton, HE LAN Evaluation Plan Consulting, Health Forward Foundation, \$5,236

**Jannette Berkley-Patton**, Health Impacts of City-Wide Zero-Fare Bus Transit: A Natural Experiment, National Institutes of Health (NIH) National Institute of Diabetes and Digestive and Kidney Diseases, \$701,017

**An-Lin Cheng**, Application of eXplainable Artificial Intelligence for automatic stratification/prioritization of patient subpopulations for deep understanding of COVID-19 and cancer associations in Cerner database, Washington University, \$3,000

**Traci Johnson**, Elevating Voices, Addressing Depression, Toxic Stress and Equity in Group Prenatal Care (EleVATE GC), Washington University, \$16,728

**Peter Koulen**, Late-stage Preclinical Development and cGMP Production of a First-in-Class Cornea Cryopreservation Kit Based on FDA Feedback, CryoCrate LLC, \$273,875

**Paula Monaghan-Nichols**, A Safer Glucocorticoid to Treat Neonatal Lung Injury with Limited Adverse Neurologic Effects, University of Pittsburgh, \$354,088

**Paula Monaghan-Nichols**, Frontiers Clinical and Translational Science Institute at the University of Kansas, University of Kansas Center for Research, Inc., \$20,616

**Paula Monaghan-Nichols**, Nitric Oxide redistribution by a phospholipid nanoparticle colloid to treat septic shock, Vivacelle Bio Inc, \$70,594

**Nicholas Norgard**, Evaluation of the Biomarker Growth Differentiation Factor 15 (GDF-15) in a Traditionally Underserved and Understudied Heart Failure Population, Missouri Chapter of American College of Cardiology, \$8,335

**Jennifer Quaintance**, Laying a strong foundation: How do medical schools with and without learning communities promote character, caring, and professional identity formation during students' pre-clerkship years, University of Massachusetts Chan Medical School, \$7,500

**John Spertus**, Translational Endeavors – Frontiers: Heartland Institute for Clinical and Translational Research, University of Kansas Medical Center Research Institute, Inc., \$226,932

**Michael Wacker**, The UMKC THUMS Public/Private Health Partnership/Medical Student Education Training Program, Health Resources and Services Administration, \$1,750,000

## School of Nursing

Susan Bennett, The Nurse Residency Expansion Initiative, United States Department of Veterans Affairs \$12,839

Lisa Carter, ATTC Regional Center-Region 7, University Health Truman Medical Center, \$722,722

**Amanda Emerson**, Localized m-health approach to reducing COVID-19 vaccine hesitancy, and boosting access and uptake among women with criminal legal system involvement in three cities, University of Kansas Medical Centre Research Institute, Inc., \$23,739

Amanda Grimes, Getting Around KC: An evaluation of KC's Zero-Fare Bus Transit, BikeWalkKC, \$56,576

**Laurie Krom**, Natl Peer-Run Training & TA Center (APR-CoE), Substance Abuse and Mental Health Services Administration, \$1,986,892

**Laurie Krom**, Behavioral Health Workforce Development Technical Assistance and Evaluation (BHWD TAE) Program, University of Wisconsin–Madison, \$515,036

**Laurie Krom**, International Technology Transfer Center (ITTC) Network Coordinating Office, Colombo Plan Drug Advisory Program, \$229,298

**Laurie Krom**, Harm Reduction Technical Assistance Center, National Association of County and City Health Officials, \$126,922

**Sue Lasiter**, Instrument Development and Psychometric Testing of the Capstone-Experience Preceptor Preparedness Scale: The Cap-ExPresS Study, Sigma Theta Tau International, \$6,720

**Cynthia Lippincott**, Managing Medications During a Pandemic: A Survey of Adult Kidney Transplant Recipients' Perceptions, International Transplant Nurses Society, \$5,000

Cynthia Lippincott, Medication Adherence Given Individual SystemCHANGE™ in Advancing Nephropathy (MAGICIAN) Pilot Study, Indiana University, \$3,307

**Cynthia Lippincott**, The mMEDITATION Study: A Randomized Controlled Trial Evaluating the Effect of an mHealth Meditation Intervention Compared to Cardiovascular Education on Adults and Older Adults with Anxiety and Stress After Myocardial Infarction, American Association Of Critical Care Nurses, \$9,984

Kelly Reinhardt, Partnering and Communicating Together (PACT), AIDS United, \$10,000

**Holly Renwick Hagle**, Engaging African American Faith-based leaders in a substance use Learning Collaborative (LC), Hennepin Healthcare Research Institute, \$218,284

Melissa Roberts, Nurse Educators Incentive Grant, Missouri State Board of Nursing, \$150,000

**Jacquelyn Witt**, National Clinical Training Center for Family Planning, Office of the Assistant Secretary for Health, \$1,000,000

**Jacquelyn Witt**, Sexual and Reproductive Health Education for the National Healthy Start Association, National Healthy Start Association, \$11,500

Jacquelyn Witt, First Responder Online Course - COAP TTA, Treatment Alternatives for Safe Communities, \$163,074

Jacquelyn Witt, Reproductive Health National Training Center – OWH, John Snow, Inc., \$30,000

Jacquelyn Witt, Reproductive Health National Training Center - Title X, John Snow, Inc., \$40,000

## School of Pharmacy

**Tao Wang**, Pharm targeting of GPR68 to alleviate ischemic brain injury in mice, American Heart Association, \$71,562 **Xiangming Zha**, Neuroprotective role of OGR1 in brain ischemia, NIH National Institute of Neurological Disorders and Stroke, \$576,043

## School of Science and Engineering

**Majid Bani Yaghoub**, Modeling plant-virus-vector coinfections and the effect of disease control strategies on plant yield, Occidental College, \$2,000

**Samuel Bouyain**, The molecular architecture of perineuronal nets, Research Foundation for the State University of New York, \$189,844

Mark Brodwin, Collaborative Research: The Massive and Distant Clusters of WISE Survey 2, NSF Division of Astronomical Sciences, \$101,571

**ZhiQiang Chen**, HyperGLU-PIL: Hyperspectral and Geometric Learning for UAV-Enabled Plant Species Identification and Localization, Ameren Missouri, \$50,000

**ZhiQiang Chen**, Augmented Reality (AR) Pilot to Demonstrate Flooding Risk at 103rd St. in KCMO, City of Kansas City, Missouri, \$150,000

**Sravya Chirandas**, Budgeting App: an outward facing application that will give customer useful information about their full financial picture, Commerce Bank, \$2,000

**Baek-Young Choi**, Using Artificial Intelligence without a Data Center for Reliable Wireless Sensing and Communication for Space and Extreme Environments, NASA Goddard Space Flight Center, \$15,000

**Baek-Young Choi**, NSF Student Travel Grant for 2022 IEEE International Conference on Communications (ICC), NSF Division of Computer and Network Systems, \$25,000

**Christina Davis**, Enhancing Innovation, Resilience and Agility in Missouri's Manufacturers, U.S. Economic Development Administration, \$33.822

Reza Derakhshani, DVIS: A Wearable Deep Vascular ID System, United States Department of the Army, \$379,604

**Reza Derakhshani**, DVIS: A Wearable Deep Vascular ID System Participant Sup, United States Department of the Army, \$10,000

**Alison Graettinger**, GP-UP: Kansas City Explores Earth and the Environment (KC E3) Service-oriented research projects in urban environmental geosciences for students transitioning into 4YR college, NSF Research, Innovation, Synergies, and Education, \$307,462

**Ceki Halmen**, Standard Critical Chloride Threshold Test Variability due to Material Sources, Amer Concrete Institute, \$57,500

**Ceki Halmen**, Summary and Reporting of Peer Exchange and Peer Reviews, Missouri Department of Transportation, \$12,500

John Kevern, Timely and Uniform Application of Curing Materials, Wisconsin Department of Transportation, \$170,000

**Sungyop Kim**, Effectiveness of Temporary Rumble Strips in Work Zones, Missouri Department of Transportation, \$24,999

**Sungyop Kim**, 2040 Coordinated Expansion Plan for KCATA MAX and KC Streetcar, Kansas City Area Transportation Authority, \$1,000

Sungyop Kim, 2040 Coordinated Expansion Plan for KCATA MAX and KC Streetcar, Kansas City Streetcar Authority, \$1,000

Sungyop Kim, Complete Streets Plan for NW Bell Road in Parkville, MO, City of Parkville, Missouri, \$10,000

Jejung Lee, Development of GIS-Based Watershed Need Classification, City of Kansas City, Missouri, \$100,000

**Zhu Li**, RINGS: L-RIM: Learning based Resilient Immersive Media—Compression, Delivery, and Interaction, Auburn University, \$324,745

**Jared May**, Perturbation of Cellular Translation and RNA Metabolism by SARS-COV-2 Nucleoprotein Phase Separation, NIH National Institute of Allergy and Infectious Diseases, \$78,250

Martha McCabe, Racial Equity, Diversity and Inclusion (REDI) KC Community of Practice, Ewing Marion Kauffman Foundation, \$15,000

Martha McCabe, Remake Learning Days Across America (RLDAA) 2022, Grantmakers of Western Pennsylvania, \$8,000

**Amirfarhang Mehdizadeh**, A Foundational Step Towards the Development of a Predictive Framework for Particle Deposition in Wall-Bounded Turbulent Flows, NSF Chemical, Bioengineering, Environmental and Transport Systems, \$333,728

**Dina Newman**, Everyday Entrepreneurship in Kansas City's Diverse Neighborhoods, Ewing Marion Kauffman Foundation, \$300,000

**Tina Niemi**, IRES Track 1: Guatemala Geohazards International Research Experiences for Students-Understanding the Long-term Records of Volcanic, Seismic, and Landslide Hazards, NSF Office of International Science and Engineering, \$297.732

**Mostafizur Rahman**, RF Sniffing of Light Communication (EE-RF), Honeywell Federal Manufacturing & Technologies, \$2,500

**Mostafizur Rahman**, Data Acquisition System to Enhance Vehicle Testing Capabilities, Honeywell Federal Manufacturing & Technologies, \$2,500

Paul Rulis, Microstructure and Materials Properties, Honeywell Federal Manufacturing & Technologies, \$36,049

**Paul Rulis**, First-principles Modeling of MAX Phase Electronic and Optical Properties, Honeywell Federal Manufacturing & Technologies, \$78,050

**Sejun Song**, Education of Smart and Reliability Technologies for the Future Non-terrestrial Network (NTN) System, NASA Goddard Space Flight Center, \$15,000

**Sejun Song**, Hazard Detection and Alert System to Prevent Incidents - TR202214, Missouri Highways and Transportation Commission, \$200,000

**Sejun Song**, PFI-TT: Crowd-based Alert and Detection Service to Increase the Safety of People with Special Needs, NSF Directorate for Technology, Innovation and Partnerships, \$285,698

Kevin Truman, RG-202107-10987 KC STEM Alliance/STEM Connect-KC, Ewing Marion Kauffman Foundation, \$958,400

**Dianxiang Xu**, GenCyber Summer Camps for Underrepresented High School Students in the Kansas City Metropolitan Area, National Security Agency, \$143,461

#### Student Affairs

**Keichanda Dees-Burnett**, AmeriCorps: Lift as You Climb Program, Missouri Department of Economic Development, \$193,142

#### **UMKC Innovation Center**

Maria Meyers, Missouri SBDC Tech Center, U.S. Small Business Administration, \$66,500

Maria Meyers, GEER Excels, Missouri Department of Higher Education and Workforce Development, \$238,280

Maria Meyers, REDI Community Practice Participation, Ewing Marion Kauffman Foundation, \$15,000

Maria Meyers, Digital Sandbox KC, Missouri Technology Corporation, \$250,000

**Maria Meyers**, FY2021 MOBEC - MOSourceLink: A central clearinghouse for all things Missouri entrepreneurial, Missouri Technology Corporation, \$100,834

# NEW AWARDS FY23<sub>[3]</sub>

#### **Finance**

**Sean Reeder**, Health Sciences District Development, Missouri Department of Higher Education and Workforce Development, \$40,000,000

## Healthcare Institute for Innovations in Quality

**Suzanne Arnold**, KCCQ Validation in Tricuspid Valve Disease IRB Fees, U.S. Food and Drug Administration, \$14,639 **Suzanne Arnold**, KCCQ Validation in Tricuspid Valve Disease, U.S. Food and Drug Administration, \$928,552

## Institute for Human Development

**Michael Abel**, DESE Quality Assurance Report Project 2023, Missouri Department of Elementary and Secondary Education, \$1,960,782

**Michael Abel**, Missouri Early Childhood Workforce Initiative 2023, Missouri Department of Elementary and Secondary Education, \$823,000

**Michael Abel**, Missouri Supports for Early Childhood Administrators (MO-SECA)-UMKC IHD, Missouri Department of Elementary and Secondary Education, \$4,833,760

**Michael Abel**, Quality Assurance Report (QAR)-Home Visiting Planning Project, Missouri Department of Elementary and Secondary Education, \$225,000

Kelli Barton, Enhancing the System Response to Adult Abuse, Neglect, and Exploitation in Missouri, VOYCE, \$132,225

**Kelli Barton**, Missouri Brain Injury Resource Facilitation (MOBIRF), Missouri Department of Health and Senior Services, \$36,738

**Kelli Barton**, UMKC-IHD Improving the Health of People with Mobility, Centers for Disease Control and Prevention, \$585,000

Kelli Barton, BHN for Network Analysis, Behavioral Health Network of Greater St. Louis, \$19,782

**Kelli Barton**, Missouri Traumatic Brain Injury Project FY23, Missouri Department of Health and Senior Services, \$115,179

**Kelli Barton**, AADD Training for Individuals with DD and Families, The Association on Aging with Developmental Disabilities, \$76,168

Kelli Barton, South Dakota Brain Injury Needs Assessment 2023-2024, University of South Dakota, \$10,453

Kelli Barton, Memory Care Home Solutions Project, Memory Care Home Solutions, \$22,265

**Colette Canchola**, Missouri Family to Family Health Information Center (MO F2F HIC)-2022-2027, Health Resources and Services Administration, \$89,140

Nancy Carter, ACED Northland Clay County Program CY2023, Developmental Disabilities Resource Board, \$59,172

Nancy Carter, ACED Northland Platte County CY2023, Platte County Board of Services, \$37,269

Nancy Carter, ACED EITAS 2023, Developmental Disability Services of Jackson County-EITAS, \$250,000

**Danielle Chiang**, Missouri-Substance Use and Maternal/Infant Health Action Network, Missouri Department of Health and Senior Services, \$187,500

Danielle Chiang, TIES KCMO, Children's Mercy Hospital, \$55,000

**Danielle Chiang**, Missouri Substance Use and Maternal Health Action Network YR2, Missouri Department of Health and Senior Services, \$127,961

**Danielle Chiang**, Team for Infants Endangered by Substance Abuse (TIES) Program-KDHE-MIECHV, Children's Mercy Hospital, \$78,737

Danielle Chiang, Kansas City Healthy Start Initiative Evaluation 2019-2024, Nurture KC, \$120,605

Danielle Chiang, TA for Missouri Hospital Association, Missouri Hospital Association, \$20,000

**George Gotto**, Supporting the Health and Well-Being of Children with IDD-Additional Funding, Washington University School of Medicine, \$37,524

**George Gotto**, CORE 5-YR Grant-University Centers for Excellence in Developmental Disabilities Education, Research, and Service, Administration for Community Living, \$577,735

George Gotto, PA23005-NCI Data Collection-DMH, Missouri Department of Mental Health, \$42,192

George Gotto, PA23006-MOQO Survey-DMH, Missouri Department of Mental Health, \$25,781

George Gotto, PA23007-Diversity and Engagement-DMH, Missouri Department of Mental Health, \$50,247

George Gotto, MARF Economic Impact Study 2022, Missouri Association of Rehabilitation Facilities, \$17,115

George Gotto, PA23007-Diversity and Engagement-DMH, Missouri Department of Mental Health, \$18,890

**Christina Hileman**, Show Me Home: MFP Implementation Project CY2023, Missouri Department of Social Services, \$185,305

**Christina Hileman**, Show Me Home: MFP Demonstration Project CY2023, Missouri Department of Social Services, \$51,786

Amelia Reighard, Self-Advocate Resources for Reporting Abuse, Missouri Developmental Disabilities Council, \$100,000

**Michelle Reynolds**, University of Minnesota Charting the Life Course (CtLC) and Family and Individual Needs for Disability Supports (FINDS) Survey, University of Minnesota, \$3,050

Michelle Reynolds, Texas Family to Family Network, Family to Family Network, \$2,100

Michelle Reynolds, PA23001: Front Door DDD MoF2F Referrals-DMH, Missouri Department of Mental Health, \$20,000

**Michelle Reynolds**, PA23002-Support Coordination Capacity Building-DMH, Missouri Department of Mental Health, \$75,000

**Michelle Reynolds**, Community of Practice (CoP) Expansion 2022-2023, National Association of State Directors of Developmental Disabilities Services, \$223,630

**Michelle Reynolds**, Community of Practice (CoP) Conference Only 2022-2023, National Association of State Directors of Developmental Disabilities Services, \$26,000

**Michelle Reynolds**, Missouri MIPPA Priority Area 3: ADRC 2022-2024, Administration for Community Living, \$94,171 **Michelle Reynolds**, Values Into Action CtLC, Values Into Action, \$24,100

**Michelle Reynolds**, No Wrong Door System Governance: Improving Access to LTSS for Individuals and Family Caregivers, Administration for Community Living, \$410,148

**Michelle Reynolds**, Maryland DDA-Regional Awareness and Capacity Building, National Association of State Directors of Developmental Disabilities Services, \$35,000

**Michelle Reynolds**, South Dakota Division of Developmental Disabilities Individualized Service Plan, South Dakota Department of Health, \$2,500

**Michelle Reynolds**, Living Well Missouri: A Model for Community Monitoring and Capacity Building, Administration for Community Living, \$527,303

Michelle Reynolds, Nebraska DDC CtLC Capacity Building Network, Nebraska Council on Developmental Disabilities, \$32,980

Michelle Reynolds, South Carolina Department of Disabilities and Special Needs Project, Sage Squirrel Consulting LLC, \$98,000

**Michelle Reynolds**, New York State Office of Aging LifeSpan Respite Project, New York State Office for the Aging, \$9,700

**Michelle Reynolds**, Adult Protective Services Project Management, Missouri Department of Health and Senior Services, \$149,569

**Michelle Reynolds**, Ohio Charting the LifeCourse Transition Support Partnership, Ohio Department of Education, \$66.310

**Michelle Reynolds**, Empowering Youth with Intellectual and Developmental Disabilities to Manage Their Healthcare Transitions-Family Voices ACL HCT, National Family Voices, \$77,669

Michelle Reynolds, Connecticut Aging & Disability Services, Connecticut State Department of Aging and Disability Services, \$4,000

Michelle Reynolds, Supportive Behavioral Resources Project, Supportive Behavioral Resources Inc, \$17,500

**Michelle Reynolds**, PCP Implementation Plan: Development and Communication Strategy - Developmental Disabilities Administration, Maryland Department of Health, \$99,850

Michelle Reynolds, Family to Family DDC FY2020-2024, Missouri Dept of Mental Health, \$55,000

Michelle Reynolds, NCAPPS Kentucky 2022-2023, Human Services Research Institute, \$16,000

Michelle Reynolds, Connextions Australia, Connextions: Unlimited Possibilities, \$11,410

Michelle Reynolds, Indiana University DDRS Training, Indiana University, \$40,253

**Michelle Reynolds**, DESE Missouri Assistive Technology ACL Public Health Project, Missouri Department of Elementary and Secondary Education, \$80,000

Michelle Reynolds, Shared Support, Inc CtLC, Shared Support Inc., \$28,700

Michelle Reynolds, The Arc of Indiana LifeCourse Nexus, The Arc of Indiana, \$136,000

**Michelle Reynolds**, CtLC for CSPD Montana Region 2, Comprehensive System of Personnel Development Montana Region 2, \$2,500

Michelle Reynolds, KenCrest CtLC, KenCrest Services, \$30,700

**Cassie Webb**, Partnership to Address Health Disparities in African American Youth with Developmental and Intellectual Disabilities-PCORI, Children's Mercy Hospital, \$28,018

## Missouri Institute for Defense & Energy (MIDE)

Mujahid Abdulrahim, Autonomous Systems and Robotics - Bumblebee, DEFENSEWERX, \$150,000

Jesse Beaudin, SHELL, Overmatch Inc, \$45,000

**Juan Cabrera-Garcia**, Constructing UMKC's Educational Capacity in Controlled Environment Agriculture, National Institute of Food and Agriculture, \$29,998

Anthony Caruso, Pulsed Tactical Effector for Regulated Attack (PTERA) Study, Office of Naval Research, \$8,059,963

Anthony Caruso, Forecasting Future Technological Threats and Opportunities, TechNext Inc., \$225,000

Travis Fields, Enabling Distributed Machine Learning at the Edge with the Tiguar UAS, Prescient Edge, \$269,069

**Viviana Grieco**, A Knowledge Graph and Deep Learning for Managing and Analyzing Spanish American Notary Records, National Endowment for the Humanities, \$74,999

**Zhu Li**, Effective Compaction of UAV LiDAR and Other Data Transmission to Maximize Bandwidth and Security, AtomBeam Technologies Inc, \$24,409

**Michelle Paquette**, Area-Selective Deposition Collaboration (UMKC/Lehigh): Novel Crosslinkable SAM Blocking Layers, Intel Corporation, \$100,000

Michelle Paquette, High Responsivity Optical GaN Switch, Kyma Technologies, \$199,954

**Zhonghua Peng**, Developing Plastic Circularity Curricula Coupling Multidisciplinary Instruction with Experiential Learning and Course-Based Research Skill Training, National Institute of Standards and Technology, \$499,999

Stephan Young, Technical Support to the ARL SPO July 2022, Leidos Inc., \$10,000

#### **KCUR**

Cynthia Janovy, Kansas City Media Collaborative, Ewing Marion Kauffman Foundation, \$1,050,000

Sharon Lindenbaum, Missouri Arts Council, Missouri Arts Council, \$66,832

Sharon Lindenbaum, CPB Community Service Grant, Corporation for Public Broadcasting, \$434,836

#### Research Services

**Alexis Petri**, NSF ADVANCE Catalyst: Diagnosing Intersectional Challenges for Equity in STEM, NSF Division of Equity for Excellence In STEM, \$299,999

#### School of Dentistry

**Erin Bumann**, Diversity Supplement for Wnt5a/Ror2 Signaling in Jaw Bone Development, NIH National Institute of Dental and Craniofacial Research, \$34,058

**Erin Bumann**, Mechanisms of micrognathia in a ciliopathy mouse model of osteochondrodysplasia, University of Kansas Medical Center Research Institute, Inc, \$25,000

Sarah Dallas, Leica Stellaris 8 Confocal Microscope System, NIH Office of the Director, \$599,252

Jeffrey Primos, Build Digital Dentistry Capacity, Delta Dental of Missouri, \$50,000

**Julie Sutton**, Comparing Dental Hygiene Associate and Baccalaureate Entry-Level Degree Attainments in the State of Missouri, ADHA Institute for Oral Health, \$3,500

**Rong Wang**, Infrared Spectroscopic Imaging and Machine Learning for Risk Stratification of Oral Epithelial Dysplasia, NIH National Institute of Dental and Craniofacial Research, \$410,975

## School of Education, Social Work and Psychological Sciences

Karin Chang, JCCC External Grant Evaluator Services, Johnson County Community College, \$25,000

**Marvalee Collins**, School-Based Mental Health Recruitment and Retention Initiative: School Counseling, Missouri Department of Elementary and Secondary Education, \$15,100

**John Pragman**, Teacher Recruitment & Retention Specialist, Missouri Department of Elementary and Secondary Education. \$100.000

John Pragman, Career Advisor, Missouri Department of Elementary and Secondary Education, \$50,000

**John Pragman**, Mathematics Improvement Consultant, Missouri Department of Elementary and Secondary Education, \$315,000

John Pragman, MELL (ELL) (Title III.A), Missouri Department of Elementary and Secondary Education, \$13,000

John Pragman, MELL (Title I.A), Missouri Department of Elementary and Secondary Education, \$100,000

John Pragman, Non-traditional Event(s) Program, Missouri Department of Elementary and Secondary Education, \$7,500

John Pragman, RPDC Director Support, Missouri Department of Elementary and Secondary Education, \$70,000

**John Pragman**, Special Ed Improvement Consultant, Missouri Department of Elementary and Secondary Education, \$157,500

**John Pragman**, School-Wide Positive Behavior Support (SW-PBS) Consultant, Missouri Department of Elementary and Secondary Education, \$393,750

**John Pragman**, Comprehensive Literacy State Development Program (Dyslexia), Missouri Department of Elementary and Secondary Education, \$12,000

**John Pragman**, Mathematics Program Management, Missouri Department of Elementary and Secondary Education, \$180,000

John Pragman, Literacy Coach, Missouri Department of Elementary and Secondary Education, \$210,000

John Pragman, CLDS LETRS Facilities Use, Missouri Department of Elementary and Secondary Education, \$8,140

**John Pragman**, Continuous Improvement Consultants (DCI-E), Missouri Department of Elementary and Secondary Education, \$100,000

John Pragman, DCI Consultants, Missouri Department of Elementary and Secondary Education, \$625,000

John Pragman, DCI Travel Expenses, Missouri Department of Elementary and Secondary Education, \$49,000

John Pragman, IDEA Compliance Consultant, Missouri Department of Elementary and Secondary Education, \$105,000

**John Pragman**, Leadership Specialist (Title I.A), Missouri Department of Elementary and Secondary Education, \$100.000

**John Pragman**, Leadership Specialist (Title II.A), Missouri Department of Elementary and Secondary Education, \$100,000

**John Pragman**, Leadership Specialist (ESSER II), Missouri Department of Elementary and Secondary Education, \$100,000

**John Pragman**, Literacy and Language Consultant K-3, Missouri Department of Elementary and Secondary Education, \$105,000

**John Pragman**, Literacy and language Consultant K-12, Missouri Department of Elementary and Secondary Education, \$105,000

**John Pragman**, Literacy Instruction & Intervention Specialist (DYSLEXIA), Missouri Department of Elementary and Secondary Education. \$68,250

**John Pragman**, Literacy Instruction & Intervention Specialist (DYSLEXIA), Missouri Department of Elementary and Secondary Education, \$36,750

**John Pragman**, 23 Missouri Assessment Program Design Project (MAPDP) - Title I, Part B / Federal Assessment Funds, Missouri Department of Elementary and Secondary Education, \$600,000

**John Pragman**, Literacy Project Coordinator Kansas City RPDC, Missouri Department of Elementary and Secondary Education \$95,000

**John Pragman**, Literacy Project - Administrative Assistant, Missouri Department of Elementary and Secondary Education, \$55,000

**John Pragman**, Missouri Assessment Program Design Project, Missouri Department of Elementary and Secondary Education, \$15,636,141

Tiffani Riggers-Piehl, STEM and Belief in UK and USA Higher Education, Coventry University, \$1,000

**Amy Simmons**, School-Based Mental Health Recruitment and Retention Initiative: Social Work, Missouri Department of Elementary and Secondary Education, \$15,000

**Jennifer Waddell**, Project S2C3: Supporting Students of Colors & Career Changers in Teacher Preparation, Missouri Department of Elementary and Secondary Education, \$100,000

#### School of Humanities and Social Sciences

**Diane Mutti-Burke**, Scattered to the Four Winds of the Earth: The Civilian Refugee Crisis in the American Civil War, The Filson Historical Society, \$500

**Diane Mutti-Burke**, Scattered to the Four Winds of the Earth: The Civilian Refugee Crisis in the American Civil War, John L. Nau III Center for Civil War History, \$1,000

**Sandra Enriquez**, Redlining and Residential Segregation in Kansas City and Beyond: Community Dialogues with Dr. Sheryll Cashin, Freedom's Frontier National Heritage Area, \$2,000

Linda Hoffman, Raising KC, Raised with Love and Limits Foundation, \$12,500

Christie Riemann, New Letters Magazine MAC Grant 2022-2023, Missouri Arts Council, \$16,133

**Michelle Smirnova**, Educate Organize Advocate 2022 Social Justice Conference, Freedom's Frontier National Heritage Area, \$2,500

#### School of Law

**Jeffrey Thomas**, UMKC Tenant Assist Initiative Submission for MHDC House, Missouri Housing Development Commission, \$48,000

## School of Management

**Susan Opp**, Intergovernmental Personnel Act (IPA) Susan Opp, Administration for Children and Families, \$93,643 **David Renz**, Transl Clini Care to Public Health Practice: A Targeted Approach, Children's Mercy Hospital, \$24,500

#### School of Medicine

**Jannette Berkley-Patton**, Faithful Response II: COVID-19 Rapid Test-to-Treat with African American Churches, NIH National Institute on Minority Health and Health Disparities, \$1,016,780

**Traci Johnson**, EleVATE-Clinicians: a tool to mitigate implicit bias by increasing clinicians' empathy, Washington University, \$20,275

**Peter Koulen**, A transformative Orbitrap Tribrid mass spectrometry system for advanced quantitative proteomics at the UMKC Biological Mass Spectrometry and Proteomics Facility, NIH National Institute of General Medical Sciences, \$1,004,451

**Nihar Nayak**, Development of a Strategy for Warfighter Survival after Exsanguination - the effect of VBI-1 on macrophage activation, Vivacelle Bio Inc, \$110,000

**Nihar Nayak**, Translational Endeavors -Frontiers: Heartland Institute for Clinical and Translational Research, University of Kansas Medical Center Research Institute, Inc., \$14,018

**Paula Monaghan-Nichols**, Frontiers Clinical and Translational Science Institute at the University of Kansas, University of Kansas Center for Research, Inc., \$21,678

Jennifer Paumen, Supporting Families Impacted by ACEs, American Academy of Pediatrics, \$2,000

Elizabeth Pearsall, A New Class of Wet AMD Therapeutics, NIH National Eye Institute, \$391,250

Mark Steele, EMERGEncy ID NET Study, University of California, Los Angeles, \$13,966

**Michael Wacker**, UMKC Rural Behavioral Health Workforce Education, Training, and Initiatives, Health Resources and Services Administration, \$2,500,000

# School of Nursing

**Lisa Carter**, First Responders-Comprehensive Addiction and Recovery Support Services Act 2.0, Missouri Department of Health and Senior Services, \$32,819

Amanda Grimes, Move More, Get More, Health Forward Foundation, \$45,000

Amanda Grimes, Active Lab: Promoting public health through physical activity, AmeriCorps, \$167,910

**Maxine Henry**, Mental Health Technology Transfer Center (MHTTC) National Coordinating Center (NCC) Supplement, Stanford University, \$42,756

**Maxine Henry**, Mental Health Technology Transfer Center (MHTTC) National Coordinating Center (NCC), Stanford University, \$153,250

Maxine Henry, NIH Helping to End Addiction Long Term Initiative (NIH HEAL), Addiction Policy Forum, \$10,000

**Sue Lasiter**, Feasibility and Acceptability of a Randomized Controlled Trial Comparing a Companion Dog-Walking Intervention to an Attention Control Education Intervention on the Psychological Health of Adult Intensive Care Unit Survivors, Sigma Theta Tau International, \$5,000

Joseph Lightner, Youth Engagement in Sports (YES) AmeriCorps, AmeriCorps, \$36,673

Joseph Lightner, Zero-Fare Sustainability, Kansas City Area Transportation Authority \$500,000

Kelly Reinhardt, Harm Reduction Program, Kansas City Health Care Center, \$72,566

**Holly Renwick-Hagle**, State Opioid Response (SOR)/Tribal Opioid Response (TOR) Technical Assistance (Short Title: SOR/TOR TA), Amererican Academy of Addiction Psychiatry, \$5,800,000

Melissa Roberts, Nursing Education Program Grant, Missouri State Board of Nursing, \$300,000

Melissa Roberts, Nursing Education Incentive Program, Missouri State Board of Nursing, \$150,000

Kristin Wilson, The Right Time Initiative, Missouri Family Health Council, \$340,744

**Kristin Wilson**, Clinical Training Center for Sexual + Reproductive Health (CTC-SRH), Office of the Assistant Secretary for Health, \$1,000,000

**Jacquelyn Witt**, National Clinical Training Center for Family Planning (NCTCFP) Supplement, Office of the Assistant Secretary for Health, \$750,000

Jacquelyn Witt, MO SANE-NET Training, Missouri Department of Health and Senior Services, \$45,045

Jacquelyn Witt, New Morning Training Bundle, New Morning Training, \$73,131

**Jacquelyn Witt**, Reproductive Health National Training Center (RHNTC) OWH, JSI Research & Training Institute, Inc., \$50,000

## School of Pharmacy

**Kun Cheng**, Normalizing PDAC stroma with PCBP2 siRNA nanoparticles to improve the antitumor activity of chemotherapy and immunotherapy, NIH National Cancer Institute, \$333,079

**Kristen Koch**, Assessing the Impact of Pharmacist-led Digital Retina Scan Services on Rates of Annual Eye Exams for Patients with Diabetes at a Federally Qualified Health Center, APhA Foundation, \$1,000

**Mark Patterson**, Vaccination Services for COVID-19 and Other Adult Vaccinations, Missouri Pharmacy Association, \$26,042

**Gerald Wyckoff**, Topic No. AFX23D-TCSO1, STTR Phase I Proposal FX23D-TCSO1-0324 - Using Collaborative AI to Optimize Curriculum Retention in Military Training Environments - Swarm Learning™, Unanimous AI, \$22,432

**Wenyan Zha**, GPR68-mediated acid signaling protects the brain against ischemia-induced aberrant activation of retrotransposon, American Heart Association, \$231,000

**Xiangming Zha**, GPR4 in blood brain barrier dysfunction in brain ischemia, NIH National Institute of Neurological Disorders and Stroke, \$387,295

Xiangming Zha, A novel neuroprotective acid-GPR68 axis in dementia, American Heart Association, \$200,000

**Xiangming Zha**, GPR4 in blood brain barrier dysfunction in brain ischemia SUPPLEMENT, NIH National Institute of Neurological Disorders and Stroke, \$391,250

## School of Science and Engineering

**Majid Bani Yaghoub**, Midwest Virtual Laboratory of Pathogen Transmission in Healthcare Settings (MVL-PATHS) Centers for Disease Control and Prevention, \$299,761

**Katherine Bloemker**, Epoxy Staking of Printed Wiring Board Components, Compressive Lap Shear Test Fixture, Evaluation of Ultrasonic Sensors in Microfluidics, Alternate Materials for Flexible Cable Manufacturing, and Hybrid Manufacturing Coupling Polymer AM with Machining Processes, Honeywell Federal Manufacturing & Technologies, \$5,000

**Katherine Bloemker**, Mechanical Engineering Senior Design - AFC-NSIN Capstone Pilot Initiative Project, National Security Innovation Network, \$1,000

**Katherine Bloemker**, Mechanical Engineering Senior Design - Winchester Cal .50 De-Linking Round Remover, Winchester Military, \$1,000

Katherine Bloemker, Mechanical Engineering Senior Design - Drone Wash Project, Brain Wash LLC, \$1,000

Katherine Bloemker, Mechanical Engineering Senior Design - Winchester Cal .50 Blank Mouth Waterproofing Applicator, Winchester Military, \$1,000

**Shuhao Cao**, Collaborative Research: Theory and Applications of Structure-Conforming Deep Operator Learning, NSF Division of Mathematical Sciences, \$156,046

Shu-Ching Chen, Florida Public Hurricane Loss Model (FPHLM), FL INTL UNIV, \$366,611

Shu-Ching Chen, Center of Excellence: Al-Empowered Spatial Computing, US DEPT OF EDUC, \$989,560

**Shu-Ching Chen**, SCC-IRG JST: Multimodal Data Analytics and Integration for Effective COVID-19, Pandemics and Compound Disaster Response and Management, NSF Division of Computer and Network Systems, \$716,986

Shu-Ching Chen, Recruiting Optimization and Analysis Dashboard (ROAD), Via Science, \$225,000

**Shu-Ching Chen**, Intelligent Immersive Environments for Learning Robotics Operations (IL-PRO), Florida International University, \$116,417

**ZhiQiang Chen**, Advancing Access to Global Flood Modeling and Alerting using the PDC DisasterAWARE Platform and Remote Sensing Technologies, University of Alabama in Huntsville, \$28,000

**Stephane Dissel**, Investigation of a newly identified group of neurons regulating sleep and feeding behaviors, NIH National Institute of Neurological Disorders and Stroke, \$391,250

**Michael Frisch**, How mortgage lending practices influence the state of Black/African American homeownership in Texas' major cities, Texas Southern University, \$51,000

**John Kevern**, A Roadmap for Missouri: Assessing Needs an Implementation Framework for Incorporating Environmental Product Declarations, Missouri Department of Transportation, \$195,000

**John Kevern**, Artificial Intelligence-Based Smart Toolbox for 3D Printing of Concrete, U.S. Army Engineer Research and Development Center, \$120,000

**Sungyop Kim**, Improvement Plan for the West Rock Creek Trail Corridor in Mission, Kansas, City of Mission, Kansas, \$2.000

Sungyop Kim, Asset Characterization Using Automated Methods, Missouri Department of Transportation, \$200,000

**Haluk Lacin**, Developmental and Genetic Basis of Neural Circuit Formation and Behavior, NIH National Institute of Neurological Disorders and Stroke, \$391,250

**Martha McCabe**, Remake Learning Days Across America (RLDAA) 2023, Grantmakers of Western Pennsylvania, \$10.000

**Hillary McGraw**, Wnt pathway mutations alter hair cell development and regeneration in the zebrafish fish lateral line, NIH National Institute of General Medical Sciences, \$195,625

**Farid Nait-Abdesselam**, Interdisciplinary Graduate Training through Research in Artificial Intelligence and Secure Networked Sensing to Mitigate the Crisis of Alcohol and Drug Abuse, NSF Division of Graduate Education, \$2,999,999

Dina Newman, The Woods Project (Palestine East Corridor), Missouri Department of Conservation, \$31,948

**Zahra Niroobakhsh**, ERI: Reconfigurable Highly Ordered Microlayers Between Liquid Interfaces, NSF Division of Chemical, Bioengineering, Environmental, and Transport Systems, \$200,000

**Zahra Niroobakhsh**, Collaborative Research: Mathematical Modeling and Computation of Morphological Instabilities in Reactive Fluids Driven Out of Equilibrium, NSF Division of Mathematical Sciences, \$146,326

**Zhonghua Peng**, Computational and Experimental Studies Towards Ideal Organic Semiconductors for Perovskite Solar Cells, NSF Division of Materials Research, \$309,827

**Mohammad Rafiee**, Barrett's esophagus screening using point-of-care measurement of gas phase aldehydes in exhaled breath. University of Kansas Medical Center Research Institute. Inc., \$17,554

**Paul Rulis**, First-principles Modeling of MAX Phase Electronic and Optical Properties, Honeywell Federal Manufacturing & Technologies, \$70,163

**Syed Shah**, Fundraising Web App: A platform where users can create fundraisers and donate to other's fundraisers, Commerce Bank, \$2,000

Mei-Ling Shyu, Child Avatar Simulation - Innovation Fund, University of Miami, \$47,000

**Fengpeng Sun**, State Digital Equity and Broadband Equity, Access, and Deployment Planning Grant, Missouri Department of Economic Development, \$65,542

**Jon VanHorn**, Polymer Crosslinking: Swelling Ratio Tester versus Positron Analysis, Honeywell Federal Manufacturing & Technologies, \$62,942

**Jon VanHorn**, Positron Evaluation of metal Powder Hybrid Materials PDRD & Single-Side Positron Lifetime Analysis Sample Holder PDRD, Honeywell Federal Manufacturing & Technologies, \$57,744

**Jacob Wagner**, LISC South Round Top Neighborhood Development and Resiliency Plan, Local Initiatives Support Corporation, \$7,000

**Shizhen Wang**, Structural dynamics of voltage-gated ion channels and their implications for ion permeation and drug modulation, National Institute of General Medical Sciences, \$328,650

**Theodore White**, Using massive, multi-regional EHR data to eliminate the impacts of climate change on fungal disease epidemiology in the U.S., NIH National Institute of Allergy and Infectious Diseases, \$823,063

**Dianxiang Xu**, FMitF:Track II: SMT-Based Reachability Analyzer of NGAC Policies, NSF Division of Computing and Communication Foundations, \$100,000

#### Student Success

**Kristi Holsinger**, Student Career Pathways Expansion, Missouri Department of Higher Education and Workforce Development, \$1,536,000

#### **UMKC Innovation Center**

Maria Meyers, MO PTAC FY23, Defense Logistics Agency, \$190,675

Maria Meyers, Denver University Center Program 2022, United States Department of Commerce, \$162,500

**Maria Meyers**, Brush Creek Enterprise Center Missouri Innovation Center FY23, Brush Creek Enterprise Center Inc., \$112,361

Maria Meyers, Show Me Jobs: Powering new and growing businesses in rural Missouri, USDA Rural Development, \$729,919

Maria Meyers, Missouri SBDC Tech Center, U.S. Small Business Administration, \$50,634

Maria Meyers, Missouri Small Business Development Center, U.S. Small Business Administration, \$316,365

Maria Meyers, MOSourceLink: Wayfinding for Missouri's Entrepreneurs, Missouri Technology Corporation, \$299,078

**Maria Meyers**, Creating a technology commercialization engine in Kansas City, Missouri Technology Corporation, \$150,000

Maria Meyers, Missouri SBDC Tech Center, U.S. Small Business Administration, \$50,069

Maria Meyers, Missouri Small Business Development Center, U.S. Small Business Administration, \$320,121

Maria Meyers, FY22 FAST GRANT, U.S. Small Business Administration, \$35,785

## APPENDIX F

#### References

Data Retrieval and Verification: The data presented in this report was obtained by running three different reports, cited below. For consistency, new awards and supplemental funding were manually verified and duplications removed.

For more information on these reports, contact ors@umkc.edu.

- [1] AWARDS\_KCITY\_CFDA\_6906 and KCITY\_PROP\_CFDA\_8277
- [2] Grants\_Report\_3\_Proposal\_Listing
- [3] AWARDS\_KCITY\_CFDA and Grants\_Report\_5\_Award\_Listing