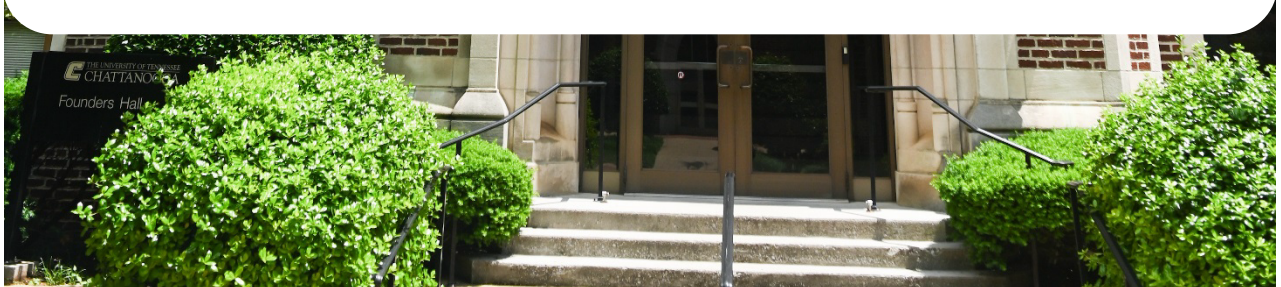




**C** THE UNIVERSITY OF TENNESSEE  
**CHATTANOOGA**  
Office of Research and  
Sponsored Programs

**ANNUAL REPORT**  
**FISCAL YEAR 2024**

JULY 1, 2023 - JUNE 30, 2024





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# WELCOME

The ORSP Annual Report for Fiscal Year (FY) 2024 documents the significant achievements of faculty, staff, organizational units, and the institution. FY24 was a banner year for sponsored programs activity.

UTC faculty and staff continue to distinguish themselves through meritorious investigator-initiated research. Dr. Hamdy Ibrahim (Mechanical Engineering) received a prestigious NSF CAREER award, Dr. Azad Hossain (BGE) attracted UTC's first NASA Research Initiation Award to examine regional water quality, and Dr. Murat Barisik (Mechanical Engineering) secured NSF and DOE awards for early career faculty.



UTC faculty and staff leveraged sponsored funding to bolster UTC's scholarly and learning environment. Carolyn Runyon (Library) secured National Archives & Records Administration funding to document the extraordinary career of state legislator Tommie F. Brown, Dr. Mengjun Xie (NCAECD) received NSF funds to renew the CyberCorps Scholarship program, and Catherine Quinlan (CAS Dean's Office) lead a team that attracted NEH funding to implement a new, humanities-informed environmental studies major.

Sponsored funding also undergirds significant community engagement that improves lives in our community, our state, and beyond. Dr. Deborah McAllister (SOE) received an NSF Noyce award to establish a residency program for STEM teachers, Dr. Kristi Wick (SON) secured funds that addresses statewide needs of aging seniors and rural health care, and Charlie Mix and colleagues (IGT Lab) attracted funding from several sources to map and protect natural assets.

The UTC Research Institute hit its stride in FY24 with CUIP researchers teaming successfully with collaborators to capture significant funding that benefits our region. Efforts under the Quantum Initiative, with Assistant Professor and Chief Technology Officer Dr. Tian Li, and Department Heads Drs. Cox, Dungey, Ofoli and Xie, evolved this year into the UTC Quantum Center with support from a NIST Community Project. Dr. Li secured a competitively awarded grant from the NSF ExpandQISE program to research distributed Quantum Sensing. The Research Institute also formalized a strategic partnership with Oak Ridge National Laboratory regarding collaborative activities in Quantum Information Science and Engineering.

FY24 was a year of transition, with Dr. Joanne Romagni, UTC's inaugural Vice Chancellor for Research, returning to a faculty position. The achievements that our campus has realized owe much to Dr. Romagni's founding vision and the energy she brought to the VCR role.

Please join me in recognizing all the UTC faculty and staff who engaged in sponsored project proposal or award activity during FY24. I also want to acknowledge the engaged cooperation from Academic Affairs and others that is essential to advancing the research enterprise at UTC.

# FY24 UTC SNAPSHOTS

**85**

unique Lead PIs  
submitting proposals



**58**

unique sponsors



**167**

proposals  
submitted



**\$73M**

in proposal requests



**89**

new awards  
received



**\$15.5M**

in awards received



**73**

total  
active  
awards



**\$45.1M**

in active  
award dollars



**38**

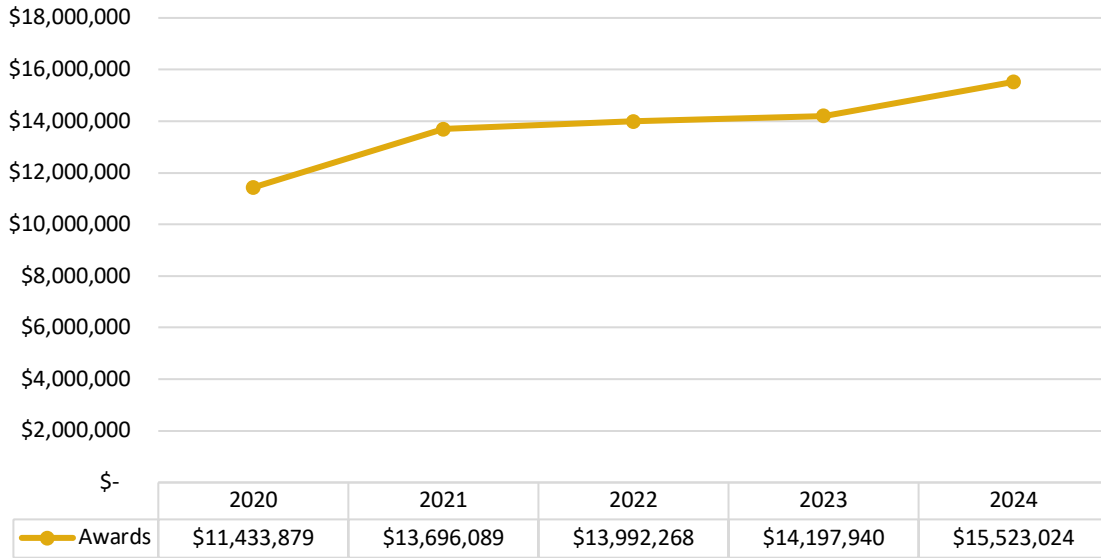
high-value  
proposals  
(\$500k+)



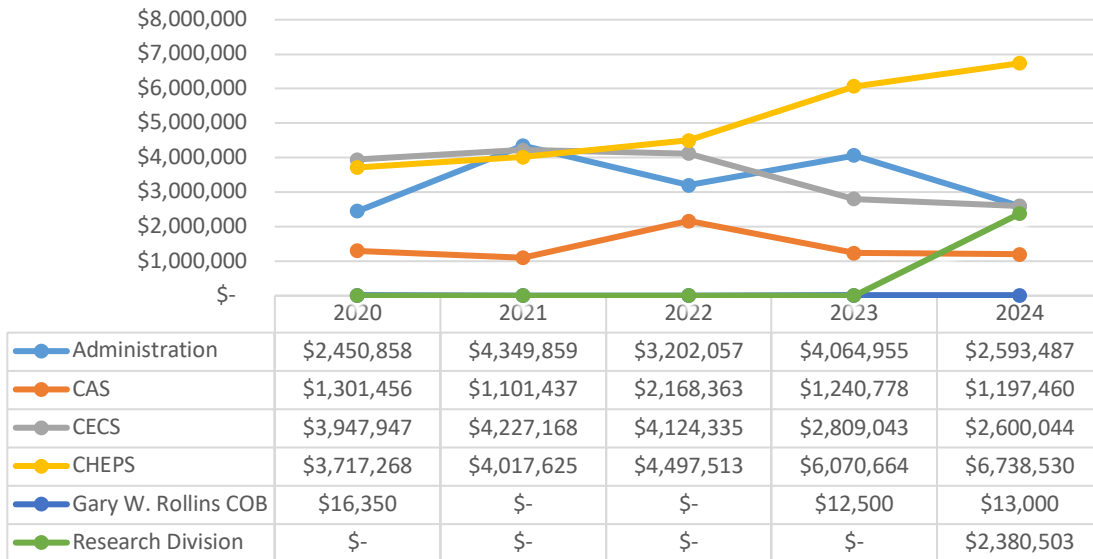
# INSTITUTION OVERVIEW

## FIVE YEAR TREND - AWARDS

Total Awards



Awards by College

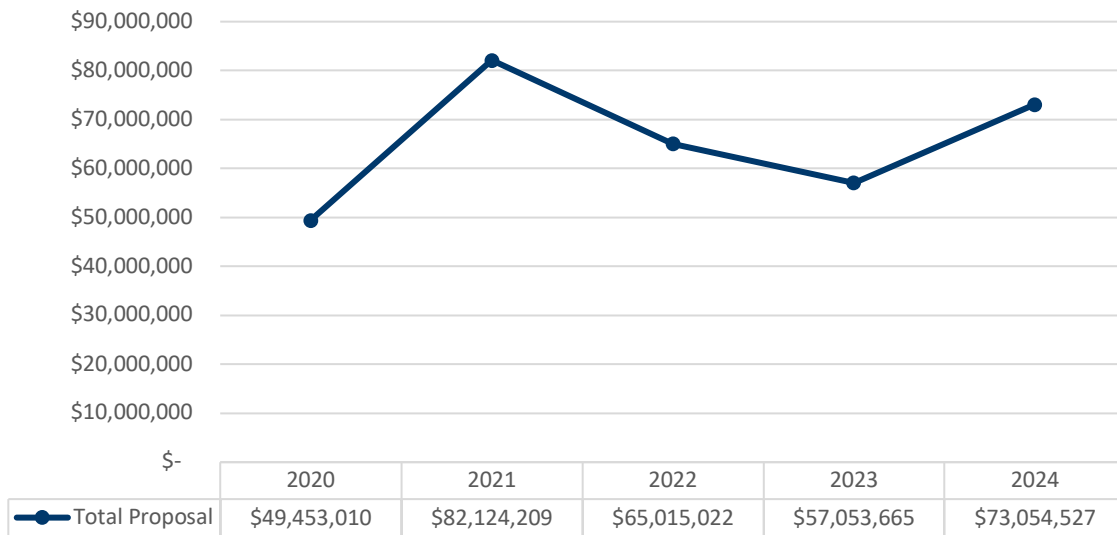


*NOTES: (1) Research Division funds were previously included under Administration and past-year Research Division awards have been left under the Administration heading for consistency. (2) HEERF/CARES Act funding has been excluded from this report for the purpose of clarity. Historical trends on that funding mechanism are documented in the FY22 Annual Report.*

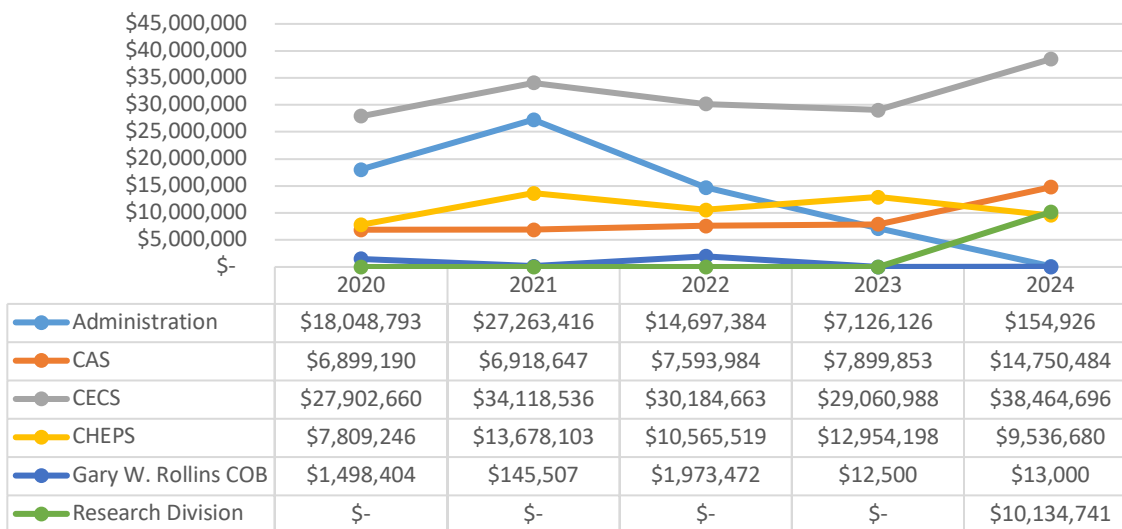
# INSTITUTION OVERVIEW

## FIVE YEAR TREND - PROPOSALS

Total Proposal



Proposals by College



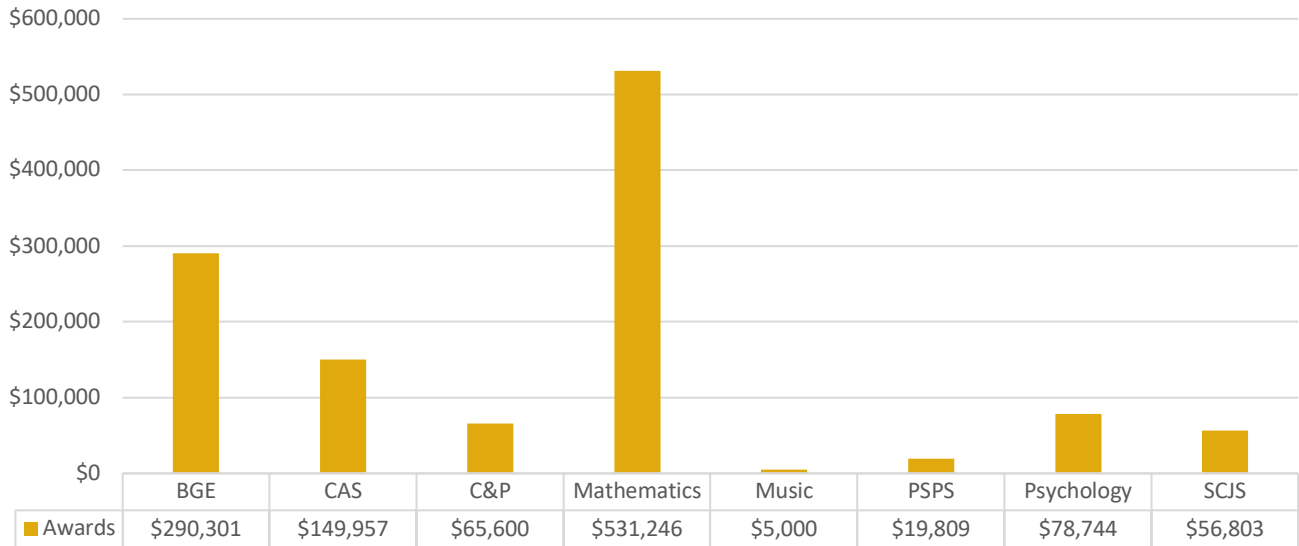
NOTES: (1) Research Division proposals were previously included under Administration and past-year Research Division awards have been left under the Administration heading for consistency. (2) HEERF/CARES Act requests has been excluded from this report for the purpose of clarity. Historical trends on that funding mechanism are documented in the FY22 Annual Report. Page | 6



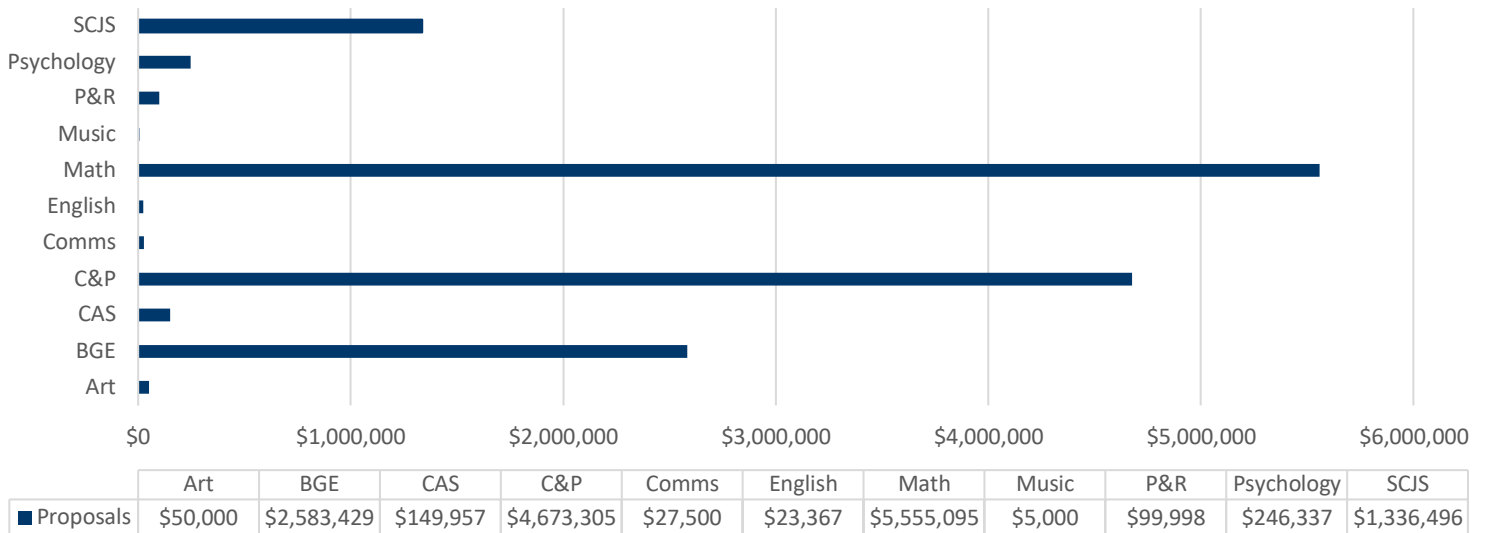
# COLLEGE OF ARTS AND SCIENCES

## AWARDS AND PROPOSALS BY DEPARTMENT

Awards



Proposals

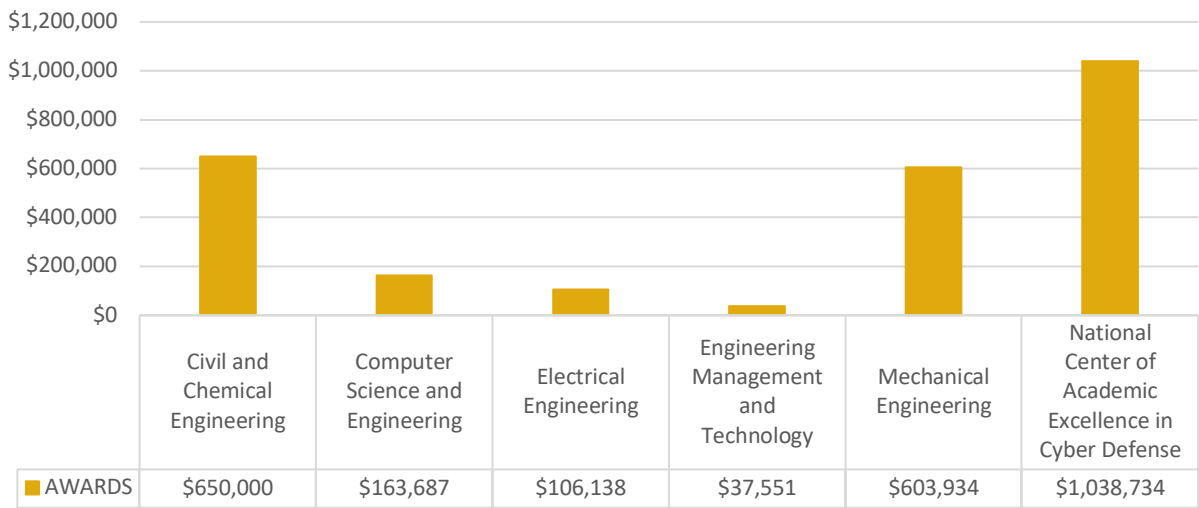


*BGE: Biology, Geology, and Environmental Science; CAS: College of Arts and Science; C&P: Chemistry & Physics; Comms: Communications; Math: Mathematics; P&R Philosophy and Religion; SCJS: Social, Cultural & Justice Studies.*

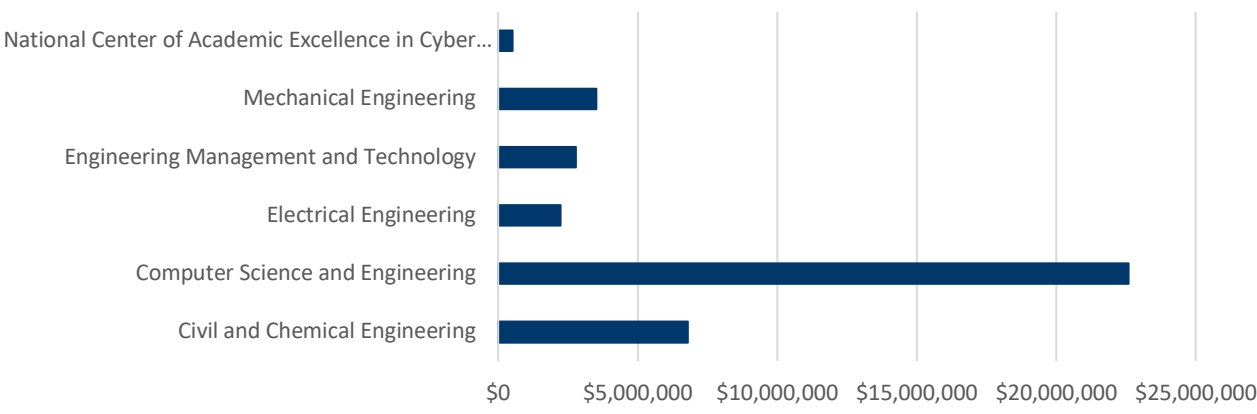
# COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

## AWARDS AND PROPOSALS BY DEPARTMENT

Awards



Proposals



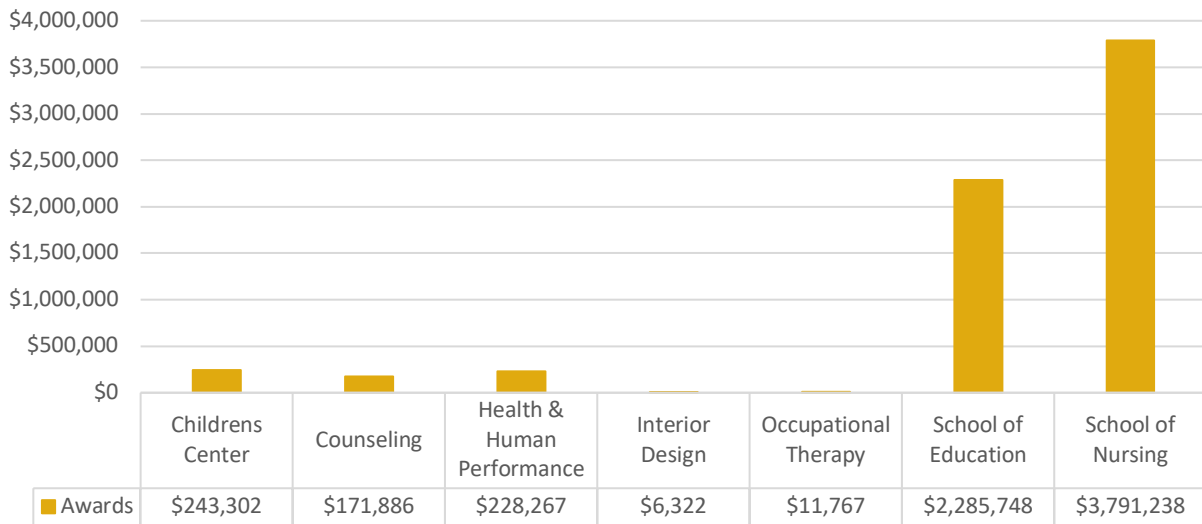
	Civil and Chemical Engineering	Computer Science and Engineering	Electrical Engineering	Engineering Management and Technology	Mechanical Engineering	National Center of Academic Excellence in Cyber Defense
■ Proposals	\$6,807,497	\$22,597,286	\$2,235,569	\$2,776,002	\$3,522,620	\$525,722



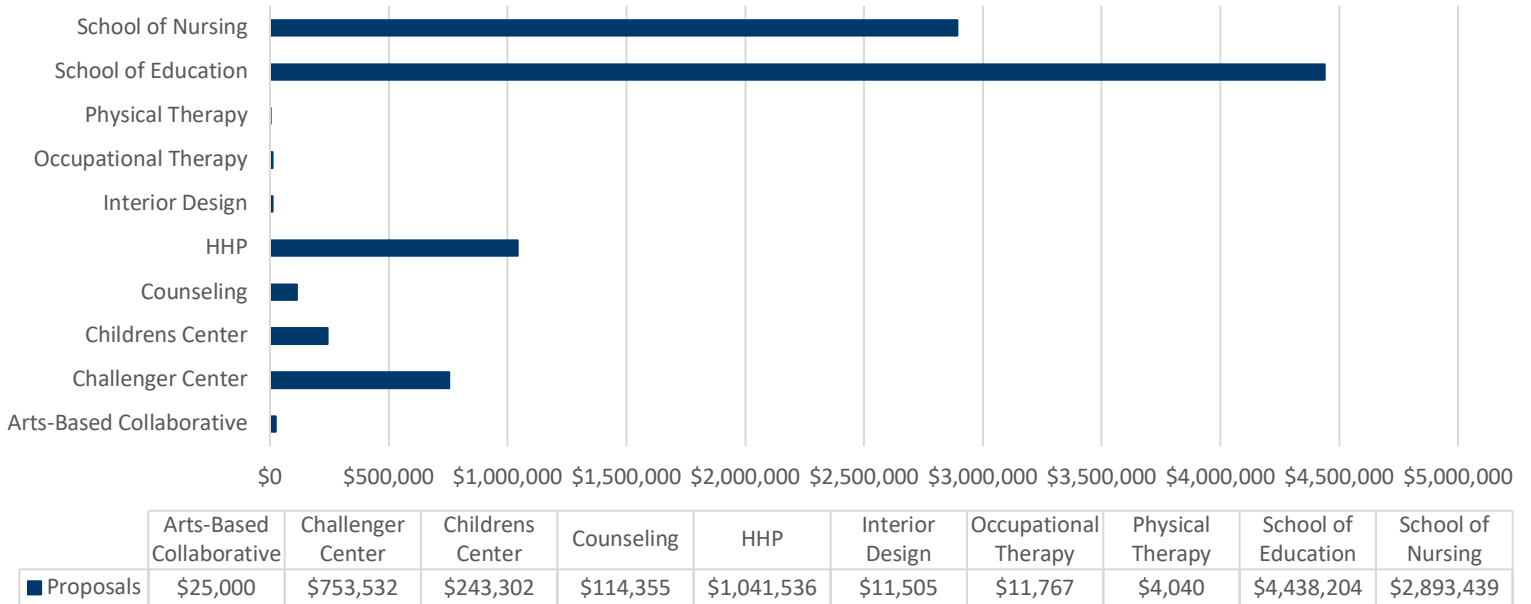
# COLLEGE OF HEALTH, EDUCATION, AND PROFESSIONAL STUDIES

## AWARDS AND PROPOSALS BY DEPARTMENT

### Awards



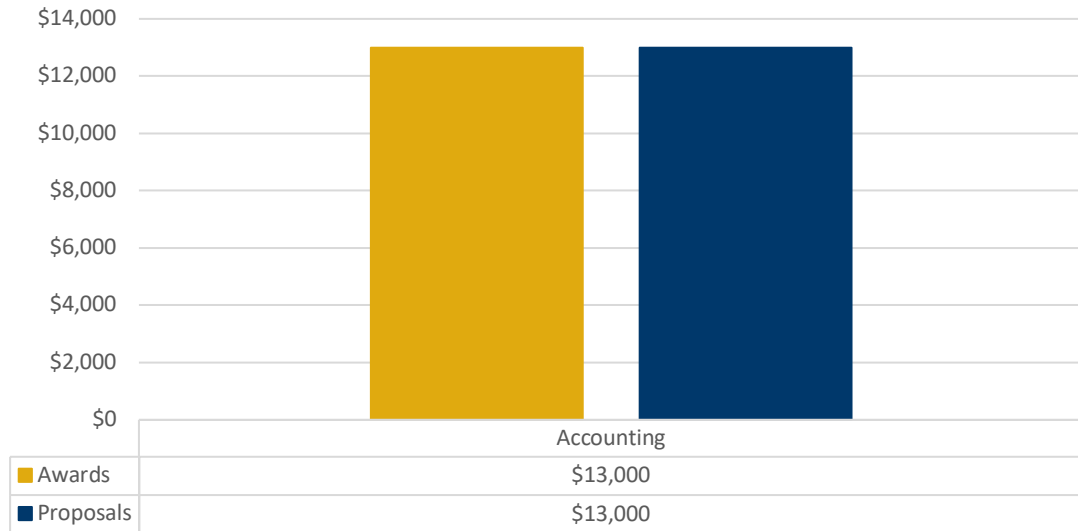
### Proposals



HHP: Health and Human Performance

# Gary W. Rollins College of Business

## AWARDS AND PROPOSALS BY DEPARTMENT

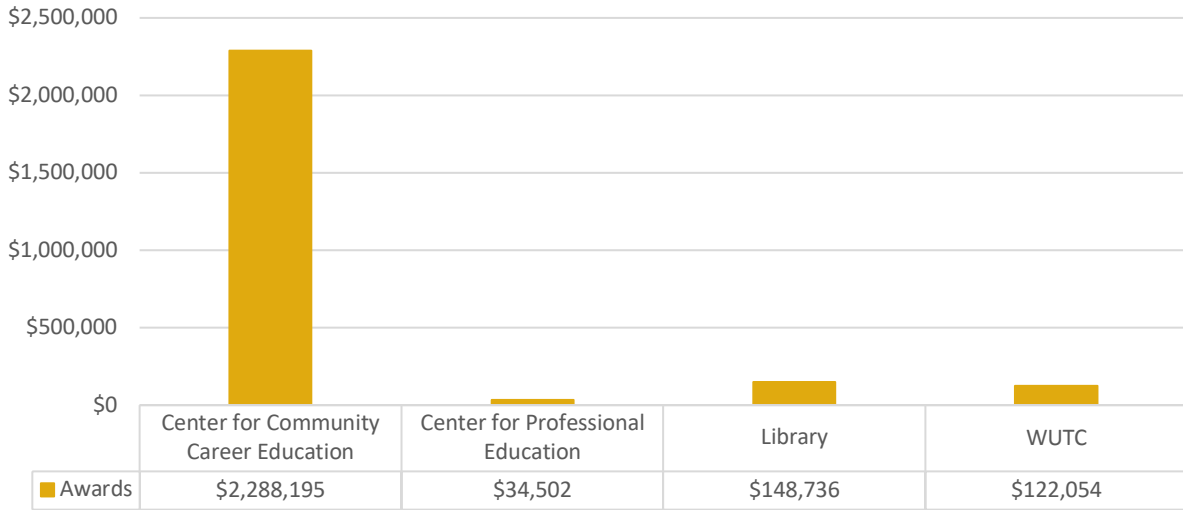




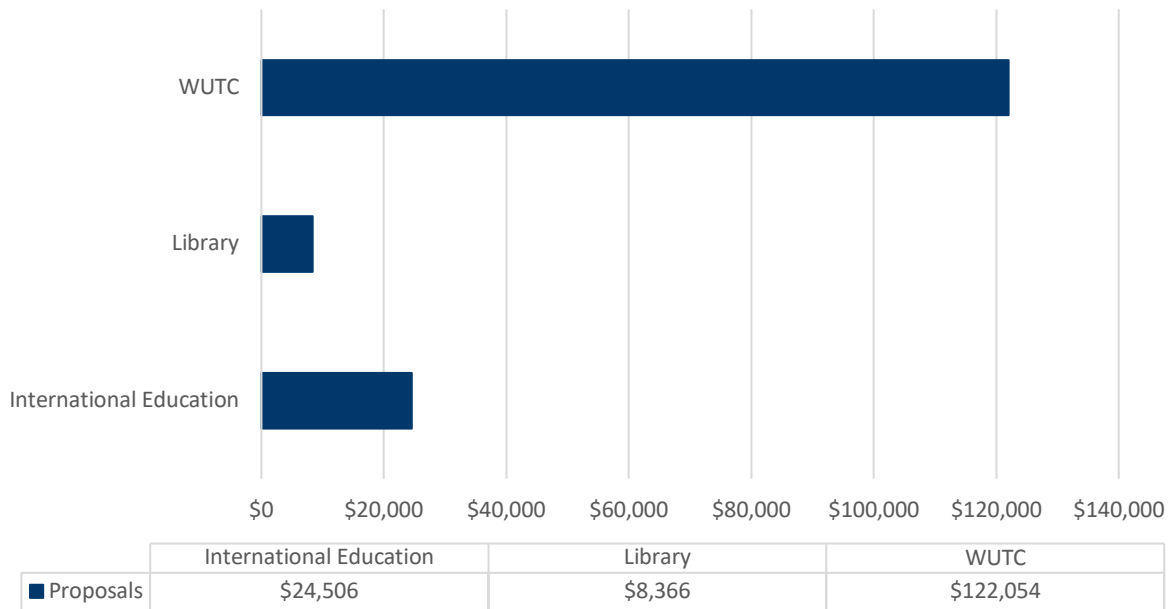
# ADMINISTRATION

## AWARDS AND PROPOSALS BY DEPARTMENT

### Awards



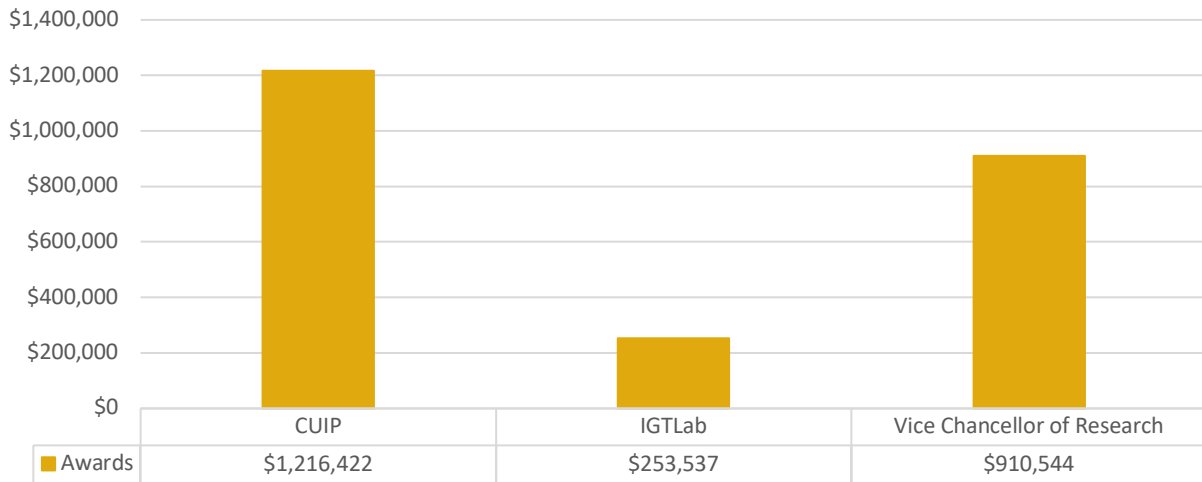
### Proposals



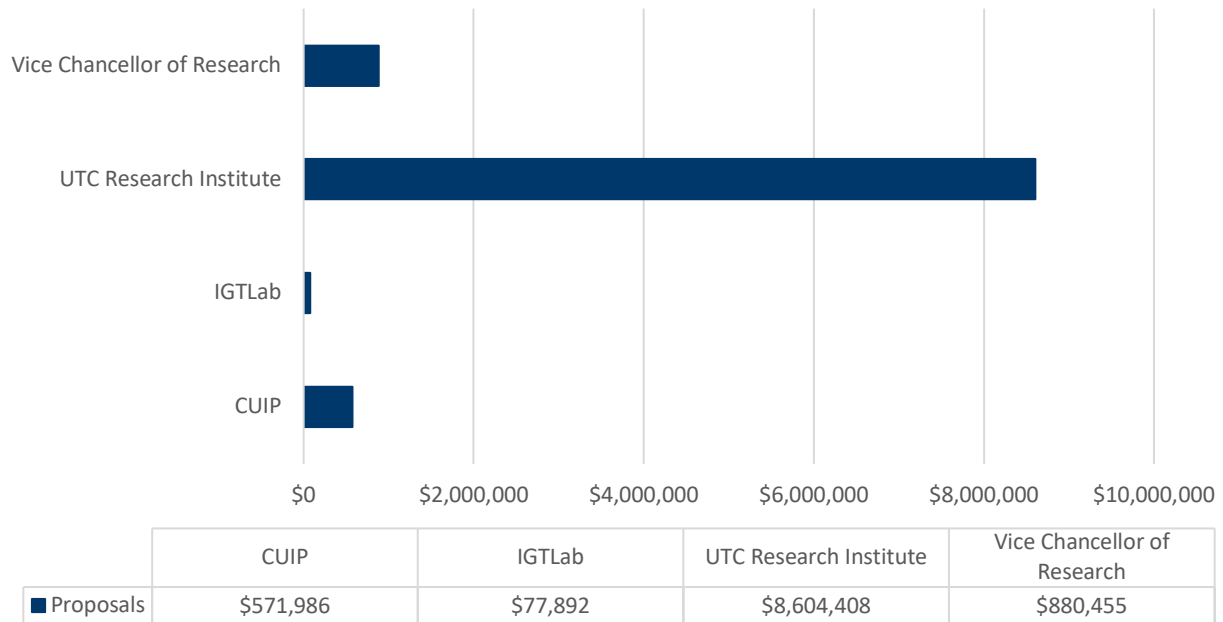
# RESEARCH DIVISION

## AWARDS AND PROPOSALS BY DEPARTMENT

Awards

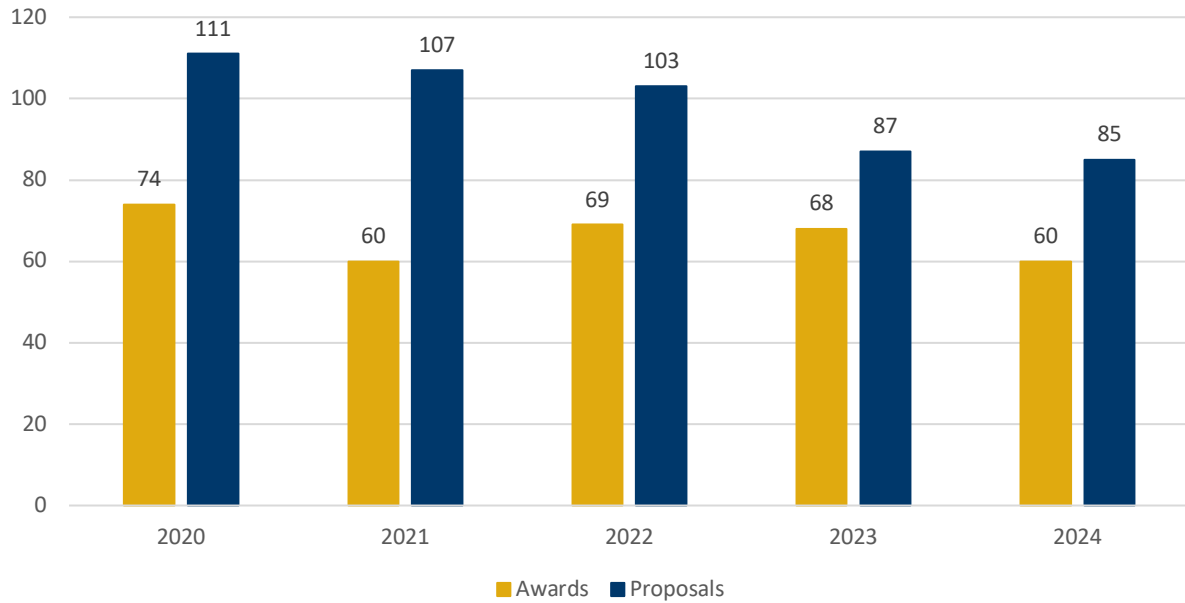


Proposals

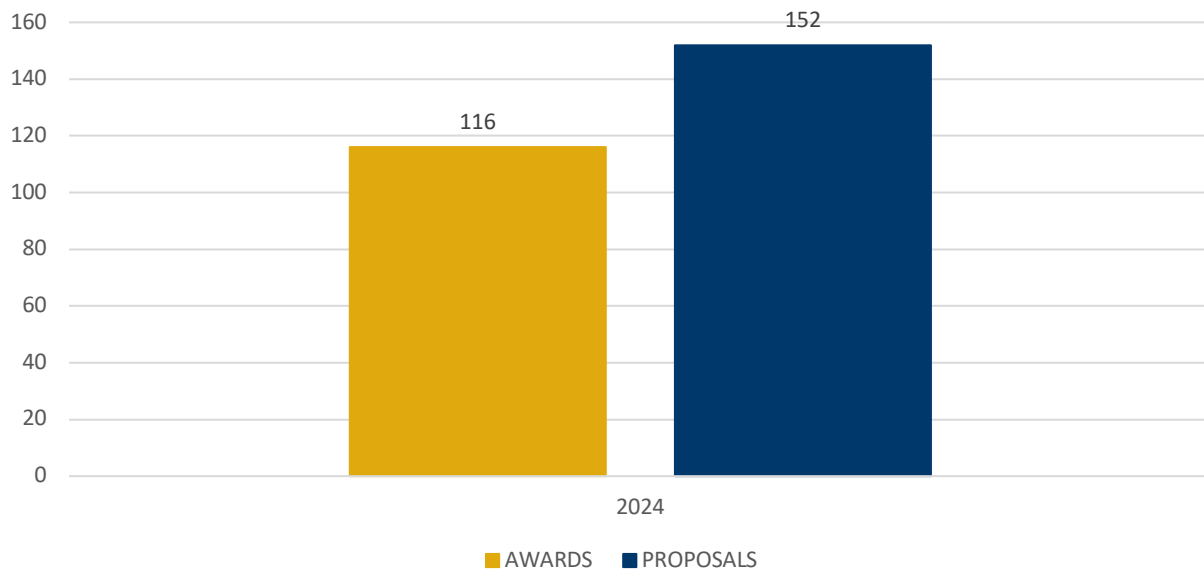


# FACULTY ENGAGEMENT

## UNIQUE LEAD PRINCIPAL INVESTIGATORS



## UTC PERSONNEL INVOLVED IN SPONSORED PROJECT ACTIVITY



# Open Publishing Support Fund Recipients

## Congratulations to UTC's Open Publishing Support Fund FY24 Recipients!

*The Open Publishing Support Fund is an internal fund that assists with expenses related to article processing charges for eligible peer-reviewed, open access journals.*



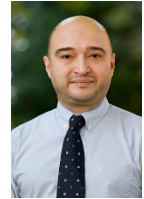
**Dr. Tomorrow Arnold (Psychology)** is the lead author on the article entitled, "Interpersonal discrimination and depressive symptoms among older Black and African American adults" which has been published in Public Library of Science.

**Dr. Edmund Baffoe-Twum (Engineering Management and Technology)** authored two articles: (1) "Mitigating Schedule Overruns in Pre-Stressed Girder Bridge Construction: Assessing Risks and Proposing Mitigation Strategies" which has been published in Ain Shams Engineering; (2) "Unveiling Effectiveness of Lean Construction Practices: A Comprehensive Study through Surveys and Case Studies" which was published in Civil Engineering Journal.



**Dr. Andrew Baley (Health and Human Performance)** is the lead author on the article entitled, "Short-term physical activity and long-term health: Environment matters," which was published in the Journal of Healthy Eating and Active Living.

**Dr. Gokhan Erdemir (Engineering Management and Technology)** authored two articles: (1) was titled "Formation Control of Multiple Autonomous Mobile Robots by Turkish Natural Language Processing" which was published in Multidisciplinary Digital Publishing Institute (MDPI); (2) was titled "Indoor surface classification for mobile robots" which was published in PeerJ Computer Science.



**Dr. John R. Graef (Mathematics)** is the lead author on the article entitled, "Oscillation of Fourth Order Nonlinear Semi-canonical Neutral Difference Equations via Canonical Transformations," which was published in Abstract and Applied Analysis.

**Dr. Donald Reising (Electrical Engineering)** is the lead author on the article entitled "An Investigation into the Impacts of Deep Learning-based Re-sampling on Specific," which was published in The Journal of Engineering.



**Dr. Gary Wilkerson (Health and Human Performance)** is the lead author on the article entitled "Concussion History and Virtual Reality Metrics Predict Core or Lower Extremity Injury Occurrence among High School Athletes," which was published in Frontiers in Sport and Active Living.

# 2024 NSF CAREER Cohort

**Best of luck to UTC's FY24 NSF CAREER proposal submission cohort!**

*The NSF CAREER program supports the research aspirations of early career faculty in pursuing intellectually rigorous and impactful scholarship in NSF-eligible areas of inquiry. The following faculty spent the better part of summer 2024 preparing for*



**Dr. Murat Barisik** (Mechanical Engineering) requested \$596,510 for a project entitled, "Multiscale characterization of heat transfer in nanoporous materials assisted by machine learning."

**Dr. Luis Sanchez Diaz** (Chemistry and Physics) requested \$598,937 for a project entitled, "Biomechanics and Rheological Properties of Escherichia Coli in Response to Ampicillin."



**Dr. Rahul Bhosale** (Chemistry and Physics) requested \$684,087 for a project entitled, "A Low-Temperature Isothermal Solar Fuel Production via a Chemical Looping Reforming of Methane and H<sub>2</sub>O and/or CO<sub>2</sub> Splitting Redox Cycle."

**Dr. Reetesh Ranjan** (Mechanical Engineering) requested \$607,371 for a project entitled, "Towards Physics-Based Modeling of Transition to Turbulence in Wall-Bounded Flows with Predictive Capabilities."



**Dr. Khalid Tantawi** (Engineering Technology and Management) requested \$681,381 for a project entitled, "Determining the Effects of the Increased Prevalence of Phosphatidylserine at the Outer Leaflet and the Change in Fatty Acid Composition on the Electrical Properties of Lipid Bilayer Membranes."

**Dr. Yunye Shi** (Mechanical Engineering) requested \$677,594 for a project entitled, "Deep-learning Assisted Experimental Characterization of Nanofuel Droplet Combustion"





# Thank you to our research partners!



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Compliance Officer,  
UTK

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**Virginia Moore**

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**THE UNIVERSITY OF TENNESSEE**  
**CHATTANOOGA**  
**Office of Research and  
Sponsored Programs**

The Office of Research and Sponsored Programs (ORSP) seeks to promote scholarship, research, creative activities, and engagement by encouraging and providing comprehensive support to faculty and staff in the pursuit of sponsored programs.



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**Jennifer Corbin**  
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# APPENDIX A: Awards and Proposals by Lead PI

Lead Investigator	Total Award Amount	Total Proposal Amount	Lead Investigator	Total Award Amount	Total Proposal Amount
<i>Acoello, Shellie</i>		\$24,583	<i>Hossain, Azad</i>	\$162,501	\$309,890
<i>Alaakam, Amir</i>	\$74,632	\$49,632	<i>Huckabay, Hunter</i>	\$749,015	
<i>Allen, Laurie</i>		\$753,532	<i>Ibrahim, Hamdy</i>	\$104,915	\$268,451
<i>Barbee, Meredith</i>	\$55,000		<i>Kaplanoglu, Erkan</i>		\$268,451
<i>Barbosa, Jose</i>		\$687,516	<i>Kendall, Catherine</i>	\$6,322	\$11,505
<i>Barisik, Murat</i>	\$389,112	\$1,193,026	<i>Ketron, Nora</i>	\$4,687	\$4,687
<i>Basham, Sherah</i>		\$186,887	<i>Kim, Jisook</i>		\$1,072,498
<i>Bathi, Jejal Reddy</i>		\$2,662,704	<i>Kim, Seong Dae</i>	\$20,683	\$1,072,498
<i>Black, Kristen</i>		\$160,740	<i>Klug, Hope</i>	\$15,801	\$15,801
<i>Booth, Jamie</i>		\$24,506	<i>Lasley, Noah</i>		\$3,679
<i>Boyd, Jennifer</i>		\$97,899	<i>Lazenby, Susan</i>	\$122,054	\$122,054
<i>Boykin, Twyler</i>	\$309,505		<i>Leasi, Francesca</i>		\$696,680
<i>Bridges, Keith</i>	\$566,988		<i>Lee, Belinda</i>	\$374,217	
<i>Cunningham, Christopher</i>	\$49,837	\$49,837	<i>Li, Tian</i>		\$4,974,198
<i>Davenport, Stephan</i>	\$13,000	\$13,000	<i>Liang, Yu</i>	\$98,273	\$1,289,675
<i>Denney, Andrew</i>		\$52,575	<i>Lynberg, Jennifer</i>	\$90,571	\$151,142
<i>Dierenfeldt, Ricki</i>		\$726,017	<i>Ma, Ziwei</i>		\$299,994
<i>Dittmar, Angela</i>		\$25,000	<i>Mahtabi, Mohammad</i>	\$105,000	\$691,079
<i>Dungey, Keenan</i>	\$10,600	\$34,780	<i>Mann, Reinhold</i>	\$910,544	\$880,455
<i>Ellington, Lucien</i>	\$37,491		<i>Manning-Berg, Ashley</i>	\$25,999	
<i>Elliot, Trevor</i>		\$200,000	<i>Mauldin, Marcus</i>	\$19,809	
<i>Ellis, Jennifer</i>	\$309,786	\$309,786	<i>McAllister, Deborah</i>	\$1,744,940	\$3,161,198
<i>Epperson, Stephanie</i>	\$499,999	\$1,388,439	<i>McElrone, Marissa</i>	\$103,994	\$103,994
<i>Erdemir, Gokhan</i>		\$957,009	<i>Melhorn, Erin</i>	\$11,767	\$11,767
<i>Ferdoush, Jannatul</i>		\$5,000	<i>Mix, Charlie</i>	\$253,537	\$77,892
<i>Fomunung, Ignatius</i>		\$3,613,498	<i>Mudali, Deborah</i>		\$88,905
<i>Freeze, John</i>	\$34,502		<i>Myers, Elizabeth</i>		\$4,040
<i>Frishcosy, Christopher</i>	\$650,000	\$1,002	<i>Oberheim, Steven</i>	\$144,355	\$144,355
<i>Gaudin, Timothy</i>		\$7,663	<i>O'Brien, Elizabeth</i>	\$57,531	
<i>Harris, Austin</i>		\$470,014	<i>Persons, Brooke</i>	\$57,531	\$20,043
<i>Harris, Bradley</i>		\$530,293	<i>Pienkos, Jared</i>		\$937,953
<i>Hartline, Megan</i>		\$23,367	<i>PolICASTRO, Christina</i>	\$36,760	\$47,953
<i>Hayes, Loren</i>		\$749,999	<i>Pratt, Allen</i>		\$615,219
<i>Hill, Linda</i>	\$19,948		<i>Qin, Hong</i>		\$18,918,646

Lead Investigator	Total Award Amount	Total Proposal Amount	Lead Investigator	Total Award Amount	Total Proposal Amount
<i>Hogg, Jennifer</i>	\$13,789	\$827,475	<i>Quinlan, Catherine</i>	\$149,957	\$149,957
<i>Hornsby, Cindy</i>	\$243,302	\$243,302	<i>Ranjan, Reetesh</i>		\$614,506
<i>Reising, Donald</i>	\$101,147	\$2,230,578	<i>Tucker, John</i>	\$12,251	
<i>Resnick, Irven</i>		\$99,998	<i>Vann, Karen</i>	\$288,470	
<i>Roache, Amber</i>	\$632,091		<i>Varol, Serkan</i>	\$10,962	\$303,542
<i>Runyon, Carolyn</i>	\$144,049		<i>Waldrop, Rachel</i>	\$373,257	\$50,000
<i>Sanchez Diaz, Luis</i>		\$1,153,876	<i>Wang, Jin</i>	\$531,246	\$3,771,391
<i>Sartipi, Mina</i>	\$1,216,422	\$4,675,919	<i>Wang, Xiunan</i>		\$400,583
<i>Schmidt, Charlene</i>	\$35,852	\$35,852	<i>Wang, Yingfeng</i>	\$58,088	\$1,154,971
<i>Shaw, Joey</i>	\$73,749	\$110,880	<i>Ward, Chandra</i>		\$168,182
<i>Shelton, Jill</i>	\$22,054	\$22,054	<i>Weerasena, Lakmali</i>		\$1,083,127
<i>Shi, Yunye</i>		\$70,000	<i>Wick, Kristina</i>	\$2,635,200	
<i>Simms-Roberson, Priscilla</i>	\$4,000	\$1,505,000	<i>Wingate, Kimberly</i>	\$102,960	\$102,960
<i>Sisworahardjo, Nurhidajat</i>	\$4,991	\$4,991	<i>Wu, Dalei</i>	\$7,326	\$607,315
<i>Smith, Morgan</i>		\$134,839	<i>Xie, Mengjun</i>	\$1,038,734	\$625,721
<i>Tanner, James</i>		\$7,500	<i>Yuan, Yukun</i>		\$374,775
<i>Tantawi, Khalid</i>	\$10,813	\$1,126,317	<i>Zahry, Nagwan</i>		\$20,000
<i>Teaford, Max</i>	\$6,853	\$13,706	<i>Zhang, Tianya</i>		\$530,461
<i>Truan, Robert</i>	\$5,000	\$5,000			
			<b>Grand Total</b>	<b>\$15,523,024</b>	<b>\$73,054,527</b>

# APPENDIX B:

## Awards by Month

### JULY 2023

Dr. Yingfeng Wang (Computer Science and Engineering) has received \$58,088 in CloudBank credit from the National Science Foundation for the project entitled, "III: Small: RUI: Investigating Fragmentation Rules and Improving Metabolite Identification Using Graph Grammar and Statistical Methods."

Dr. Lucien Ellington (School of Education) has received \$2,500 from The Jack Miller Center for Teaching America's Founding Principles and History for the project entitled, "2023 Constitution Day."

Dr. Joey Shaw (Biology, Geology, and Environmental Science) has received \$6,110 from the SWCA Environmental Consultants for the project entitled, "TC Energy Solar Project Osprey."

Dr. Joey Shaw (Biology, Geology, and Environmental Science) has received \$6,638 from the SWCA Environmental Consultants for the project entitled, "TC Energy Solar Project Kestrel."

Dr. Linda Hill (School of Nursing) has received \$19,948 from the Health Resources and Services Administration for the project entitled, "2020-24 HRSA Nurse Anesthetist Traineeships."

Dr. Joey Shaw (Biology, Geology, and Environmental Science) has requested and received \$25,000 from the Association of Southeastern Biologists (ASB) for the project entitled, "Wildflower Pilgrimage Graduate Assistant."

John Freeze and Rebecca Hurst (Center for Professional Education) have received \$34,502 from the Tennessee Office of Criminal Justice Programs for the project entitled, "JAG - Southeastern Leadership Academy 2023-2026."

Dr. Lucien Ellington and Jeffrey Melnik (School of Education) have received \$34,991 from the Freeman Foundation for the project entitled, "Freeman Foundation Teacher Development Programs 2023-2024."

Twyler Boykin (Center for Community Career Education) has received \$309,505 from the US Department of Education for the project entitled, "University of Tennessee at Chattanooga Upward Bound Math & Science."

Dr. Amber Roache (School of Nursing) has received \$632,091 from the Health Resources and Services Administration for the project entitled, "Clinical-Academic Partnerships: Breaking Down Barriers to Care 2023-27."



Dr. Hunter Huckabay (Center for Community Career Education) has received \$749,015 from the US Department of Education for the project entitled, "UTC GEAR UP Project."

Dr. Mengjun Xie, Dr. Joseph Kizza, and Dr. Hong Qin (Computer Science and Engineering) in collaboration with Tuskegee University, have received \$808,576 from the National Science Foundation for the project entitled, "Renewal: Strengthening the National Cybersecurity Workforce."

## **AUGUST 2023**

Dr. Kim Wingate and Dr. Jennifer Lynberg (School of Education), in collaboration with Chattanooga 2.0, have requested and received \$48,000 from United Way of Chattanooga for the project entitled, "Early Matters QMF Tuition Assistance Program."

Dr. Mina Sartipi (CUIP) and Dr. Chandra Ward (Sociology), in collaboration with the Chattanooga Area Regional Transportation Authority, have received \$9,615 from the US Office of Energy and Renewable Energy for the project entitled, "AI-Engine for Optimizing Integrated Service in Mixed Fleet Transit Operations."

Dr. Emma Sampson (Health and Human Performance), in collaboration with the City of Chattanooga has requested and received \$103,994 from the US Office of Minority Health for the project entitled, "UTC MPH Program Support of City of Chattanooga's CARE Coalition."

Dr. Karen Vann (Talent Search) has received \$288,470 from the US Dept. of Education for the project entitled, "UTC Talent Search."

Dr. Nurhidajat Sisworahardjo (Electrical Engineering) has requested and received \$4,991 from the Electric Power Research Institute for the project entitled, "Synthetic Smart Meter Data Generation."

Dr. Christopher Cunningham (Psychology) has received \$49,837 from Peak Performance, Inc. for the project entitled, "Continuing support for the Smart Factory Institute (Year 3)."

Dr. Mohammad Mahtabi (Mechanical Engineering) and Dr. Erkan Kaplanoglu (Engineering Management and Technology) have received \$105,000 from State of Tennessee Appropriations for the project entitled, "Commercializing Nickel Electroplated SLA Printed Die Plates for Injection Molding."

Dr. John Tucker and Dr. Dawn Ford (Biology, Geology and Environmental Science), in collaboration with the Tennessee Department of Environment and Conservation have received \$12,251 from the US Environmental Protection Agency for the project entitled, "Student Assistance with Outreach, Lead Testing, and Remediation in Child Care Facilities."

Dr. Reinhold Mann (Deputy Vice Chancellor for Research) in collaboration with the University of Kentucky has received \$30,089 from the National Science Foundation for the project entitled, "From a Carbon Centric to Circular Economy: Generating Advanced Manufacturing Excellence for Change (GAME Change) for the Southeastern Commerce Corridor."

Dr. Jennifer Ellis (School of Education) has requested and received \$309,786 from the National Science Foundation for the project entitled, "NSF Program Director Assignment 2023-25."

Dr. Jin Wang (Mathematics) and Dr. Reetesh Ranjan (Mechanical Engineering) in collaboration with the University of Florida have received \$200,000 from the National Science Foundation for the project entitled, "Fluid Dynamics and Infectious Diseases: An Integrated Modeling Framework."

Dr. Brooke Persons (Social, Cultural and Justice Studies) has received \$20,043 from the Forest Service for the project entitled, "USFS Internship Cherokee National Forest."

Dr. Mina Sartipi (CUIP), in collaboration with a Privately Owned Company, has received \$71,139 from a US federal Agency for a research project.

## SEPTEMBER 2023

Charles Mix (IGT Lab) has received \$3,084 from the City of Chattanooga for the project entitled, "Parks and Outdoors Plan Map."

Dr. Murat Barisik and Dr. Reetesh Ranjan (Mechanical Engineering) have received \$562,497 from the Office of Science for the project entitled, "First principles multiphase modeling of mesoscale gas transport in porous reactive systems."

Dr. Mina Sartipi (CUIP), Dr. Osama Osman (Civil and Chemical Engineering) and Dr. Austin Harris (CUIP) have received \$1,135,668 from the Federal Highway Administration for the project entitled, "Advanced Artificial Intelligence Research for Equitable Safety of Vulnerable Road Users."

Dr. Keith Bridges (Educational Opportunity Center) has received \$241,332 from the US Department of Education for the project entitled, "Northwest Georgia Educational Opportunity Center (NWGEOC)."

Dr. Keith Bridges (Educational Opportunity Center) has received \$325,656 from the US Department of Education for the project entitled, "Southern Appalachian Educational Opportunity Center (SAEOC)."

Dr. Donald Reising (Electrical Engineering) has received \$4,784 from the Electric Power Research Institute for the project entitled, "OpenZmeter Security and Data Analytics Integration."

Dr. Brooke Epperson, Tessa Mullinax-Baker, Dr. Rosebelle Peters, Dr. Jenny Holcomb, Rachel Nall, Michelle Rosano (School of Nursing), and Laurie Allen (Arts-Based Collaborative) have received \$499,999 from the Health Resources and Services Administration for the project entitled, "AHEAD-RN."

Dr. Jin Wang (Mathematics), and Dr. Gregory Heath (Health and Human Performance) have received \$331,246 from the National Institutes of Health for the project entitled, "Mathematical Modeling and Scientific Computing for Infectious Disease Research."

Dr. Donald Reising (Electrical Engineering) in collaboration with Purdue University has received \$50,000 from the Department of Defense for the project entitled, "2020 SCALE Consortium - Radiation-Hard Microelectronics Workforce Development Consortium."

Dr. Elizabeth O'Brien (Counseling) in collaboration with the Tennessee Department of Education has received \$57,531 from the US Department of Education for the project entitled, "Increasing School-Based Mental Health Services in Rural Tennessee School Districts."

Dr. Carolyn Runyon (Library), and Albert Salatka have received \$144,049 from the National Historical Publications and Records Commission for the project entitled, "One of the Black Legislators: Providing Access to the Tommie F. Brown Papers."

Christopher Frishcosy (Civil Engineering) has received \$650,000 from the Tennessee Valley Authority for the project entitled, "Coal Combustion Residual Characterization Laboratory."

Dr. Deborah McAllister (School of Education) in collaboration with Vanderbilt University has received \$35,555 from the National Aeronautics and Space Administration for the project entitled, "Elementary and Middle Grades STEM."

## **OCTOBER 2023**

Dr. Jennifer Hogg (Health and Human Performance) has received \$13,789 from Trazer, Inc. for the project entitled, "Reliability and Validity of Trazer XP."

Dr. Priscilla Simms-Roberson (School of Nursing) has received \$4,000 from CVS Health for the project entitled, "2023-2024 CVS Health Foundation FNP/PA Scholarship."

## **NOVEMBER 2023**

Dr. Meredith Barbee (Chemistry) has received \$55,000 from the American Chemical Society for the project entitled, "Expanding Covalent Mechanochemistry to Commonly Used Polymer Materials."

Cindy Hornsby (Children's Center) has received \$144,471 from the Tennessee Department of Human Services for the project entitled, "TDHS/HHS Child Care Stabilization Funds Round 3 – Brown Academy."

Cindy Hornsby (Children's Center) has received \$98,831 from the Tennessee Department of Human Services for the project entitled, "TDHS/HHS Child Care Stabilization Funds Round 3 – Battle Academy."

Dr. Hope Klug (Biology, Geology and Environmental Science) has received \$15,801 from the National Science Foundation for the project entitled, "The Operation of Sexual Selection Revisited."

Dr. Ashley Manning-Berg (Biology, Geology and Environmental Science) has received \$25,999 from the US Geological Survey for the project entitled, "Tennessee Water Resources Research Center Program."

Dr. Robert Truan (Music) has received \$5,000 from the Tennessee Arts Commission for the project entitled, "Jerry Tachoir Musical Performance."

## **DECEMBER 2023**

Dr. Christina Policastro and Dr. Karen McGuffee (Social, Cultural and Justice Studies) have received \$36,760 from the Tennessee Coalition to End Domestic and Sexual Violence for the project entitled, "2024 Senator Tommy Burks Victim Assistance Academy."

Dr. Max Teaford (Psychology) in collaboration with Ohio State University has received \$6,853 from the Department of Defense for the project entitled, "Identifying Adverse Modes via Human-Machine Cybernetic Modeling."

Dr. Kristina Wick, Dr. Latisha Toney, Dr. Sarah Treat (School of Nursing), Dr. Shewanee Howard-Baptiste, Dr. Amir Alakaam (Health and Human Performance), Dr. Cathy Scott (Social Work), and Dr. Erin Melhorn (Occupational Therapy), have received \$2,635,200 from the Tennessee Department of Health for the project entitled "Rural Health and Older Adult Interprofessional Mobile Health and Workforce Recruitment Program."

## **JANUARY 2024**

Dr. Yu Liang, Dr. Yingfeng Wang, Dr. Dalei Wu (Computer Science and Engineering), and Dr. Zibin Guo (Social Cultural and Justice Studies) in collaboration with the AI/Machine Learning Consortium to Advance Health Equity and Researcher Diversity have received \$98,273 from the National Institute of Health for the project entitled, "Generation of AI-enabled Diagnostic and Therapeutic Music from Biometric Data to Promote Equity of Medical Services."

Dr. Marcus Mauldin (Political Science and Public Service) has received \$19,809 from the City of Chattanooga for the project entitled, "Chattanooga Social Equity Study Proposal."

Dr. Steven Oberheim (Counseling), Dr. Megan McKnight, and Dr. Jami Hargrove (Center for Wellbeing) have received \$114,344 from the Hamilton County Government for the project entitled, "Development of a Clinical Addictions Studies Certificate Program."

Dr. Mengjun Xie (National Center Academic Excellence of Cyber Defense) in collaboration with Purdue University has received \$230,158 from the National Security Agency Central Security Service for the project entitled, "Continue, Sustain, & Expand the NCAE-C AI Cybersecurity Workforce Certification Based Training. Program."

Catherine Kendall (Interior Design) has received \$6,322 from the Tennessee Board of Architectural and Engineering Examiners for the project entitled, "2024 Professional Exam Fees and First Year Supplies."

Dr. Seong Dae Kim (Engineering Management and Technology), Dr. Eun Young Kim (Interior Architecture and Design) and Dr. Sungwoo Yang (Civil & Chemical Engineering) have received \$20,683 from the Tennessee Board of Architectural and Engineering Examiners for the project entitled, "2024 TBAEE Funding – Engineering Management & Technology"

Dr. Jennifer Lynberg (School of Education) has received \$55,571 from the Tennessee Department of Education for the project entitled, "2024 Governor's School."

Dr. Azad Hossain (Biology, Geology and Environmental Science) has received \$9,892 from the Tennessee Wildlife Resources Agency for the project entitled, "Web GIS for Urban Stream Project."

Dr. Donald Reising (Electrical Engineering) and graduate student Joshua Tyler have received \$5,000 from the University of Tennessee Research Foundation for the project entitled, "Advanced Waveform Resampling."

Dr. Hamdy Ibrahim (Mechanical Engineering) and Dr. Stephanie Philipp (School of Education) have received \$104,915 from the National Science Foundation for the project entitled, "CAREER: Hybrid Surface Coating Toward Corrosion-Controlled Magnesium-Based Implants."

## **FEBRUARY 2024**

Dr. Charlene Schmidt (Health and Human Performance) has received \$35,852 from Welcome Home of Chattanooga for the project entitled, "Developing a Nutrition Program for Welcome Home Chattanooga."

Dr. Amir Alakaam (Health and Human Performance) has received \$49,632 from the City of Chattanooga for the project entitled, "Nutrition Education Program."

Dr. Donald Reising (Electrical Engineering) and Dr. Mohamed Fadul have received \$22,341 from a governmental entity for a research project.

Dr. Dalei Wu, Dr. Roland Howell, Dr. Yu Liang and Dr. Yukun Yuan (Computer Science and Engineering), have received \$7,326 from the Volkswagen Group of America for the project entitled, "Gateway Programming with CAPL/Vector/CANalyzer Tool."

## **MARCH 2024**

Dr. Khalid Tantawi (Mechanical Engineering), in collaboration with Motlow State Community College, has received \$4,907 from the National Science Foundation for the project entitled, "Preparing the Workforce for Industry 4.0's Intelligent Industrial Robotics."

Dr. Deborah McAllister (School of Education) has received \$17,500 from the Georgia Tech Research Institute for the project entitled, "Inspiring NASA's Next Generation through Building, Coding, and Machine Learning Missions."

## **APRIL 2024**

Dr. Erin Melhorn (Occupational Therapy), Dr. Stephanie Eton, Dr. Jessica Hackathorne, and Dr. Carolyn Padalino (Physical Therapy) have received \$11,767 from the Alliance of Women Philanthropists for the project entitled, "Empowering Independence: Establishing an Innovative Aging in Place Lab for the Occupational and Physical Therapy programs at UTC."

Dr. Serkan Varol (Engineering Management and Technology) has received \$10,962 from Volkswagen Group of America for the project entitled, "Engineering & Planning Center at VW- Engineering Management and Technology at UTC."

Dr. Murat Barisik (Mechanical Engineering) has received \$199,997 from the National Science Foundation for the project entitled, "Molecular-level Characterization of Water-in-Salt Electric Double-Layer Capacitors: Nanoscale Thermal Effects on Differential Capacitance."



Dr. Khalid Tantawi (Engineering Management and Technology) has received \$5,906 from the REmpowering Schools for the project entitled, "Integrating Wind Energy in the Mechatronics Education."

Dr. Azad Hossain (Biology, Geology and Environmental Science) and Dr. Hong Qin (Computer Science and Engineering) have received \$152,609 from the National Aeronautics and Space Administration for the project entitled, "Remote Sensing of Water Quality in the Tennessee River."

Dr. Jill Shelton (Psychology) in collaboration with Florida International University has received \$22,054 from the Mental Research Institute for the project entitled, "The Role of Self and Others in the Internalization of Disability Identity."

Dr. Deborah McAllister, Dr. Jason Gordon, Dr. Jennifer Lynberg (School of Education), and Dr. Aniekan Ebiefung (Mathematics) have received \$1,691,885 from the National Science Foundation for the project entitled, "Graduate Yearlong Experience and Residency for Acquiring STEM Teaching Competencies."

Nora Ketron and Katie Gohn (Library) have received \$4,687 from the Alliance of Women Philanthropists for the project entitled, "UTC Library Whole Student Wellness Collection."

## **MAY 2024**

Dr. Keenan Dungey, Dr. Jared Pienkos, Dr. Luis Sanchez Diaz, and Dr. Wang Yong Yang (Chemistry and Physics) have received \$9,600 from the American Chemical Society for the project entitled, "2024 ACS Project SEED at UTC."

Charles Mix and Nyssa Hunt (IGTLab) have received \$200,685 from the City of Chattanooga for the project entitled, "Take Root: Analyzing, Mapping, and Restoring Chattanooga's Urban Forests."

Susan Lazenby (Radio Station) has requested and received \$122,054 from the Corporation for Public Broadcasting for the project entitled, "2024 WUTC Radio Community Service Grant."

Dr. Belinda Lee (Center for Community Career Education) has received \$374,217 from the US Department of Education for the project entitled, "University of Tennessee at Chattanooga Upward Bound Program."

Dr. Joey Shaw and Dr. Stylianos Chatzimanolis (Biology, Geology and Environmental Science) have requested and received \$36,001 from the Electric Power Board of Chattanooga for the project entitled, "2024 Survey for Nine EPB Rights-of-Way."

Charles Mix (IGTLab) has received \$44,028 from the Southeast Aquatic Resources Partnership for the project entitled, "Aquatic Connectivity Barrier Geospatial Data Validation, Phase II."

Charles Mix and Nyssa Hunt (IGTLab) have received \$2,806 from the Sudbury Valley Trustees for the project entitled, "Sudbury Valley Trustees Web Map and Applications Enhancements."

Dr. Kimberly Wingate (School of Education) has received \$54,960 from the Tennessee Department of Education for the project entitled, "Occupational Educator Scholarships 2024-27."

John Freeze (Center for Professional Education) and Rebecca Hurst have received \$34,502 from the Tennessee Office of Criminal Justice Programs for the project entitled, "JAG - Southeastern Leadership Academy 2023-2026."

## **JUNE 2024**

Dr. Donald Reising (Electrical Engineering) and Dr. Tian Li (Chemistry and Physics) have received \$19,022 from the Tennessee Technological University for the project entitled, "Beginnings: Creating and Sustaining a Diverse Community of EQUIS Across the Southeastern US."

Charles Mix (IGTLab) has received \$2,934 from the Enterprise Center for the project entitled, "Affordable Connectivity Plan Impact Spatial Analysis and Mapping."

Dr. Jennifer Lynberg and Dr. Krysta Murrillo (School of Education) have requested and received \$35,000 from the United Way of Chattanooga for the project entitled, "Childcare Educators Workshop."

Dr. Amir Alakaam (Health and Human Performance) has received \$25,000 from the City of Chattanooga for the project entitled, "Nutrition Education Program."

Dr. Stephan Davenport and Dr. Spencer Ursey (Accounting) have requested and received \$13,000 from the Urban League of Greater Chattanooga, Inc. for the project entitled, "2023-24 IRS/Volunteer Income Tax Assistance Matching Grant Program"

Catherine Quinlan (English) and Dr. Lucy Schultz (Philosophy and Religion) have received \$149,957 from the National Endowment for the Humanities for the project entitled, "Implementing a Humanities-Informed Environmental Studies Major at the University of Tennessee at Chattanooga."

