

**University Research Committee
2021-2022 Annual Report**

Charge

1. To encourage and promote scholarship, research, and creative endeavors among all faculty members of the University.
2. The Committee's responsibilities include, in particular, the evaluation of applications for intramural research funds and the allocation of these funds among bargaining unit faculty members.
3. More generally, they include advising and making recommendations to the Chief Research Officer on practices and policies conducive to scholarly activity.

Membership

2020-2022 Faculty Appointments

Ranadeb Chaudhuri (SBA) - Co-Chair

Zorica Kauric-Klein (SON)

Matthew Fails (CAS) - Co-Chair

Rob Sidelinger (CAS)

Todd Shackelford (CAS)

Crystal Van Kooten (CAS)

2021-2023 Faculty Appointments

Sara Arena (SHS)

Xia Wang (SECS)

Michael Kranak (SEHS)

Zissimos Mourelatos - Graduate Council
Representative

2021-2022 Ex-Officio Appointments

Dave Stone (Chief Research Officer)

Susan Willner (Research Office) Coordinator

Meetings and actions

All URC business during the 2021-2022 academic year was conducted online.

Three synchronous meetings took place on September 29, 2021, November 11, 2021, and April 20, 2022.

As is custom for the URC, the vast majority of committee work consists of the careful reading, evaluating, and scoring proposals for internal funding awards, and URC members complete this work on their own time. Meetings of the full URC tend to focus on discussing cumulative proposal scores, developing consensus on award recipients, and discussing potential policy changes to better achieve the URC's stated goals. URC co-chairs would like to recognize the outstanding work of all URC members. Each member completed their tasks thoroughly and promptly, allowing URC meetings to proceed quickly and efficiently.

Recommendations

The URC made several recommendations that focus on modernizing and maximizing the inclusiveness and equity of the university's internal funding opportunities.

1. On March 9, 2022, the URC voted to approve increasing the page allotment maximum award amount from \$350 to \$500. As open-access publishing has become more common, especially in certain disciplines, increasing this amount allowed the URC to fund a larger portion of these publication fees. A full list of these awards is included below.
2. At our April 20, 2022 meeting the URC voted to approve one recommendation related to the **Research Excellence** and **New Investigator** awards. Specifically, we recommend that the call for each award be revised to explicitly allow for self-nominations. Allowing self-nominations should encourage a larger and potentially more diverse applicant pool. The language should be revised to:
 - “Candidates may nominate themselves or may be nominated by others.”
3. At our April 20, 2022 meeting, the URC recommended that future **Faculty Fellowship** scoring procedures be amended to collect information on whether an applicant is untenured. This is not a recommended change to the call for proposals, but rather a suggestion to future URC members to collect systematic data on this issue, to determine the share of awardees who are tenured versus untenured.

2022-2023 URC leadership

At our April 20, 2022 meeting, Sara Arena (SHS) and Michael Kranak (SEHS) volunteered to serve as Co-Chairs of the URC for the 2022-2023 academic year.

Notes

We are grateful for the expertise and diligence of Sue Willner, the URC administrative coordinator, who managed our submission and review systems and provided other essential support. Sue participated in all URC meetings and is a tremendous source of institutional knowledge. The URC could not function without her assistance.

Respectfully submitted,

Matthew Fails, Associate Professor of Political Science
Co-Chair, URC 2021-2022
Ranadeb Chaudhuri, Associate Professor of Finance
Co-Chair, URC 2021-2022

UNIVERSITY RESEARCH COMMITTEE - FY22 Annual Report

Balance Carried Forward from FY21	9,412	
Budget FY22	350,000	
Total Budget for FY22	\$359,412	
Faculty Research Fellowship Awards	289,844	29 Awards
Stipend Fringe Charge	5,417	2.45% of stipends
Faculty Research Grant	33,900	17 awards
Faculty Books and Reprints	3,575	7 awards
Meadow Brook Hall Conference	0	no applicants
President Colloquium Series	0	1 award, funded by president
Faculty Research Excellence Award	0	1 award, funded by provost
New Investigator Research Excellence Award	0	1 award, funded by provost
Total URC Awards	\$332,736	
Balance Carried Forward FY23	\$26,676	

Note: Shicheng Chen's \$10,000 FY22 Fellowship Award will be made payable in FY23. Currently the General Ledger balance is \$36,676, of which only \$26,676 is available.

Faculty Research Grant Awards

Awardee	Project Title	Award
Claude Baillargeon Department of Art and Art History	The Photography of Wendel White: Imaging the Racialized Experiences of the Black Community	\$2,000
G. Rasul Chaudhry Department of Biology	Treatment of retinal degeneration using cell therapy in an animal model	\$2,000
Sumit Dinda Department of Clinical Diagnostic Sciences	The Effects of Turmeric (Curcumin) on Estrogen Receptor Alpha and Tumor suppressor gene (p53) in MCF7 Breast Cancer Cells	\$2,000
Mary Jamieson Department of Biological Sciences	Understanding how strawberry phytochemistry contributes to pathogen resistance	\$2,000
Lan Jiang Department of Biological Sciences	Role of a Novel Rho GEF CG33275 in Tracheal Tube expansion	\$2,000
Thayer Jonutz Department of Dance	Hammer and Nail	\$2,000
Elizabeth Kattner-Ulrich Department of Dance	Continuation of Floating Heavily - German to English Translation of Book Schweres Schweben: Qualitäten der gravitas in Pina Bauschs Orpheus und Eurydike (Floating Heavily: Qualities of Gravitas in Pina Bausch's Orpheus and Eurydice) on Choreographer Pina Bausch	\$2,000
Dae-Kyoo Kim Department of Computer Science and Engineering	Cross-Language Code Clone Detection Using Deep Learning with InferCode	\$2,000
Julia Paul School of Nursing	Chronic Wound Tissue Analysis for Markers of Itch	\$2,000
Maria Smith-Bohannon Department of Art and Art History	Sustainable Activism: A Visual Study of Words Connected to Climate Change	\$2,000
Tian Tian Department of Music	Piano Pedagogy Workshop with the renowned Robert McDonald	\$1,900
Emily Van Wasshenova Department of Interdisciplinary Health Sciences	A Physical Activity Intervention in Cancer Survivors: Request for Equipment	\$2,000
Jennifer Vonk Department of Psychology	Innocent Until Proven Black?: The Impact of Race on Information Seeking after Presumptions of Guilt or Innocence	\$2,000
Yuejian Wang Department of Physics	Thermal Stability of Silicon Nitride	\$2,000
Alison Woerner Department of Dance	Arts Education Impact Outreach Pilot Program: Impacting Lives Through Dance	\$2,000
Colin Wu Department of Chemistry	Assessing the cancers risks of BRCA1 variants	\$2,000
Virgil Zeigler-Hill Department of Psychology	Narcissism and Attitudes Toward Affirmative Action Programs: The Roles of Social Worldviews and Race	\$2,000

Total Faculty Research Grant Awards \$33,900

Faculty Research Fellowship Awards

Awardee	Project Title	Award
Zeina Alsalman Department of Economics	Where do Unemployed Workers Go After Oil Price Shocks? Evidence from Short-, Medium- and Long-term Unemployed	\$10,000
Seyed Ali Arefifar Department of Electrical and Computer Engineering	Power Quality Improvement in Energy Systems using Power Transformers	\$10,000
Sarah Beetham Department of Mechanical Engineering	Simulation and Modeling of Carbon Capture for On-Board Vehicle Applications	\$10,000
Catherine Bennett Department of Music	Inclusion and Cultural Responsiveness in South American Music Education	\$10,000
Thomas Bianchette Department of Chemistry	Paleoenvironmental Reconstruction from Boreholes in the Southern Peruvian Andes: A Multisite and Multiproxy Investigation of Climate, Anthropogenic Impacts, and Water Resources	\$9,844
Shicheng Chen Department of Clinical and Diagnostic Sciences	Interactions Between Gut Microbiota and Endosymbiont in Vector Mosquito (<i>this research funding will be awarded in FY23</i>)	\$10,000
Yu-chuan Chen Department of Art and Art History	Photographic Wuyi: The Late Nineteenth Century and Early Twentieth Centuries	\$10,000
Elizabeth Delorme-Axford Department of Biological Sciences	Post-Transcriptional RNA Modification as a Mechanism for Regulating Autophagy	\$10,000
David Dulio Department of Political Science	Campaigns and Elections American Style	\$10,000
Todd Estes Department of History	Political Professionals and the Creation of the Permanent Campaign in Early U.S. Political History (1787-1805)	\$10,000
Stephen Goody Department of Art and Art History	Observation Station and the Empirical Landscape	\$10,000
Kevin Grimm Department of English	Sir Thomas Malory, Prisoner; Sir Thomas Malory, Our Contemporary	\$10,000
Katie Hartsock Department of English	Songs of the Iliad	\$10,000
Tamas Horvath Department of Mathematics and Statistics	Moving Mesh Techniques for Compressible Gas Dynamics	\$10,000
Rebecca Josephy Department of Modern Languages and Literatures	Crime and the Occult in World Literature: Essays on Magic and Magicians in the Mystery and Detective Fiction Genre	\$10,000
Jaemin Kim Department of Management and Marketing	Expanding Organizational Attention to ESG: From the Perspective of Attentional Triangulation	\$10,000
Zacharias Kinney Department of Chemistry	Tuning the Luminescence of Pyridine-Terminated β -Naphthodithiophenes	\$10,000
Shailesh Lal Department of Biological Sciences	Molecular and Biochemical Characterization of Core Minor Spliceosomal Proteins essential for Normal Cell Differentiation and Development	\$10,000
Qunfeng Liao Department of Accounting and Finance	The Impact of Executive Ethnic Diversity on Real Earnings Management	\$10,000

Zijuan Liu Department of Biological Sciences	Arsenic Biotransformation and Detoxification in Agaricus Bisporus (white button mushroom)	\$10,000
Steven Louis Department of Electrical and Computer Engineering	Developing an Artificial Spintronic Neuron with a Synthetic Antiferromagnetic Junction	\$10,000
Alexander Rusakov Department of Chemistry	Reliable Models of Heavy-Element Compounds	\$10,000
Hon Yiu So Department of Mathematics and Statistics	Imputation of Missing Data in One-shot Device: A Machine Learning Approach	\$10,000
Fei Song Department of Decision and Information Sciences	Does ESG-related Reputational Risk Have a Silver Lining? An Empirical Examination of Its Impact on Firm Environmental Stewardship	\$10,000
Emily Spunaugle Library	Women's Benevolent Publications in the Long Eighteenth Century	\$10,000
Chiaoning Su Department of Communication, Journalism, and Public Relations	Journalists as Affective Communities: Examining Affect, Emotion, and Trauma in Covering 2019 Hong Kong Protests	\$10,000
Kasaundra Tomlin Department of Economics	Reverse Vertical Foreign Direct Investment and Antidumping Duties	\$10,000
Steven Wilson Department of Computer Science and Engineering	A Computational Investigation of Cross-Lingual Bursts of Twitter Activity about COVID-19 Vaccines	\$10,000
Ziming Yang Department of Chemistry	Biogeochemistry of Phosphorus in the Lake Michigan Sand Dune Ecosystem	\$10,000

Total Faculty Research Fellowship Awards \$289,844

Faculty Publishing Awards

Awardee	Publication Title	Award
Thomas Bianchette Department of Chemistry	A 4000-year Paleoenvironmental Reconstruction and Extreme Event Record from Laguna Nuxco, Guerrero, Mexico	\$500
Jingshu Chen Department of Computer Science and Engineering	Conference Paper, title TBD	\$500
Daniel Goble Department of Human Movement Science	Test–Retest Reliability of the Balance Tracking System Modified Clinical Test of Sensory Integration and Balance Protocol Across Multiple Time Durations	\$500
Yongjin Lu Department of Mathematics and Statistics	Fully Automatic Top Coat Layer Recognition in Thermal Barrier Coating Images	\$675
Gary McDonald, Anqi Wang Department of Mathematics and Statistics	Analysis of State Homicide Rates Using Statistical Ranking and Selection Procedures	\$500
Lakshmi Raman Department of Psychology	Do Preschoolers and Adults Think That Academic and Athletic Abilities are Inherited? A Pilot Study	\$400
Kanako Taku Department of Psychology	Differences Between Posttraumatic Growth and Resiliency: Their Distinctive Relationships with Empathy and Emotion Recognition Ability	\$500

Total Faculty Publishing Awards \$3,575

Faculty Research Excellence Award

Shunan Zhao, Department of Economics - \$2,500

Faculty New Investigator Research Excellence Award

Betty Tonui, Department of Social Work - \$1,500

President Colloquium Series Award

Kwame Sakyi, Department of Public and Environmental Wellness - \$1,000