RESEARCH CELEBRATION

Highlighting research achievements; Honoring first-time PIs and new PI Millionaires.

April 6, 2023 | 2:30 PM
Maxine A. Smith University Center
River Room
A TENNESSEE FLAGSHIP
CARNEGIE R1 RESEARCH INSTITUTION
Welcome
Bill Hardgrave
President
University of Memphis

FY 2022 Achievements & Faculty Recognition
Jasbir Dhaliwal
Executive Vice President
Division of Research & Innovation

Arthur C. Graesser Presidential Award for Lifetime Achievement in Research
Dr. Dipankar Dasgupta

Class of 2023 PI Millionaires
This year’s PI millionaires join 121 of their UofM colleagues in achieving this prestigious designation.

#122
Tracy Collins
Loewenberg College of Nursing

#123
Ali Fatemi
Department of Mechanical Engineering

#124
Melissa Hirschi
Department Of Social Work

#125
Marian Levy
School of Public Health

#126
Kathryn Ramsey
Cecil C. Humphreys School of Law

#127
John Sabatini
Institute for Intelligent Systems

#128
Daniel Schaffzin
Cecil C. Humphreys School of Law

#129
Eraina Schauss
Counseling, Educational Psychology & Research

#130
Matthew Smeltzer
School of Public Health

#131
Steven West
Counseling, Educational Psychology & Research

#132
Jeremy Whittaker
Loewenberg College of Nursing

#133
Kan Yang
Department of Computer Science

#134
Todd Zoblotsky
Center for Research in Educational Policy
<table>
<thead>
<tr>
<th>Department</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Services</td>
<td>Alisha Rose</td>
</tr>
<tr>
<td>College of Health Sciences</td>
<td>Tracy Bruen, Jacquelyn Pence, Chidambaram Ramanathan, Michelle Stockton</td>
</tr>
<tr>
<td>Department of Biological Sciences</td>
<td>Charles Kubicek</td>
</tr>
<tr>
<td>Department of Biomedical Engineering</td>
<td>Carl Herickhoff</td>
</tr>
<tr>
<td>Department of Civil Engineering</td>
<td>Farhad Jazaei</td>
</tr>
<tr>
<td>Department of Computer Science</td>
<td>Xiaolei Huang, Weizi Li, Christos Papadopoulos, Myounggyu Won, Kan Yang</td>
</tr>
<tr>
<td>Department of Criminology and Justice</td>
<td>Timothy McCuddy</td>
</tr>
<tr>
<td>Department of Earth Sciences</td>
<td>Youngsang Kwon</td>
</tr>
<tr>
<td>Department of English</td>
<td>Jerome Cusson</td>
</tr>
<tr>
<td>Department of Mathematical Sciences</td>
<td>Misty Freeman</td>
</tr>
<tr>
<td>Department of Mechanical Engineering</td>
<td>Daniel Foti</td>
</tr>
<tr>
<td>Department of Physics and Materials Science</td>
<td>Shawn Pollard, Joanne Rhodes</td>
</tr>
<tr>
<td>Department of World Languages and Literatures - Spanish</td>
<td>Adoracion Berry, Diana Ruggiero</td>
</tr>
<tr>
<td>Engineering Student Services &amp; Diversity</td>
<td>Isaiah Surbrook</td>
</tr>
<tr>
<td>Department of Business Information and Technology</td>
<td>Huigang Liang, Napoleon Overton</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Ryan Hall</td>
</tr>
<tr>
<td>Instruction and Curriculum Leadership</td>
<td>Thouraya Al-Nasser, Sandra Nichols</td>
</tr>
<tr>
<td>Loewenberg College of Nursing</td>
<td>Tracy Collins, Bradley Harrell, Larry Slater, Jeremy Whittaker</td>
</tr>
<tr>
<td>Public Safety Institute</td>
<td>William Gibbons</td>
</tr>
<tr>
<td>Rudi E. Scheidt School of Music</td>
<td>Josef Hanson</td>
</tr>
<tr>
<td>School of Public Health</td>
<td>Jennifer Turchi</td>
</tr>
<tr>
<td>School of Public Health</td>
<td>Yu Jiang, Abu Mohammed Naser Titu, Mark Hendricks</td>
</tr>
<tr>
<td>Student Academic Success</td>
<td>Ophrah Payne</td>
</tr>
</tbody>
</table>
FY22 RESEARCH PROFESSORSHIPS

As part of the University’s push for top-tier Carnegie R1 status, the office of the Provost and the Division of Research & Innovation have partnered to celebrate research excellence on campus. As part of that recognition, they recently awarded twenty professorships to various UofM faculty. Those awarded include:

Andrew Olney | CAS, Institute For Intelligent Systems  
Kathryn Howell | CAS, Psychology  
Roger Kreuz | CAS, Psychology  
Joy Goldsmith | CCFA, Communication & Film  
Andre Johnson | CCFA, Communication & Film  
Mary Wilson | CCFA, School of Music  
Brandt Pence | CHS  
Laura Casey | COE, Instruction and Curriculum Leadership  
Gavin Bidelman | CSD  
George Deitz | FCBE, Marketing and Supply Chain Management  
Mark Gillenson | FCBE, Business Information and Technology  
Jamin Speer | FCBE, Economics  
Mihalis Gkolias | HCOE, Civil Engineering  
Sabya Mishra | HCOE, Civil Engineering  
Brian Waldron | HCOE, Civil Engineering  
Eddie Jacobs | HCOE, Electrical Computer Engineering  
Satish Kedia | SPH  
Latrice Pichon | SPH  
Matthew Smeltzer | SPH  
Hongmei Zhang | SPH

FY22 RESEARCH BOOK PUBLICATIONS

Beginning this year, the Division of Research & Innovation is tracking publications by our research faculty on an ongoing basis. To view the books published in FY22, follow the link below. Books published in FY23 can be sent to researchdev@memphis.edu.

To view, visit bit.ly/UofMBooks.

Congratulations to all our authors!
Dr. Dipankar Dasgupta, a widely admired higher education teacher and distinguished scholar, received the 2022 Arthur C. Presidential Award for Lifetime Achievement in Research. He is a Full Professor of Computer Science at the University of Memphis and joined the University of Memphis (UoM) in January 1997 and became a Full Professor in 2004. The Arthur C. Graesser Presidential Award for Lifetime Achievement in Research is given periodically to a full professor who has made significant contributions to the research enterprise and reputation of the University through an exemplary and sustained record of academic scholarship, research collaboration, mentoring, and university citizenship. Dr. Dasgupta has been significantly involved in research, education, and service activities.

Earthquakes rarely occur in isolation but rather as intertwined sequences of fore, main and aftershocks. Events within a seismic sequence are linked by a process called triggering which is thought to be responsible for up to 90% of all earthquakes. The NSF-career project will concentrate on a multi-scale investigation of seismic triggering and aftershocks in lab and nature. We will use high-speed, broad-band optical and seismic instrumentation to detect triggered seismic events and to identify conditions that promote triggering.
Dr. Dasgupta developed pioneering research in AI-based cybersecurity with applications that include digital immunity, negative authentication, Cloud Insurance models, and Adaptive Multi-Factor Authentication. He is on the editorial board of five proceedings/journals and has around three hundred research papers in book chapters, journals, and international conference proceedings.

In 2007, Dr. Dasgupta was awarded the University’s College of Arts & Sciences’ Dunavant Professorship, a 3-year award for exceptional teaching, scholarship, service, and outreach achievement. He received the College of Arts & Sciences Distinguished Research Award twice (2002, 2006), the Sigma Xi Research Paper Award (2003), and the Early Career Research Award (1999). He is the recipient of the Dr. Pat E. Burleson’s Professorship and the 2012 Willard R. Sparks Eminent Faculty Award, the highest distinction and most prestigious honor given to a faculty member by the University of Memphis. He is a William Hill Cybersecurity Professor at the University of Memphis. Among other professional recognitions, Dasgupta is an IEEE Fellow, Association for Computing Machinery (ACM) Life member, was an ACM Distinguished Speaker (2015-2020), IEEE Secure Learning Taskforce, and is currently appointed as an IEEE Distinguished Lecturer (2022-2024).

He has held over 400 international research talks in many countries as an expert in the scientific community. His 2017 interview on computational intelligence in cybersecurity with Dr. David Fogel highlights his engaged scholarship in the field (available at LinkedIn: bit.ly/graesseraward2023). Dasgupta’s innovative research generated four issued patents and two patent applications, several of which have received federal funding and were licensed. His most recent patent (Nov 2022) was awarded for a multi-user permission strategy to access sensitive information.

Some of his recent accomplishments include his election as a prestigious National Academy of Inventors (NAI) Fellow for the Class of 2022 and national leadership of a 15-University Consortium and presentation of their work at DoD University Consortium for Cybersecurity (UC2) Research Workshop hosted by the National Defense University at Fort McNair in Washington, DC. He also served as a Co-Chair of the IEEE Computational Intelligence in Cybersecurity (CICS) Symposium in Singapore from Dec. 4-7, 2022 where he presented a tutorial on “Machine Learning Applications, Adversarial Attacks, and Mitigation Strategies.”

But, most importantly, if you ask Dr. Dasgupta what his greatest accomplishment is, he says it is not about his actions. His inspiration transfers his passion for the subject matter to students. Along with his knowledge transfer, accessibility, career guidance, quality of life, and feedback to his students, he inspires others and is dedicated to student success, which includes practicum experience. He supervised more than one hundred graduate and undergraduate students, including fourteen doctoral, five post-doctoral, and fifty master’s students. His advisees are in highly technical positions at technology industry leaders including Google, Microsoft, Facebook, Apple, Discover Bank, Facebook, and Adobe. Some stories of his student successes are available from the CfIA website (bit.ly/Dasguptastudent).

Congratulations, Dr. Dasgupta!
FY 2022
PRINCIPAL INVESTIGATORS

James Adelman
Lily Afshar
Manohar Aggarwal
Mohd Ali
Thouraya Al-Nasser*
Alpha Ba
Debra Bartelli
**Barbara Bekis**
Brennan Berg
Kevin Berisso
Kristoffer Berlin
Adoracion Berry*
Christine Bertz
Gavin Bidelman
Richard Bloomer
Keri Brondo
Tracy Bruen*
Joel Bumgardner
Jon Burleson
Dorian Burnette
Laura Casey
Su Chen
Eunseo Choi
Kensha Clark
**Tracy Collins***
Chris Cramer
Jerome Cusson*
Dipankar Dasgupta
Russell Deaton
Teresa Del Rosso
Elena Delavega
Nathan DeYonker
Ana Doblas
Randolph Dupont
Amanda Edgar
Susan Elswick
**Ali Fatemi**
Ryan Fisher
Daniel Foti*
Demetria Frank
Misty Freeman*
William Gibbons*
Elizabeth Gillespie
Michail Gkolias
Thomas Goebel
Ranganathan Gopalakrishnan
Wendy Griswold
Michael Hagge
Ryan Hall*
Josef Hanson*
Melvyn Harding
Bradley Harrell*
Tammy Haut Donahue
Alexander Headley
Mark Hendricks*
Carl Herickhoff*
Arleen Hill
**Melissa Hirschi**
Kathryn Howell
Xiangen Hu
Xiaolei Huang*
William Hunter
Richard Irwin
Stephanie Ivey
Eddie Jacobs
Wesley James
Farhad Jazaei*
Jessica Jennings
Chunrong Jia
Yu Jiang*
Carolyn Kaldon
Satish Kedia
Michael Kennedy
Charles Kubicek*
Santosh Kumar
Youngsang Kwon*
Christodoulos Kyriakopoulos
Charles Langston
Mohamed Laradji
Daniel Larsen
Irena Lasiecka
Justin Lawhead
Mark LeDoux
Robin Lennon-Dearing
**Marian Levy**
Weizi Li*
Huihang Liang*
Jennifer Mandel
Jeffrey Marchetta
Timothy McCuddy*
Meghan McDevitt-Murphy
James McGinnis
Duane McKenna
Claudio Meier
James Meindl
Courtnee Melton-Fant
Sabyasachee Mishra
Shelia Moses
Francisco Muller Sanchez
James Murphy
Derek Myers
Fawaz Mzayek
Joshua Nave
Susan Neely-Barnes
Sandra Nichols*
Napoleon Overton*
Radesh Palakurthi
Christos Papadopoulos*
Maxime Paquette
Abby Parrill-Baker
Philip Pavlik
Ophrah Payne*
Jacquelyn Pence*
Shahram Pezeshk
Latrice Pichon
Charles Pierce
Andrea Pirkey
Shawn Pollard*
Robin Poston
Chrysanthe Preza
Emily Puckett
Chidambaram Ramanathan*
Kathryn Ramsey
Meredith Ray
Joanne Rhodes*
Aaron Robinson
Alisha Rose*
Loretta Rudd
Diana Ruggiero*
Vasile Rus
John Sabatini
Aaryani Sajja
Maryam Salehi Esfandarani
Daniel Schaffzin
Eraina Schauss
Chrisann Schiro-Geist
Michael Schmidt
Nicholas Simon
Paul Simone
Larry Slater*
Robert Smalley
Matthew Smeltzer
Michelle Stockton*
Jack Strahl
Genae Strong
Isaiiah Surbrook*
Thomas Sutter
Richard Sweigard
Abu Mohammed Naser Titu*
Deborah Tollefsen
Jennifer Turchi*
Brian Waldron
Lan Wang
Kenneth Ward
Gregory Washington
Thomas Watson
Karen Weddle-West
Steven West
James Whelan
Jeremy Whittaker*
Leah Windsor
Mitchell Withers
Myounggyu Won*
Kan Yang*
Stephen Zanskas
Hongmei Zhang
Yufeng Zhang
Bentuo Zheng
Todd Zoblotsky

* Denotes First Time Pls
**Bolded** names are FY22 PI Millionaires
### Top Faculty by Scopus H-Index

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Scopus H-Index</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowlin, Gary</td>
<td>55</td>
<td>Department of Biomedical Engineering</td>
</tr>
<tr>
<td>Sutter, Tom</td>
<td>53</td>
<td>Department of Biological Sciences</td>
</tr>
<tr>
<td>Fatemi, Ali</td>
<td>52</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Lasiecka, Irena</td>
<td>50</td>
<td>Department of Mathematical Sciences</td>
</tr>
<tr>
<td>Rudd, David</td>
<td>46</td>
<td>Department of Psychology</td>
</tr>
<tr>
<td>Ward, Kenneth</td>
<td>46</td>
<td>School of Public Health</td>
</tr>
<tr>
<td>Bollobas, Bela</td>
<td>45</td>
<td>Department of Mathematical Sciences</td>
</tr>
<tr>
<td>Lindner, Ernö</td>
<td>43</td>
<td>Department of Biomedical Engineering</td>
</tr>
<tr>
<td>Triggiani, Roberto</td>
<td>40</td>
<td>Department of Mathematical Sciences</td>
</tr>
<tr>
<td>Bumgardner, Joel</td>
<td>39</td>
<td>Department of Biomedical Engineering</td>
</tr>
<tr>
<td>Mishra, Sanjay</td>
<td>39</td>
<td>Department of Physics and Materials Science</td>
</tr>
<tr>
<td>Oller, Kimbrough</td>
<td>39</td>
<td>School of Communication Sciences and Disorders</td>
</tr>
<tr>
<td>Skalli, Omar</td>
<td>39</td>
<td>Department of Biological Sciences</td>
</tr>
<tr>
<td>Gallagher, Shaun</td>
<td>37</td>
<td>Department of Philosophy</td>
</tr>
<tr>
<td>Langston, Charles</td>
<td>37</td>
<td>Center for Earthquake Research and Information</td>
</tr>
<tr>
<td>Huang, Xiaohua</td>
<td>36</td>
<td>Department of Chemistry</td>
</tr>
<tr>
<td>Kumar, Santosh</td>
<td>35</td>
<td>Department of Computer Science</td>
</tr>
<tr>
<td>Liang, Huigang</td>
<td>35</td>
<td>Business Information and Technology</td>
</tr>
<tr>
<td>Parrill-Baker, Abby</td>
<td>34</td>
<td>Department of Chemistry</td>
</tr>
<tr>
<td>Yang, Kan</td>
<td>34</td>
<td>Department of Computer Science</td>
</tr>
</tbody>
</table>

**About Scopus H-Index**

The University of Memphis subscribes to Scopus, a database of citations and abstracts. An H-index of 40 means, for example, that a scientist has published 40 papers that each has at least 40 citations.
The Division of Research & Innovation recognizes that the success of our faculty is, in part, thanks to the many pre-award coordinators, research support staff, and individuals across campus who help to ensure the success of the research enterprise at the University of Memphis.