



**UMass** | Dartmouth

# ***Scholarship Recognition Event***

**Friday, January 29, 2021**

## **Fellow Honorees:**

Dr. Mark Altabet, Ph. D.

Dr. Rose Mary Botti-Salitsky, Ph. D.

Dr. Vijaya Chalivendra, Ph.D.

Dr. Sigal Gottlieb, Ph. D.

Dr. Kristen Sethares, Ph. D.

Dr. Honggang Wang, Ph. D.

## Agenda

### **Scholarship Recognition Event**

Friday, January 29, 2021

2:00 - 3:30pm Via Zoom

Link: <https://umassd.zoom.us/j/96158402982?pwd=eDYrV3E5dHVVeVUxZ3FGU2VHQVhwUT09>

1. Introduction from Ramprasad Balasubramanian, Vice Provost Research & Academic Affairs 5- 10 min 2:00 – 2:05pm
2. Remarks from Interim Chancellor Mark Fuller 5-10 min 2:06 – 2:15pm
3. Presentation of Honorees: (2:15 - 3:15pm) Each faculty presentation will conclude with remarks from honoree  
Dr. Honggang Wang being presented by Dr. Hua Fang, College of Engineering  
Dr. Vijaya Chalivendra being presented by Dr. Amit Tandon, College of Engineering  
Dr. Sigal Gottlieb being presented by Dr. Yanlai Chen, College of Arts & Sciences  
Dr. Rose Mary Botti-Salitsky being presented by Dean Lawrence Jenkins, CVPA  
Dr. Mark Altabet being presented by Dr. Brian Howes, SMAST  
Dr. Kristen Sethares being present by Dr. Elizabeth Chin, College of Nursing & Health Sciences
4. **3:27-3:30** closing remarks by Ram Bala



### **Professor Mark Altabet, Estuarine & Ocean Sciences, SMAST**

In June 1995, Dr. Mark Altabet joined the faculty at UMass Dartmouth as an Associate Professor in the Chemistry Department. Subsequently, he was a founding faculty member of the School for Marine Sciences and Technology (SMAST), promoted to Full Professor in 2001, and currently is Chair of SMAST's Dept. of Estuarine & Ocean Science. During Dr. Altabet's tenure at the university, he has been awarded numerous research

grants from federal agencies and other sources; his current research projects have been funded by the National Science Foundation. In 2020, Dr. Altabet also received a grant from the Office of Naval Research through the Marine and Under Sea Technology (MUST) Research Program at UMass Dartmouth.

Dr. Altabet has received numerous honors, awards, and fellowships throughout his career. He was appointed Session Chair for the Gordon Research Conference on Chemical Oceanography in 2015 and was a Visiting Scientist at the Isotope Hydrology Laboratory, Int. Atomic Energy Agency in Vienna Austria in 2017. He was an Invited Speaker at the 7th Kaplan Symposium: Tracers in the Sea in Eilat, Israel in 2019. Then also in 2019, Dr. Altabet was invited to speak at the International Symposium on Isotope Hydrology in Vienna, Austria.

He is the author of 129 publications, 109 in peer-reviewed scientific journals, many of which are highly sighted. Dr. Altabet's editorship of peer-reviewed journals includes *Marine Chemistry* from 1991 to 2015 and *Limnology and Oceanography Letters* from 2016 to 2020. This year, Dr. Mark Altabet was elected Fellow of the American Geophysical Union, "For major contributions towards the measurement of nitrogen isotopes and their application to understanding ocean biogeochemistry, present and past." He is the 2<sup>nd</sup> current faculty member in the UMass system to receive this honor.



### **Associate Professor, Rose Mary Botti-Salitsky, Art & Design, College of Visual & Performing Arts,**

Dr. Rose Mary Botti-Salitsky has worked as an academic, design professional, author, and advocate in the Interior Architecture + Design field for more than 30 years. She was at the forefront of the effort to recognize interior design as a profession in Massachusetts and across the country, advocating that interior designers should be registered alongside their architectural and engineering brethren. She was the lead author of House Bill 4303, enacted by Governor Deval Patrick in 2014, recognizing the profession of interior designers to bid on state contracts.

She has served as president of the Massachusetts Interior Design Coalition (MIDC) from 2005-2010, its Director of Legislative Affairs from 2011-2015, and currently the Director of Government Affairs ASID New England. In

2018, she was one of eight subject matter experts representing the U.S. and Canada who updated the definition of Interior Design for NCIDQ. She is an active participant in professional organizations, holding positions at the national and regional level for the American Society of Interior Designers. Dr. Botti-Salitsky is also a site Visitor/Chair for the Council of Interior Design Accreditation (CIDA) for Interior Design Programs seeking accreditation or renewal since 2000. Prior to entering academia, Dr. Botti-Salitsky worked for the world-renowned design firm The Architects Collaborative, located in Cambridge MA.

Interior Architecture + Design encompasses human occupants; her research emphasizes their health, safety, and welfare. Research areas have focused on programming and research; resiliency in design; licensure and the evolution of a profession. Dr. Botti-Salitsky's publications and research activities include numerous peer reviewed papers, and conference presentations, as well as the publication of her textbook *Programming & Research: Skills and Techniques for Interior Design*. The First edition was published in 2009 and the second edition was released in March 2017. The textbook is on the recommended reading for one to prepare for the National Council for Interior Design Qualifications (NCIDQ) certification exam. The book is an integral part of Interior Architecture + Design undergraduate and graduate education curriculums, and is part of design library collections globally. Dr. Botti-Salitsky is currently collaborating on another textbook entitled: *Infection and Disease Control Through Environmental Design*, publication anticipated in spring 2022. This will address many of the issue's designers are dealing with in the built environment due to the COVID global pandemic.

Rose Mary was a tenured Professor and Department Chair for the Interior Architecture + Design undergraduate and graduate programs at Mount Ida College from 1991 to 2018. After the College's abrupt closure in 2018, she worked to relocate the students and faculty to the University of Massachusetts Dartmouth, launching the only CIDA and NASAD accredited public program in New England. She has spent her career expanding opportunities to underrepresented individuals by promoting an affordable and accessible education that will contribute to expanding diversity in the design profession.



### **Professor Vijaya Chalivendra, Mechanical Engineering, College of Engineering**

Dr. Vijaya Chalivendra joined UMass Dartmouth in 2005 and is now serving as a Professor in the Mechanical Engineering Department. He is also currently serving as Graduate Program Director for the department. He has published about 75 peer-reviewed journal articles and is currently serving as a Technical Associate Editor for the *Experimental Mechanics Journal*. Dr. Chalivendra was awarded a \$2M external grant funding as Principle Investigator for conducting research for understanding materials behavior under various loading conditions at different length scales. He has graduated sixteen master's students and one doctoral student from his research lab. He also trained 40 undergraduate students in his research lab and published 20 peer-reviewed articles with them as co-authors. His research interests include, Smart composite material, biological materials, nano-mechanical characterization of MEMs and polymers, high strain rate behavior, and impact characterization of sports helmets.

Dr. Chalivendra was awarded the American Society for Mechanical Engineers Fellow (ASME) in August, 2020. Of Dr. Chalivendra ASME states, "Dr. Chalivendra is an outstanding experimentalist who has established a reputed research program at the UMASS Dartmouth. He takes lot of pride in mentoring and training undergraduate students in his research laboratory. More than three dozen undergraduate students have worked under his direction on research projects and have published numerous peer-reviewed journal publications with him. Dr. Chalivendra's research has been sponsored by the NSF, DOD and other agencies and has resulted in many peer-reviewed publications in reputed journals. His most prominent work relates to damage sensing in carbon nanotubes embedded polymers and composites under various mechanical loads."



### **Professor Sigal Gottlieb, Mathematics, College of Arts & Sciences**

Dr. Sigal Gottlieb is a computational mathematician who received her PhD from the Division of Applied Mathematics at Brown University in 1998. She joined UMass Dartmouth in 1999 as an Assistant Professor in the department of mathematics, was awarded tenure and promoted to Associate Professor in 2004, Professor in 2008, and Chancellor Professor in 2019.

Professor Gottlieb is known internationally as an expert in strong-stability-preserving time discretizations and other schemes for the simulation of hyperbolic partial differential equations. She has published two books and over 35 research papers in peer-reviewed journals of high caliber. Her papers have over 6800 citations, with her top two papers having approximately 2000 citations each. Her research has been funded by the National Science Foundation and the Air Force Office of Scientific Research. She has served on the editorial boards of several prestigious journals, and as Deputy Director at the NSF-funded Institute for Computational and Experimental Research in Mathematics (ICERM) hosted by Brown University. In recognition of her expertise and impact on the field, Professor Gottlieb was selected as a Fellow of the Society of Industrial and Applied Mathematics (SIAM) in 2019 "For her contribution to strong-stability-preserving time discretizations and other schemes for hyperbolic equations, and for her professional services including those to SIAM and women in mathematics." In 2021, she was selected as a Fellow of the Association for Women in Mathematics (AWM) in 2021 "For exemplary and lasting work in forging an active and positive research environment, proactive outreach, effective mentoring, and promoting the success of women in mathematical and computational sciences."

Professor Gottlieb has a deep passion for incorporating research into the undergraduate curriculum. She has adopted an exploratory, discovery-based approach by using "computing for intuition" as a critical tool to learning, and has worked to engage her undergraduate students in research in computational mathematics. From 2008-2013 she served as PI on NSF-funded CSUMS program at UMass Dartmouth aimed to structure and formalize a process by which Freshman and Sophomore students are exposed to faculty-supervised pre-research projects, and then become active in significant research projects during the Junior and Senior years. Over 80 students were involved in this project, which served to integrate undergraduate research into the mathematics curriculum. Several of these students have since

completed their doctorates in the EAS doctoral program, as part of the CSE track Professor Gottlieb helped design.

Professor Gottlieb has been active in service at every level of the University, in numerous capacities. Notably, in the mathematics department she has served (and sometimes chaired) the curriculum committee, numerous search and screen committees, and every AQAD committee since she arrived at the University close to 20 years ago. At the college level, she has served in the Science Academic Council (as chair from 2011-2012), and on the CAS Assessment Committee. At the University level, she has served on the RSI committee (2014- present, chair from 2020), and several Search and Screen Committees, including the one that led to the hire of former Provost Karim and of the current Dean of the College of Engineering, Dr. Jean VanderGheynst.

Most significant has been Professor Gottlieb's leadership and service of the Center for Scientific Computing and Visualization Research (CSCVR), which she helped form and served as director (2013-2017) and co-director (2017-present). In this capacity she has worked to support, facilitate, and promote the research activities of the scientific computing group and to mentor students of scientific computing in a supportive, broad, and deep interdisciplinary research environment.



**Professor Kristen Sethares, Adult Nursing,  
College of Nursing & Health Sciences**

Kristen Sethares is a Professor of Nursing at the University of Massachusetts Dartmouth where she has taught since January of 1997. Prior to that, she worked in several settings including home care and as a traveling nurse, primarily with the cardiac population. Her current research focuses on heart failure patients, a group with high mortality rates and disabling symptoms. Her program of research focuses on understanding the role

of symptoms and other factors, including uncertainty, health literacy and cognitive impairment, in decision making and in using those findings to develop interventions to improve self-care behaviors and timely treatment seeking in heart failure patients. A past project focused on the development of a reflective intervention to improve self-care through focused symptom recognition. Current research projects focus on factors that influence exercise behaviors in this population and on the role of symptom clusters in treatment seeking. A second arm of her research program that closely aligns with improving self-care behaviors is also to improve quality of life in heart failure patients. Trying to understand the best method to measure quality of life and factors that influence quality of life in this population were early and ongoing parts of her developing program of research. Currently, the group is collecting data related to factors that influence exercise behaviors in heart failure patients after developing three new research instruments to measure exercise in this population. In 2020,

Dr. Sethares was appointed as Fellow of Heart Failure Society of America for her work.



## **Professor Honggang Wang, Electrical & Computer Engineering, College of Engineering**

Dr Honggang Wang, Professor of Electrical and Computer Engineering (ECE) at UMass Dartmouth. He is named IEEE Fellow in 2021, chosen among 400,000 plus IEEE members in 160 countries, for his contributions to low power wireless for Internet of Things (IoT) and multimedia applications. He was also selected IEEE Distinguished Lecturer in 2019, delivered invited talks on the emerging topics of IoT worldwide, including smart and connected health.

Before his faculty position, Dr Wang worked for Bell Labs Lucent Technologies China from 2001 to 2004 as a Member of Technical Staff and received Lucent Global Switching Software Silver Award, in Naperville IL, USA, 2002. His industry life also enriches his later research activities. Overall, his research focuses on Smart and Connected Health, Internet of Things, Wireless Body Area Networks (WBANs), Multimedia and Cyber Security and applications, Wireless Networks and Big Data in mobile health (mHealth).

Dr Wang is a leading researcher in the field of Wireless Body Area Networks (WBAN) and WBAN-related Internet of Things (IoT) m-Health applications. One exemplar is his energy efficient and secure WBAN architecture that enables IoT health applications. One of research projects funded by National Science Foundation, derives the "Portable ICU (intensive care unit)" that can help a number of infants, especially preterm, which was reported by ABC 6 TV and Standard Times Newspaper.

Dr Wang is well known in his global research community and has been chairing many IEEE technical committees. He was the past Chair (2018-2020) of IEEE Multimedia Communications Technical Committee and is the Chair of IEEE eHealth Committee (2020-2021). He co-founded IEEE/ACM CHASE conference, a leading international conference in the field of connected health, jointly sponsored by NSF and NIH. Due to his significant contribution in IoT, he is named the Editor-in-Chief for IEEE Internet of Things Journal with the SCI Impact Factor of 9.9 (Top #4 Journal in the Telecommunication field) since 2020 and served as the Associate Editor or Editor for five (5) prestigious IEEE journals.

Dr Wang sustained his research as PI from extramural funding. His research was funded by six research grants from NSF. His research was also supported by USA Department of Transportation (Co-PI), National Institutes of Health (NIH, Co-I), UMASS president office (co-PI) and UMASS Healey Endorsement (PI). He was particularly recognized and congratulated by the President of University of Massachusetts (2014) for his research with premature infant advances using digital health technology and WBANs, and for receiving 4 NSF grants at the same time in summer, 2014. He received UMass Dartmouth Sponsored Research Recognition Award in 2015, and was awarded as the "Scholar of The Year" in 2016. He is also an alumnus of National Academic Engineering (NAE) Frontiers of Engineering program and was an invited participant by NAE for 2017 German-American Frontiers of Engineering Symposium. Dr. Wang has supervised ten ECE PhD students as the sole advisor or primary advisor. Three of them are named as the tenure track Assistant Professor in the States immediately after their graduation.

Dr Wang has published more than 200 research papers, including many publications in prestigious IEEE journals and conferences such as IEEE INFOCOM and ICDCS with over 5600 citations and h-index of 41. He received six best paper awards from leading international conferences.