



VOICES OF DISCOVERY

2021-22

Elon College, the College of Arts and Sciences at Elon University is committed to engaging students and the community in the excitement and wonder of discovery. During the past two decades, scores of discoveries in molecular biology, atomic physics and computer technology have changed the face of science and brought dramatic changes to our world.

The Voices of Discovery speaker series brings to campus preeminent scientists and mathematicians who have left an indelible mark on the way we view the world. They share their remarkable experiences and perspectives with Elon students and the community. This series plays a fundamental role in the university's commitment to create a science-conscious community and to help students be informed citizens.

Voices of Discovery is just one element of Elon's efforts to provide outstanding science education. At the Dalton L. McMichael Sr. Science Center, students work in modern laboratories with cutting-edge research tools. They focus on discovery-based learning, undergraduate research and collaboration among the sciences, developing an appreciation for the scientific enterprise and how we acquire new knowledge.



TRANSFORMING THE HEALTH of Communities through Innovations in Social Computing



Wednesday, March 9, 2022 | McCrary Theatre | 7:00 p.m.

Andrea Grimes Parker

Associate Professor in the School of Interactive Computing, College of Computing,
Georgia Institute of Technology

Adjunct Associate Professor, Department of Behavioral Sciences & Health Education,
Rollins School of Public Health, Emory University

Adjunct Associate Professor, Morehouse School of Medicine

Founder and Director of the Wellness Technology Research Lab

According to a 2016 Pew Research Center study, “about half of Americans think that technology has had a mostly positive effect on society, especially from easy access and speed of information.” Many would argue that with rapidly evolving systems, such as technology, time is needed to fully understand positive and negative impacts on human wellness and to leverage those systems to promote the benefits.

Andrea Parker’s work in this new frontier of rapidly developing technologies focuses on designing and evaluating the impact of software tools that help people move toward improved health and wellness. Her interdisciplinary research happens at the intersection of the emerging technology fields of human-computer interaction, social computing and personal health informatics. She uses techniques and

empirical methods from these fields to address public health challenges, including racial and socio-economic health disparities.

Specific projects from Parker’s lab have included designing and evaluating the use of mobile health interventions in monitoring and reducing health disparities in marginalized and underserved populations; studying the effectiveness of current social networking systems in addressing health disparities; developing and assessing technology support systems for caregivers; and creating mobile, family-based games to promote physical activity. Parker’s research has been supported by the National Institutes of Health, the National Science Foundation, Google and the Aetna Foundation. She was a recipient of a Microsoft Graduate Research Fellowship for the social impact of her research.

CHASING SPACE

An Astronaut's Story of Grit, Grace and Second Chances



BAIRD LECTURE SERIES

Thursday, **March 31, 2022** | Alumni Gym | 7:00 p.m.

Leland Melvin

M.S. in Materials Science Engineering, University of Virginia

Former NFL Wide Receiver; NASA Astronaut; Co-chair of the White House STEM Education Task Force; and NASA Associate Administrator for Education

Leland Melvin has journeyed through an amazing array of opportunities, challenges and successes throughout his life. His varied and inspiring career milestones include a period as an NFL wide receiver; earning a master's degree in materials science engineering; becoming a NASA astronaut and logging two space flights; appointments to national-level leadership roles in promoting science, technology, engineering, art and mathematics (STEAM) education; and sharing personal and professional interests and insights through photography, writing and television. His 2017 memoir, "Chasing Space: An Astronaut's Story of Grit, Grace, and Second Chances," examines the intersecting roles of community, perseverance and grace that align to create the opportunities for success.

After a hamstring injury thwarted his professional football career, Melvin worked at NASA Langley Research Center assisting in the development

and testing of optical fibers to measure parameters associated with damage in aerospace vehicles. He was selected by NASA at Johnson Space Center for the astronaut training program but was medically disqualified to fly in space after an underwater training accident left him partially deaf. Amazingly, his hearing gradually returned enough that he eventually participated in two missions on the Space Shuttle Atlantis to assist in ongoing construction and maintenance of the International Space Station.

Upon hanging up his space boots, Melvin led NASA Education and co-chaired the White House's Federal Coordination in STEM Education Task Force, developing the nation's five-year STEM education plan. After 24 years with NASA as a researcher, astronaut and Senior Executive Service leader, he now shares his life story as an athlete, astronaut, scientist, engineer, photographer and musician to help inspire the next generation of explorers to pursue STEAM careers.