



# VOICES OF DISCOVERY

# 2022-23



**E**lon 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. Students work in modern laboratories with cutting-edge research tools at the Dalton L. McMichael Sr. Science Center, which is undergoing renovations to enhance facilities for biology, chemistry and environmental sciences. In fall 2022 engineering and physics will move to the new Innovation Quad, which is located adjacent to McMichael Science Center. Two of the buildings, Founders Hall and Innovation Hall, will support teaching, project design and development, and research in physics and engineering and provide opportunities for cross-disciplinary projects within the natural sciences.



# MERGING FITNESS AND MEDICINE TO IMPROVE HEALTH



## THE ELON UNIVERSITY SPEAKER SERIES

Monday, Sept. 12, 2022 | McCrary Theatre | 7:00 p.m.

### **Dr. Robert Sallis, M.D., FAFP, FACSM**

Practicing Family Medicine Physician, Kaiser Permanente Medical Center

Clinical Professor of Family Medicine, University of California,  
Riverside School of Medicine

Chairman of the Exercise is Medicine Advisory Board

**T**he World Health Organization identifies physical inactivity as the fourth leading risk factor associated with global mortality, following high blood pressure, use of tobacco products and high blood glucose levels. Recent studies by the Centers for Disease Control and the National Center for Health Statistics indicate that less than one-quarter of Americans meet recommended physical activity guidelines. Increased evidence of the impact of inactivity on overall health and specific disease processes is resulting in medical professionals viewing physical activity as another vital sign and increasingly prescribing it to prevent and treat health problems.

Dr. Robert Sallis is an advocate for this emerging perspective in his role as chairman of the advisory board for Exercise is Medicine, an initiative launched in 2007 as a joint effort of the

American College of Sports Medicine and the American Medical Association. Exercise is Medicine works locally and globally in research and in providing information and resources that promote the health benefits of physical activity.

Sallis' dual backgrounds in traditional and sports medicine have enabled him to be a strong spokesperson for integrating physical activity into the practice of medicine. He is a practicing family medicine physician who also holds a Certificate of Added Qualifications in Sports Medicine. He is a past president of the American College of Sports Medicine and served as the founding editor-in-chief of its clinical journal, *Current Sports Medicine Reports*. Sallis is an active scholar in sports medicine and has chaired the Healthcare Sector for the U.S. Physical Activity Plan. He currently serves as the head team physician for the Los Angeles Football Club.



### THE ELON UNIVERSITY SPEAKER SERIES

Tuesday, **Nov. 1, 2022** | McKinnon Hall, Moseley Center | 7:00 p.m.

## Wendy Suzuki, Ph.D.

Professor of Neural Science and Psychology, Center for Neural Science,  
New York University

Celebrated author and keynote speaker

**W**endy Suzuki is a world-renowned neuroscientist, a celebrated international authority on neuroplasticity, and a dynamic speaker and author. She was recently named one of the “10 Women Changing the Way We See the World” by Good Housekeeping and regularly serves as a sought-after expert for publications including The Wall Street Journal, Shape and Health. Her TED talk on the brain-changing benefits of exercise has received more than 31 million views and was the second-most-viewed TED talk of 2018.

Suzuki’s book “Good Anxiety: Harnessing the Power of the Most Misunderstood Emotion” is a guide for how to harness the power of anxiety into unexpected gifts. She draws on cutting-edge research and her own intimate struggles with anxiety, encouraging readers to not see anxiety as a curse, but as a unique gift that they can leverage to help solve life’s problems. By including concrete practical strategies that anyone

can do themselves, “Good Anxiety” helps readers learn how to use anxiety to eliminate social anxiety, sleeplessness, fear of performance or public speaking, and much more. Her previous book, “Healthy Brain, Happy Life: A Personal Program to Activate Your Brain and Do Everything Better,” explores the biological connection between exercise, mindfulness and action.

Suzuki is best known for her research examining how the brain forms long-term memories, while her more recent work has focused on how aerobic exercise can be used to improve learning, memory and higher cognitive abilities in humans. Passionate about teaching, Suzuki is currently a professor of neural science and psychology in the Center for Neural Science at New York University. She received her undergraduate degree in physiology and human anatomy at the University of California, Berkeley before earning her Ph.D. in neuroscience from the University of California, San Diego.

# UNDERSTANDING RACIAL AND ETHNIC DISPARITIES IN BRAIN AGING



### THE ELON UNIVERSITY SPEAKER SERIES

Monday, March 6, 2023 | McCrary Theatre | 7:00 p.m.

## Indira Turney, Ph.D.

Postdoctoral Fellow at the Taub Institute for Research on Alzheimer's Disease and the Aging Brain, Department of Neurology, Columbia University Medical Center

According to the Centers for Disease Control, approximately 6 million people in the United States have Alzheimer's Disease, the most common form of dementia. That number is expected to triple in the next few decades. Dementia affects cognition, including memory and overall quality of life, and represents a significant public health issue in the United States. There are many factors associated with the risk of developing Alzheimer's Disease and other forms of dementia such as age, various chronic health conditions, race and ethnicity. According to a recent CDC report, older Hispanics and African Americans are between 1.5 and 2 times more likely to develop dementia than White people.

Cognitive neuroscientist Indira Turney uses multiple neuroimaging methods and analysis techniques to study biological markers for dementia in the brain. At Columbia University, Turney investigates questions such as "How do collected life experiences contribute to

brain health disparities across aging?" Specifically, she is interested in how racism and socioeconomic status impact the aging brain, contributing to the well-established disparities in dementia rates among African Americans, Hispanic Americans and Whites. Her ongoing intergenerational studies of participants in diverse communities suggest that certain life experiences, along with aspects of society and culture, may contribute to increased brain aging.

Turney hopes that her work will help to improve detection and treatment for high-risk populations and promote interventions aimed at modifying environmental, sociocultural and biological factors that impact the development of dementia in at-risk populations. She is also the co-founder of the Women of Color Writing Accountability Group, an extension of her passion for promoting diversity in science, technology, engineering and mathematics fields for underrepresented students and scholars.