



# COMMENCEMENT

Spring 2021

# MARK P. MATTSON, PhD

## Honorary Doctor of Science



Mark Mattson is the former chief of the Laboratory of Neurosciences at the National Institute on Aging and is now on the faculty of neuroscience at Johns Hopkins University School of Medicine. He received his PhD in biology from the University of Iowa in 1986, studying under the late Eugene Spaziani. Mattson's research has been funded continuously, starting with his predoctoral NIH training grant at the UI in 1983.

Mattson's research has advanced an understanding of the cellular signaling mechanisms that control the formation and plasticity of neuronal networks in the brain, and cellular and molecular mechanisms of brain aging and neurodegenerative disorders. His research has also elucidated how the brain responds adaptively to challenges such as fasting and exercise, and he has used that information to develop novel interventions to promote optimal brain function throughout life.

Mattson's revelations on how intermittent fasting and exercise can counteract adverse effects of diabetes and obesity on the brain have been translated into modern dietary recommendations that are now included in numerous books. His contributions to science

have fundamentally changed how we think about lifelong brain health, and he has promoted scientific curiosity in the public realm both nationally and globally through documentaries, persuasive articles, guest lectures, and in-depth interviews. As Bernd Fritsch, Iowa Endowed Entrepreneurial Professor and retired chair of the UI Department of Biology, said in his lead letter of nomination for Mattson to receive this Honorary Doctor of Science degree, "It is in particular this translation of outstanding science into public recommendations that will become the legacy of Dr. Mark Mattson."

Mattson is among the most highly cited neuroscientists in the world, with an h-index over 220 and more than 180,000 citations from among his nearly 1,000 publications, including 19 books. In addition to extensive local, national, and international administrative duties, he is a member of 24 advisory boards, has been involved in 21 grant and institutional reviews, and has been or is a member of the editorial boards of several journals, including roles as editor-in-chief.

Mattson has mentored dozens of research scientists, doctoral students, and postdoctoral fellows. The majority of his PhD students currently hold professorial positions in major medical schools or universities, including Yale, Johns Hopkins, and McGill. Mattson has been an important contributor to the National Institute on Aging's Diversity in Aging Research Pipeline Program (DARPP), which is a pilot program to increase diversity within the biological sciences, providing research and development opportunities to underserved minority students.

Mattson was elected a Fellow of the American Association for the Advancement of Science and has received many awards, including the Metropolitan Life Foundation Medical Research Award, the Alzheimer's Association Zenith Award, and the NIH Award of Merit. In 2011, Mattson was named a UI College of Liberal Arts and Sciences Alumni Fellow.