THE
DISCOVERY
LECTURE SERIES

ERIC HORVITZ, M.D., PH.D.

FROM AI ASPIRATIONS TO HEALTHCARE FUTURES

NOVEMBER 6, 2024
4:00 P.M.
208 LIGHT HALL

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DEPARTMENT OF BIOMEDICAL INFORMATICS
AS PART OF THE ADVANCE SYMPOSIUM

VANDERBILT UNIVERSITY
MEDICAL CENTER

FROM AI ASPIRATIONS TO HEALTHCARE FUTURES

AI advancements are poised to significantly enhance healthcare, with applications ranging from clinical decision support and streamlined administrative workflows to advancing medical education and research. The evolving constellation of technologies holds great promise for improving patient care, increasing efficiency, and enabling more personalized treatments. Beyond clinical applications, AI is also driving breakthroughs in molecular biology, offering not only unprecedented insights but also powerful tools and capabilities in the realms of protein structure, function, and design, accelerating the discovery of new therapies. In this talk, Dr. Horvitz will provide an update on the latest AI developments and contextualize them within key innovations and themes from past decades. He will explore directions for integrating recent breakthroughs with long-standing principles of reasoning and decision-making and share reflections on potential syntheses that build on decades of research in AI for medicine.

ERIC HORVITZ, M.D., Ph.D.

CHIEF SCIENTIFIC OFFICER, MICROSOFT

Dr. Eric Horvitz is the Chief Scientific Officer at Microsoft, where he leads initiatives that bridge scientific discovery, technology, and societal impact, with a strategic focus on AI. He has made significant contributions to AI theory and practice, particularly in reasoning and decision-making under uncertainty, earning the Feigenbaum Prize and the Allen Newell Award for his work. Dr. Horvitz is a member of the U.S. National Academy of Engineering and the American Academy of Arts and Sciences, as well as a Fellow of the Association for Computing Machinery (ACM), the Association for the Advancement of AI (AAAI), and the American College of Medical Informatics (ACMI). He serves on the President's Council of Advisors on Science and Technology (PCAST), the NIH Advisory Committee to the Director working group on AI, and advisory boards for the Allen Institute for AI and Stanford's Institute for Human-Centered AI (HAI). He has served as the president of AAAI and on the Board of Regents of the National Library of Medicine, as well as advisory committees for the National Academies of Sciences, Engineering, and Medicine, the National Science Foundation, and DARPA. Dr. Horvitz holds MD and PhD degrees from Stanford University. For more information and a list of his publications, visit https://erichorvitz.com.

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Upcoming Discovery Lecture:

DANIEL DRUCKER, M.D.

Senior Scientist, Lunenfeld-Tanenbaum Research Institute, Mt. Sinai Hospital
Professor of Medicine, Division of Endocrinology, University of Toronto
Banting and Best Diabetes Centre-Novodisk Chair in Incretin Biology.

November 21, 2024
208 Light Hall / 4:00 P.M.