

DANA-FARBER DEPARTMENT OF DATA SCIENCE
PRESENTS

2023 MARVIN ZELEN MEMORIAL SYMPOSIUM

WELCOME Rafael Irizarry

DESIGNING MACHINE LEARNING PROCESSES
FOR EQUITABLE HEALTH SYSTEMS Marzyeh Ghassemi

MULTICELLULAR NETWORKS: IMMUNITY HUBS
IN HUMAN NSCLC Jonathan Chen

OPPORTUNITIES AND CHALLENGES FOR
MEDICAL IMAGING AI- LESSONS FROM
ONCOLOGY AND OPHTHALMOLOGY Jayashree Kalpathy-Cramer

AI FOR MAMMOGRAPHY: FROM ALGORITHMS
TO CLINICAL INTEGRATION Bill Lotter

BREAK

FORTUNE-TELLING WITH IMAGES: PAINTING
CELLS FOR DISCOVERING DRUGS Shantanu Singh

AI-POWERED TUMOR MICROENVIRONMENT
CHARACTERIZATION Andy Beck

LEARNING TO READ XRAY: APPLICATIONS TO
HEART FAILURE MONITORING Polina Golland

CLOSING Martin Aryee
RECEPTION

7 APRIL 2023 • 1:00 PM • SIMMONS UNIVERSITY

 @DFCIDATASCIENCE
#ZELEN23

MARVIN ZELEN



Professor Marvin Zelen began his career in statistics in the 1950's. Over the course of his long career, he advanced the field of statistical science and practiced its applications in biomedical science. Most notably, his research had significant impact in areas of experimental designs, randomization methods, designs of cancer clinical trials and early detection of cancer. A leading innovator in his field, Marvin was known for pioneering the statistical methods and study designs used in clinical cancer trials today.

He helped create what is now the Department of Data Science at Dana-Farber in the 1970s, and was its Chair for many years. Additionally, he taught statistical science at the Harvard School of Public Health, chairing the Department of Biostatistics from 1981-1990. In 2012, he was awarded the Karl E. Peace Award for "Outstanding Statistical Contributions for the Betterment of Society." He authored over 200 scientific publications. He was a visionary leader and inspiring colleague. In 1975, Marvin founded the Frontier Science and Technology Research Foundation, and in 2000 he and his wife Thelma Zelen made a gift to Dana-Farber Cancer Institute to establish the Zelen Endowed Lectureship Fund, which supports an annual endowed lecture in statistical science. In 2015, Thelma Zelen made another substantial gift to support the present symposium, and the lecture was renamed the DFCI-FSTRF Marvin Zelen Memorial Symposium. Thelma has been a dedicated and active supporter of Dana-Farber's mission for more than 30 years.

In addition to the Symposium, Thelma has been a loyal contributor to the Institute's annual giving program and longtime member of the Friends of Dana-Farber Cancer Institute. We remain grateful for all the Zelen family has done for Dana-Farber over the years, and we are honored to hold this annual symposium, which bears Marvin's name.

Our Speakers

Andy Beck, MD, PhD
Co-founder & CEO, Path AI

Jonathan Chen, MD, PhD
Instructor in Pathology, Massachusetts General Hospital

Marzyeh Ghassemi, PhD
Assistant Professor, Massachusetts Institute of
Technology

Polina Golland, PhD
Professor, Massachusetts Institute of Technology

Jayashree Kalpathy-Cramer, PhD
Professor, University of Colorado, Massachusetts General
Hospital, and Harvard Medical School

William Lotter, PhD
Member of the Faculty, Dana-Farber Cancer Institute and
Harvard Medical School

Shantanu Singh, PhD
Senior Group Leader, The Broad Institute