

Aser Rothstein Lecture



“Cell type and cell state in development and disease”

Dr. Marc Kirschner

March 9th, 2017
PGCRL Auditorium
4:00 – 5:00 p.m.

Host: Dr. Ran Kafri

Reception to follow in the Gallery
(cash bar)

Marc Kirschner is a cell biologist and systems biologist. He has made major contributions to four areas of fundamental biology: embryology, cell organization and cell cycle regulation and proteostasis. In each of these areas his work opened a new field, and shaped all subsequent research. In embryology, Kirschner was the first to identify a molecular component and pathway of the neuralization/dorsalization process induced by the Spemann organizer. In cell organization, Kirschner was a pioneer of cytoskeleton research. His group discovered many cytoskeleton proteins, most notably Tau. In the cell cycle, Kirschner is largely responsible for the now-accepted concept that the cell cycle is best viewed as being driven by an autonomous oscillator, which set the stage for biochemical identification of the Cdk1.Cyclin B kinase. His group also purified the Anaphase Promoting Complex, which is responsible for controlled degradation of cyclin through the ubiquitin/proteasome pathway. Kirschner has had a long-standing interest in quantitative and theoretical methods, and has recently made major contributions in the use of mathematical tools to analyze signaling pathways, cell size control, and the selectivity of drugs. Kirschner graduated from Northwestern University in 1966 and received his Ph.D. from the University of California, Berkeley in 1971. In 1993 Dr. Kirschner moved to Harvard Medical School to become the founding Chair of the Department of Cell Biology. In 2009 he was named the John Franklin Enders University Professor. Dr. Kirschner is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, Foreign Member of the Royal Society of London and the Academia Europaea. He has received numerous honors and awards.

This lecture will be streamed throughout the Peter Gilgan Centre for Research and Learning interactive screens

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