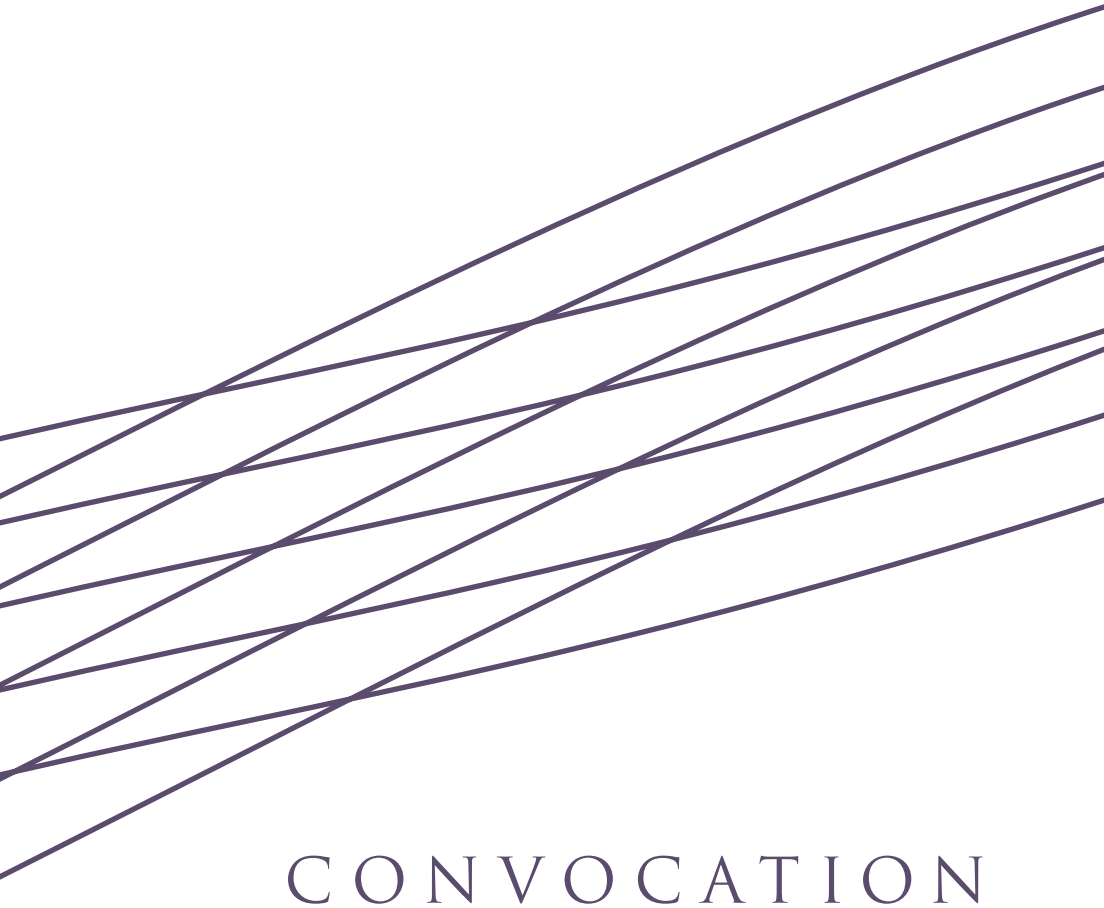
THE ROCKEFELLER UNIVERSITY



CONVOCATION

FOR CONFERRING DEGREES · 2023

THURSDAY, THE FIRST OF JUNE, 2023

ACADEMIC PROCESSION

NEW CASTLE BRASS QUINTET

WELCOMING REMARKS

RICHARD P. LIFTON, M.D., PH.D.

PRESIDENT AND CARSON FAMILY PROFESSOR

INTRODUCTION

TIM STEARNS, PH.D.

DEAN OF GRADUATE AND POSTGRADUATE STUDIES
VICE PRESIDENT FOR EDUCATIONAL AFFAIRS

CONFERRING OF THE DEGREE OF DOCTOR OF PHILOSOPHY

DR. LIFTON

CONFERRING OF THE DEGREE OF DOCTOR OF SCIENCE, HONORIS CAUSA

DR. LIFTON

EVELYN G. LIPPER, M.D.

MARC W. KIRSCHNER, PH.D.

INGRID DAUBECHIES, PH.D.

ACADEMIC RECESSION

PLEASE JOIN US FOLLOWING THE CEREMONY FOR A RECEPTION
ON THE ABBY ALDRICH ROCKEFELLER HALL LAWN.

2023 GRADUATES

NNEOMA ADAKU*

B.S., YALE UNIVERSITY

A Gain-of-Function Role of Apolipoprotein E2 in Melanoma Progression

SOHAIL TAVAZOIE

RENAN EDUARDO APARICIO*

B.S., UNIVERSITY OF CALIFORNIA, BERKELEY

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RICHARD P. LIFTON

TATSUYA ARAKI

B.S., UNIVERSITY OF CALIFORNIA, LOS ANGELES

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GABRIEL D. VICTORA
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BARBARA BOSCH

B.SC., M.D., KATHOLIEKE UNIVERSITEIT LEUVEN

Genome-scale Quantification of Target Vulnerability in *Mycobacterium tuberculosis*

JEREMY M. ROCK

VICTOR CHEN

B.S., UNIVERSITY OF CALIFORNIA, BERKELEY

Development of Improved Genetic Methods for *Enterococcus faecium*

HOWARD C. HANG AND JEREMY M. ROCK
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CHRISTOPHER COWLEY

B.S., THE OHIO STATE UNIVERSITY

Mechanistic Insight into Inflammatory Memory

ELAINE FUCHS

AARON K. GUPTA*

B.S., UNIVERSITY OF CALIFORNIA, BERKELEY

Interrogation and Manipulation of the IgG Fc Glycan

JEFFREY V. RAVETCH

TAYLOR ECO HART

B.A., CITY UNIVERSITY OF NEW YORK, HUNTER COLLEGE

Transgenic Tools in Ants and the Representation of Alarm Pheromones in the Ant Antennal Lobe

DANIEL KRONAUER

TOM HINDMARSH STEN

B.S., NEW YORK UNIVERSITY

The Internal Orchestration of a Courtship Ritual in *Drosophila*

VANESSA RUTA

GEENA ROSE IANNI*

B.A., UNIVERSITY OF PENNSYLVANIA

Cortical Control of Naturalistic Facial Expression Production in Primates

WINRICH FREIWALD
IN ABSENTIA

*PARTICIPANT IN THE TRI-INSTITUTIONAL M.D.-PH.D. PROGRAM

ANOJ ILANGES

B.A., YALE UNIVERSITY

Neural Control of the Sickness State

JEFFREY M. FRIEDMAN

IN ABSENTIA

KEVIN KAO*

B.A., UNIVERSITY OF CALIFORNIA, BERKELEY

Antibody-effector Functions in Antiviral Response

JEFFREY V. RAVETCH

MEGAN ELIZABETH KELLEY

B.A., CITY UNIVERSITY OF NEW YORK, HUNTER COLLEGE

Using Chemical Probes to Examine Cellular Activities

TARUN KAPOOR

CLAIRE THERESE KENNEY*

B.A., B.S., JOHNS HOPKINS UNIVERSITY

Rarely Acquired Type II-A CRISPR-Cas Spacers Mediate Anti-viral Immunity through the Targeting of a Non-canonical PAM Sequence

LUCIANO MARRAFFINI

IN ABSENTIA

SAM KHODURSKY

B.A., UNIVERSITY OF OXFORD

Sex Differences and the Evolution of Gene Expression

LI ZHAO

CHARLES GUNNAR KINZIG*

B.S., YALE UNIVERSITY

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TITIA DE LANGE

ILANA B. KOTLIAR

A.B., CORNELL UNIVERSITY

Multiplexed Mapping of the Interactome of G Protein-coupled Receptors and Receptor Activity-modifying Proteins

THOMAS P. SAKMAR

BRANDON MALONE

B.PHARM., UNIVERSITY COLLEGE CORK

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SETH A. DARST

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JASON MANLEY

A.B., PRINCETON UNIVERSITY

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JORDAN M. MATTHEISEN

B.S., SIMMONS COLLEGE

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THOMAS P. SAKMAR

*PARTICIPANT IN THE TRI-INSTITUTIONAL M.D.-PH.D. PROGRAM

PETER MUSSELLS PIRES

B.SC., MCGILL UNIVERSITY

Converting an Allocentric Goal Direction into an Egocentric Steering Signal in *Drosophila*

GABY MAIMON

TUAN NGUYEN*

B.S., UNIVERSITY OF GEORGIA

Mechanical Manipulation of Eukaryotic Chromatin by DNA-binding Proteins

SHIXIN LIU

AGATA LEMIESZ PATRIOTIS

B.SC., M.SC., UNIVERSITY OF ŁÓDŹ

Molecular Characterization of the EZH2-SBD Domain and Oncohistones Function in the Development of Disease

C. DAVID ALLIS
PRESENTED BY TIM STEARNS

HARLAN LINVER PIETZ*

B.S., UNIVERSITY OF WASHINGTON

Structural and Functional Analysis of Substrate Recognition and Inhibition of the Multidrug Transporters MRP1 and MRP2

JUE CHEN

DANIEL POSTON*

B.S., CREIGHTON UNIVERSITY

Dissecting Host-Viral Interactions through Focused or Unbiased High-throughput Genetic Approaches

PAUL BIENIASZ

NICHOLAS CAMERON POULTON

B.S., UNIVERSITY OF ROCHESTER

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JEREMY M. ROCK

CHRISTINA PRESSL

M.D., MEDICAL UNIVERSITY OF GRAZ

Deep Molecular Characterization of Human Cortical Cell Types: Regional and Cell-type Specific Molecular Pathophysiology of Huntington's Disease in the Human Cerebral Cortex

NATHANIEL HEINTZ AND WINRICH FREIWALD
PRESENTED BY NATHANIEL HEINTZ

DAVID R. REQUENA ANICAMA

B.SC., UNIVERSIDAD NACIONAL MAYOR DE SAN MARCOS
M.SC., UNIVERSIDAD PERUANA CAYETANO HEREDIA

Multiomics for Elucidating the Pathogenesis of Liver Cancers: A Transcriptomic Signature of Fibrolamellar Hepatocellular Carcinoma

SANFORD M. SIMON

*PARTICIPANT IN THE TRI-INSTITUTIONAL M.D.-PH.D. PROGRAM

2023 GRADUATES

CHRISTOPHER ROUYA

B.SC., M.SC., MCGILL UNIVERSITY

Inter-organellar Nucleic Acid Communication by a Mitochondrial tRNA Regulates Nuclear Transcription

SOHAIL TAVAZOIE

CHRISTIAN SAFFRAN*

B.A., COLUMBIA UNIVERSITY

New Insights into the Roles of FAN1 in Genome Maintenance and Disease

AGATA SMOGORZEWSKA

ANDY SILICIANO*

B.S., M.ENG., CORNELL UNIVERSITY

Life on the Edge: Insights into the Neural and Behavioral Algorithms of Plume Tracking

VANESSA RUTA

ANDREW TOADER*

B.S.E., DUKE UNIVERSITY

Anteromedial Thalamus Gates the Selection and Stabilization of Long-term Memories

PRIYA RAJASETHUPATHY

JAZZ L. WEISMAN

B.A., REED COLLEGE

Life on a Ball: Multi-week Tethered Behavior in *Drosophila*

GABY MAIMON

JOHANNES WEYMAR

M.SC., FRIEDRICH-SCHILLER-UNIVERSITÄT JENA
M.D., CHARITÉ - UNIVERSITÄTSMEDIZIN BERLIN

Enrichment and Transcriptome Analysis of CD4+ T Cell Clones Harboring Intact HIV-1 Proviruses

MICHEL C. NUSSENZWEIG

ANDREW WONG

B.SC., UNIVERSITY OF TORONTO

Exploring Intrinsic Drug Resistance in *Mycobacteria*

JEREMY M. ROCK

ERIC BO ZHENG*

A.B., HARVARD COLLEGE

On the Origins of Genetic Novelty in *Drosophila*

LI ZHAO

*PARTICIPANT IN THE TRI-INSTITUTIONAL M.D.-PH.D. PROGRAM

EVELYN G. LIPPER, M.D.

Evelyn Gruss Lipper brings a scientist's observational acumen and a clinician's emphasis on wellbeing to her philanthropic endeavors, with transformative results. Through a distinguished clinical career in developmental and behavioral pediatrics, and a second career in visionary philanthropy, Dr. Lipper has advanced the work of medical, scientific, and humanitarian organizations across the globe.

After discovering a love of biology in high school, she pursued a B.S. from Simmons College before earning her M.D. from Albert Einstein College of Medicine in 1971. Six years later, Dr. Lipper took a position in pediatrics at Albert Einstein College and in 1982 moved to Weill Cornell Medicine, where she was Director of the Neonatal Follow up Program. In 1990, she became Chief of the Division of Developmental Pediatrics at Weill Cornell and currently serves as Clinical Associate Professor Emerita of Pediatrics at Weill Cornell.

Dr. Lipper's relationship with The Rockefeller University extends over four decades, a depth of commitment that places her among the university's most notable and passionate advocates. She has provided critical leadership through some of Rockefeller's most transformative years. After joining the Rockefeller University Council in 1983, she was elected to the Board of Trustees in 1992—serving on the Nominating, Development, Hospital, and Educational Affairs Committees. Also of note is Dr. Lipper's pioneering support of the Women & Science initiative. She was elected Trustee Emerita in 2021.

Her background as an esteemed faculty member at renowned institutions provided Dr. Lipper with unique insight as a philanthropist. Inspired by her parents' charitable endeavors, she became involved with her family's foundations but also forged her own path according to her interests. She has dedicated her efforts to supporting medical, scientific, and humanitarian organizations in New York City, the United States, and Israel.

With a special interest in imaging, Dr. Lipper has made transformational contributions that have spurred the innovative use of advanced equipment, both at Rockefeller and the Albert Einstein College of Medicine.

Dr. Lipper is a trustee of her family foundations: the Gruss Life Monument Funds, the EGL Charitable Foundation, and the Beracha Foundation. She has served on the boards of some of the country's most distinguished institutions and is an honorary trustee at the Albert Einstein College of Medicine.

HONORARY DEGREE

MARC W. KIRSCHNER, PH.D.

Marc Kirschner majored in chemistry at Northwestern University and earned his doctorate in biochemistry at the University of California, Berkeley, studying allosteric proteins. He continued at Berkeley as a postdoctoral fellow in John Gerhart's lab, and he became captivated by the cell cycle.

In 1972, Dr. Kirschner joined the Princeton University department of biochemical sciences, where he launched a research program on microtubules, the long polymers that compose the mitotic spindle, and made several major advances. For example, he discovered the first microtubule-assembly protein, tau, which is now known for its association with Alzheimer's disease and related neurological disorders.

Dr. Kirschner moved to the University of California, San Francisco, in 1978, and continued his work on the cytoskeleton. He demonstrated that some microtubules grow while others shrink and elucidated the role of GTP in this process of dynamic instability. At UCSF, he also explored development and the cell cycle, and he made numerous seminal findings in those fields. He and Dr. Gerhart showed how frog eggs establish dorsal-ventral polarity and they found an autonomous oscillator called Maturation Promoting Factor, whose quantities rise and fall in synchrony with the normal cell division cycle even if cleavage is blocked. These observations led to Dr. Kirschner's discovery of the Anaphase Promoting Complex, which governs the cell cycle by destroying cyclin and other regulators through the ubiquitin system.

In 1993, Harvard University recruited Dr. Kirschner to set up its cell biology department and, a decade later, he became the founding chair of the department of systems biology. He is currently the John Franklin Enders University Professor at Harvard Medical School.

Drs. Kirschner and Gerhart co-authored two books about the cellular basis for evolutionary change, *Cells, Embryos, and Evolution* and *The Plausibility of Life: Resolving Darwin's Dilemma.* Dr. Kirschner is a member of the National Academy of Sciences, the American Philosophical Society, and a foreign member of the Royal Society of London. His many honors include the Gairdner Foundation International Award (Canada), the American Society for Cell Biology's Public Service Award, the Dickson Prize for Science, and the E.B. Wilson Award.

INGRID DAUBECHIES, PH.D.

Ingrid Daubechies majored in physics at the Free University of Brussels where she went on to earn her doctorate in theoretical physics. She joined the Mathematics Research Center at AT&T Bell Laboratories in 1987 and, that same year, published the paper that launched her global reputation in the field of wavelets. These mathematical tools allow efficient information packaging, especially when signals undergo sudden dramatic changes.

Undaunted by the entrenched belief that putting mathematics to work compromises its underlying beauty, Dr. Daubechies aimed to create practical tools that retained the wavelets' theoretical integrity. The wavelets that she developed transformed signal processing in many digital settings. In images, for instance, they facilitate the ability to minimize bandwidth while maximizing quality. This work underlies many applications, including the JPEG 2000 image compression and coding system. Dr. Daubechies has exploited wavelets and numerous other mathematical tools to solve problems in a tremendous range of fields, including brain imaging, geology, evolution, and even art restoration.

Dr. Daubechies joined the mathematics faculty at Rutgers University in 1991 and, three years later, Princeton University recruited her. In 2011, she moved to Duke University, where she is currently the James B. Duke Distinguished Professor of Mathematics and Electrical and Computer Engineering.

Dr. Daubechies was named a MacArthur Fellow, and her many honors include the National Academy of Sciences Award in Mathematics, the L'Oréal-UNESCO International Award for Women in Science, and the 2023 Wolf Prize in Mathematics. She has held numerous leadership positions, including president of the International Mathematical Union. In this role, she promoted equal opportunities in science and math education, especially in developing countries. She also co-founded Duke University's Summer Workshop in Mathematics for rising female high school seniors, and she serves on the board of directors of the EDGE Foundation, which aims to increase gender and racial diversity and equity in the mathematics community.

Away from academia, Dr. Daubechies teamed up with fiber artist Dominique Ehrmann to create an exhibit called Mathemalchemy. This traveling museum piece aims to convey the beauty and fun of mathematics by celebrating the relationship between math and art.

ROCKEFELLER UNIVERSITY

Founded in 1901, The Rockefeller University is a world-renowned center for research and graduate education in the biomedical and physical sciences. The university's some 70 laboratories conduct research on a broad range of biological and biomedical questions with the mission of improving the understanding of life for the benefit of humanity. Over the years, Rockefeller has been the site of many historic breakthroughs, including the landmark discovery that genes are made of DNA. Twenty-six researchers associated with Rockefeller throughout its history have been awarded the Nobel Prize.

The graduate program, with a unique curriculum that emphasizes independent research, began in 1955 and was named in honor of David Rockefeller in 2005. Since the first convocation in 1959, The Rockefeller University has granted doctor of philosophy degrees to 1,431 individuals – including 36 students who will receive their Ph.D. degrees today.

THE ROCKEFELLER UNIVERSITY
1230 YORK AVENUE
NEW YORK, NY 10065
WWW.ROCKEFELLER.EDU