The Fifteenth
Jack Peter Green Lectureship
In
PHARMACOLOGICAL SCIENCES

Brian K. Shoichet, PhD

Damon Runyon-Walter Winchell Cancer
Research Fellow
Professor, Department of Pharmaceutical
Chemistry
University of California, San Francisco

"Following the Rabbit
into Chemical Space"

Thursday, October 6, 2022
11:00 am

Hatch Auditorium
Icahn School of Medicine at Mount Sinai
1468 Madison Avenue, 2nd Floor
New York, NY 10029

Reception to follow the lecture

Icahn School
of Medicine at
**Mount
Sinai**

Department of Pharmacological Sciences
Icahn School of Medicine at Mount Sinai
One Gustave L. Levy Place
1425 Madison Avenue
New York, New York 10029
Tel. 212-659-8647

Jack Peter Green, MD, PhD

(1925 – 2007)

Jack Peter Green, MD, PhD, received both his PhD and MD degrees from Yale University and began his academic career at Yale as Assistant Professor of Pharmacology. He was Professor and founding Chairman of the Department of Pharmacology at the Icahn School of Medicine at Mount Sinai between 1968-1999. He built a department of international renown. Dr. Green's research interests were centered on the biology of histamine and he was an early proponent of histamine, and its metabolites, as central nervous system neurotransmitters and neuromodulators. In recognition of this work, he was one of only seven scientists worldwide awarded the highest honor bestowed by the European Histamine Research Society. Dr. Green was also one of the first to apply quantum mechanical techniques to the study of drug action.

Brian K. Shoichet, PhD

Dr. Shoichet is the Damon Runyon-Walter Winchell Cancer Research Fellow, and Professor of Pharmaceutical Chemistry at University of California, San Francisco (UCSF). He received a BSc degree in Chemistry from the Massachusetts Institute of Technology and a PhD degree from UCSF for his work with Dr. Tack Kuntz on the development of sampling and scoring methods in what came to be the program DOCK. His postdoc study with Dr. Brian Matthews at the Institute of Molecular Biology (Eugene, OR) was on the study of the fundamental relationship between enzyme activity and stability using crystallography, mutagenesis, and biophysics methods.

The Shoichet Lab seeks to discover chemical reagents that illuminate biological problems. This is done through exploiting protein structures to predict new reagents and therapeutic leads (structure-based ligand discovery). Approaches taken to achieve this goal include developing new computational methods for ligand discovery that are validated by determining x-ray crystal structures and binding thermodynamics, and applying these to G-Protein Coupled Receptors, which are the single largest family of signaling receptors in human cells. Further, their research also aims to address functional questions as to how the physical organic chemistry of drugs affects their behavior in vitro and in vivo, influencing drug delivery and formulation.

Dr. Shoichet's work has been recognized by national and international awards and prizes, including most recently Clarivate Highly Cited Researcher (top 1%) (2019), Delano Award, ASBMB (2017), and Barry Cohen Award, Israel Chemical Society (2017).

In Honor of

Jack Peter Green

Scientist, scholar, teacher, physician

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2002   Barry S. Coller, MD
The Rockefeller University

2003   Leroy Hood, MD
Institute for Systems Biology

2004   Anthony James Pawson, PhD
University of Toronto

2005   C. Ronald Kahn, MD
Harvard Medical School

2007   Bert W. O'Malley, MD
Baylor College of Medicine

2008   Susan Band Horwitz, PhD
Institute for Systems Biology

2010   Mary V. Relling, PharmD
St. Jude Children's Research Hospital

2011   Harry C. Dietz, MD
Johns Hopkins University School of Medicine

2012   Garret Fitzgerald, PhD
University of Pennsylvania School of Medicine

2013   Susan Amara, PhD
National Institute of Mental Health

2017   David Julius, PhD
University of California, San Francisco
* The Nobel Prize in Physiology or Medicine (2021)

2018   George D. Yancopoulos, MD, PhD
Regeneron Pharmaceuticals, Inc.

2019   Richard Tsien, DPhil
NYU School of Medicine

2021   Bryan L. Roth, MD, PhD
University of North Carolina, Chapel Hill