G protein-coupled receptors (GPCRs), the single largest class of druggable targets in therapeutic drug discovery, signal via canonical pathways involving heterotrimeric G proteins, and also via G protein–independent interactions with other signaling proteins, including β-arrestins, a process known as functional selectivity. Discovering ligands with the desired signaling bias at GPCRs will yield molecules with novel activities, and could lead to significantly improved therapeutics by enabling beneficial efficacy while reducing undesirable adverse effects. This symposium examines perspectives from academic and industrial scientists, highlighting basic and translational research. Researchers will discuss molecular and structural mechanisms underlying ligand bias and demonstrate how they quantify, design and develop functionally selective GPCR ligands for potential use in cardiovascular and central nervous system diseases.

Organizers
John Allen, PhD, Pfizer
Mercedes Beyna, MS, Pfizer
Jennifer Henry, PhD, The New York Academy of Sciences
Bryan Roth, MD, PhD, University of North Carolina at Chapel Hill School of Medicine

Keynote Speaker
Robert J. Lefkowitz, MD, Duke University Medical Center

Speakers
Laura Bohn, PhD, The Scripps Research Institute
Marc G. Caron, PhD, Duke University Medical Center
Michael Ehlers, MD, PhD, Pfizer
Terry Kenakin, PhD, University of North Carolina at Chapel Hill School of Medicine
Bryan Roth, MD, PhD, University of North Carolina at Chapel Hill School of Medicine
JoAnn Trejo, PhD, University of California-San Diego
Jonathan Violin, PhD, Trevena, Inc.

Presented by the Biochemical Pharmacology Discussion Group at the New York Academy of Sciences

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SEP 30
8:30 AM-4:30 PM
Reception to follow
Location
The New York Academy of Sciences
7 World Trade Center
250 Greenwich Street
40th Floor
New York, NY 10007-2157

Sponsorship Opportunities
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