2016-2017 POCC Lecture Series

February 23, 2017, 8:00 PM

Women in Chemistry Lecture at POCC

Dr. Krista B. Goodman

GlaxoSmithKline

What a Difference a Methyl Makes: the Discovery of Novel TRPV4 Antagonists

Carolyn Hoff Lynch Lecture Hall
Chemistry Building, University of Pennsylvania

The Philadelphia Organic Chemist's Club

POCClub.org

To join us for dinner before the lecture please contact POCC's secretary Thomas Razler (thomas.razler@bms.com) at least one week ahead of time.

Krista Goodman is the head of Medicinal Chemistry in GSK's Drug Design and Selection platform, where she oversees a global team with the remit to deliver quality starting points for drug discovery in partnership with therapy areas. Krista is also the Chair of GSK's Chemistry Council.

Prior to her current role in Drug Design and Selection, Krista was Director of Chemistry and Preclinical Development in GSK Ophthalmology, where she was accountable for the development of a portfolio of repurposed assets for ocular indications. Krista's experience in medicinal chemistry spans both platform and therapeutically aligned roles, and she has contributed to the discovery of multiple leads and clinical candidates across a broad range of target classes.

Krista holds a B.S. in Chemistry from the University of California, Berkeley, and a Ph.D in Organic Chemistry from Harvard University. Her academic research experience focused on the application of organic chemistry to solve complex problems, ranging from combinatorial chemistry to the total synthesis of natural products..

Abstract: TRPV4, a member of the TRPV (transient receptor potential vanilloid) ion channel family, has been implicated in regulation of the septal barrier, and its activation causes pulmonary edema in animal models. Based on these observations, small molecule TRPV4 antagonists have been hypothesized to reduce pulmonary edema in patients with heart failure, and have the potential to reduce hospitalization and improve exercise tolerance in this patient population. The presentation will describe the identification and successful optimization of a spirocarbamate derived lead series to deliver advanced molecules with improved pharmacokinetics, as well as their efficacy in vivo.