

Alexander T. Stein, Ph.D.

Dr. Stein received his J.D. from the University of Utah, S.J. Quinney College of Law, and holds a Ph.D. in Neurobiology and Behavior from the University of Washington. He also holds a Bachelor of Arts in Biochemistry and Molecular Biology from Reed College.

Prior to attending graduate school, Dr. Stein studied the molecular mechanics of membrane transport proteins, including excitatory amino acid transporters and nucleoside transporters from *Leishmania donovani*. Dr. Stein's doctoral dissertation concerned the molecular mechanism of hyperalgesia, and specifically revealed that phospholipid signaling mediated by PI3K recruits new pain-sensitive ion channels to the cell membrane in nociceptive neurons exposed to nerve growth factor. As a post-doctoral fellow, Dr. Stein investigated the directed differentiation of human embryonic stem cells into functional cardiomyocytes.

Technology Areas

Biotech & Pharmaceuticals
Chemical & Process
Nanotechnology

Areas of Practice

Patent Prosecution
International

Prior Professional Experience

Post-doctoral fellow, LaFlamme lab, University of Washington
Research assistant, Kavanaugh lab, Vollum Institute, Oregon Health Sciences University

Education

University of Utah, S.J. Quinney College of Law, J.D.
University of Washington, Ph.D., Neurobiology & Behavior
Reed College, OR, B.A., Biochemistry and Molecular Biology

Bar Admissions

Utah Bar
U.S. Patent & Trademark Office

Court Admissions

Supreme Court of Utah
U.S. District Court for the District of Utah

Publications

- Klein, R.M., et al. 2008. Phosphatidylinositol (4,5)-bisphosphate is the Lipid Co-factor Required for TRPV1 Regulation. Nat. Neuroscience. (submitted)
- Stein, A.T., et al. 2006 Phosphoinositide 3-Kinase Binds to TRPV1 and Mediates NGF-simulated TRPV1 Trafficking to the Plasma Membrane. J Gen Physiol. 128(5): 509-22
- Stein A., et al. 2003. Equilibrative Nucleoside Transporter Family Members from *Leishmania donovani* are Electrogenic Proton Symporters. J Biol Chem. 278(37): 35127-34

Community and Professional Organizations

American Intellectual Property Law Association (AIPLA)