

PROGRESS IN NEUROSCIENCE PINS

Seminar Series of the Brain & Mind Research Institute Weill Cornell Medical College (WCMC)



The Graduate Program in Neuroscience of WCMC and Sloan Kettering Institute

Thursday, 5/7/15, 4 PM, coffee at 3:45 PM Weill Auditorium

"Structure and insights into the function of the bestrophin calcium-activated chloride channel"

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Abstract:

Bestrophin-1 (BEST1) calcium-activated chloride channels regulate the flow of chloride ions across eukaryotic cell membranes in response to intracellular calcium levels. Mutations in BEST1 cause eye disease. This presentation will focus on the insights into the molecular bases of BEST1 function obtained by reconstituting channel function from purified components and determining the channel's atomic structure.

Stephen Long's laboratory studies the molecular mechanisms of eukaryotic ion channels that generate or respond to calcium signals using a combination of approaches that address function and three-dimensional structure.

Recent relevant publication:

Dickson, V.K., Pedi, L. and S. B. Long. (2014). *Nature.* **516**, 213-8. "Structure and insights into the function of a Ca²⁺ -activated Cl⁻ channel."



