PhD in NEUROSCIENCE PhD School of Life and Health Sciences University of Turin

## SEMINARS *in* NEUROSCIENCE

2017-18



William Catterall University of Washington

Host: Emilio Carbone

Voltage-Gated Sodium and Calcium Channels: From Structure to Disease at Atomic Resolution

Electrical signals initiated by voltage-gated sodium and calcium channels initiate rapid physiological events from bacteria to man. Through structural studies of a bacterial ancestor of eukaryotic sodium and calcium channels, we have elucidated the structural basis for voltage-dependent activation and inactivation of these ion channels, their mechanism of ion conductance and selectivity, the structural basis for pathogenic mutations in these ion channels, and the sites and mechanisms of action of channel-blocking drugs that are widely used in therapy of human diseases.

TUESDAY NOVEMBER 6, 2018 FROM 12:15

Aula Magna Farmacia Via P. Giuria, 9 Torino