

2702-Pos BOARD #B472

POSITION OF THE SECOND GATING CHARGE ALONG S4 IN AN INTERMEDIATE CONFORMATION OF A K⁺ CHANNEL VOLTAGE SENSOR. **Jerome J. Lacroix**, Stephan A. Pless, Fabiana V. Campos, Luca Maragliano, Jason D. Galpin, Christopher A. Ahern, Benoit Roux, Francisco Bezanilla

2703-Pos BOARD #B473

AN S4-S5 LINKER RESIDUE INFLUENCES KV2.1 CHANNEL GATING AND INHIBITION BY CARBON MONOXIDE RELEASING MOLECULE 2 (CORM-2). **Andres Jara-Oseguera**, Itzel G. Ishida, Gisela E. Rangel-Yescas, Leon D. Islas

2704-Pos BOARD #B474

INTRACELLULAR IONS IMPEDE VOLTAGE SENSOR RETURN IN KV1.2 CHANNELS. **Samuel J. Goodchild**, Hongjian Zhu, Chris Ahern, David Fedida

2705-Pos BOARD #B475

VOLTAGE-DEPENDENT GATING OF THE K⁺ CHANNEL KVLM EXPLORED THROUGH HETEROTETRAMERS. **Ruhma Syeda**, Jose S. Santos, Mauricio Montal, Hagan Bayley

2706-Pos BOARD #B476

ALLOSTERIC STABILIZATION OF FULLY RESTING VOLTAGE SENSORS BY A TARANTULA TOXIN. **Kenneth S. Eum**, Juan M. Angueyra, Heesoo Kim, Luke Chao, Bruce E. Cohen, Jon T. Sack

2707-Pos BOARD #B477

ACTIVATION GATE OPENING PRECEDES SLOW INACTIVATION IN SHAKER K⁺ CHANNELS. Ferenc Papp, Tibor G. Szanto, Zoltan Varga, Florina Zakany, **Gyorgy Panyi**

2708-Pos BOARD #B478

GATING PROPERTIES AND VOLTAGE SENSING IN KV1.2. **Itzel G. Ishida**, Gisela E. Rangel-Yescas, Leon D. Islas

2709-Pos BOARD #B479

POSITIONING AND GUIDANCE OF THE VOLTAGE SENSOR S4 WITHIN THE OMEGA/GATING-PORE IN THE SHAKER K-CHANNEL. **Claudia Lehmann**, Hansjakob Heldstab, Nikolaus G. Greeff

2710-Pos BOARD #B480

THE SILENT K⁺ CHANNEL SUBUNIT, K_v6.4. INFLUENCES THE GATING CHARGE MOVEMENT OF K_v2.1 IN A HETEROTETRAMERIC CHANNEL COMPLEX. **Elke Bocksteins**, Alain J. Labro, Dirk J. Snyders, Durga P. Mohapatra

2711-Pos BOARD #B481

USE OF RESONANCE-WAVELENGTH GRATING OPTICAL BIOSENSORS TO DETECT CHANNEL-PROTEIN INTERACTION IN SLACK KNA CHANNELS. **Matthew R. Fleming**, Maile R. Brown, Leonard K. Kaczmarek

2712-Pos BOARD #B482

THE POTASSIUM DELAYED RECTIFIER CONDUCTANCE IN THE SARCOLEMMMA AND THE TRANSVERSE TUBULAR SYSTEM MEMBRANES OF MAMMALIAN SKELETAL MUSCLE FIBERS. **Julio L. Vergara**, Marino DiFranco

2713-Pos BOARD #B483

ENHANCEMENT OF CLOSED-STATE INACTIVATION AND ER RETENTION OF KV4.3 MEDIATED BY N-TERMINAL KIS DOMAIN OF AUXILIARY KCHIP4A. **Yiquan Tang**, Ping Liang, KeWei Wang

2714-Pos BOARD #B484

TARGETED MUTAGENESIS WITH A HOMOLOGY MODEL IDENTIFIES CRITICAL RESIDUES FOR ARACHIDONIC ACID INHIBITION OF KV4 CHANNELS. **Linda M. Boland**, Robert Heler, Jessica A. Bell

2715-Pos BOARD #B485

MODIFICATION OF KV4.2 CHANNEL COMPLEXES BY THE DIPHENYLUREA COMPOUND NS5806. Katrin Witzel, Regina Westermeier, Paul Fischer, **Robert Bähring**

2716-Pos BOARD #B486

MECHANISM OF INHIBITION OF VOLTAGE-GATED POTASSIUM CHANNELS BY GUANIDINE COMPOUNDS. **Jeet Kalia**, Kenton J. Swartz

2717-Pos BOARD #B487

SEVOFLURANE: A POTENT GENERAL ANESTHETIC ENHANCER OF KV CHANNEL ACTIVATION. **Annika F. Barber**, Qiansheng Liang, Manuel Covarrubias

2718-Pos BOARD #B488

ACTIVATION AND INACTIVATION KINETICS OF THE POTASSIUM CHANNELS K_v1.3 AND K_v1.5 MEASURED ON THE CYTOPATCH™ INSTRUMENT AND THE MANUAL PATCH CLAMP: A COMPARATIVE STUDY. **Olaf Scheel**, Gesa Rascher-Eggstein, Thomas Knott

TRPC Channels (Boards #B489-#B498)**2719-Pos BOARD #B489**

TRPC1 CHANNELS MEDIATE THE NONSELECTIVE CATION CURRENT AND STORE-OPERATED CALCIUM CHANNELS IN HUMAN ATRIAL MYOCYTES. Yan-Hui Zhang, Hai-Ying Sun, Hui-Jun Wu, **Gui-Rong Li**

2720-Pos BOARD #B490

TRPC3 EXPRESSION MODULATES STORE-OPERATED CURRENTS IN RBL-2H3 CELLS. **Bernhard Doleschal**, Katrin Tieber, Michael Poteser, Hannes Schleifer, Irene Frischauf, Toma N. Glasnov, C. Oliver Kappe, Christoph Romanin, Klaus Groschner

2721-Pos BOARD #B491

TRPC3 OVEREXPRESSION PROMOTES ANGIOTENSINII INDUCED CARDIAC DYSFUNCTION. **Marie-Sophie Huber**, Bernhard Doleschal, Stefan Wolf, Gerald Wölkart, Klaus Groschner

2722-Pos BOARD #B492

TRPC3 CHANNEL BLOCKERS BUT NOT TRPC6 BLOCKERS INHIBIT BACKGROUND CALCIUM INFLUX AND MODULATE CALCIUM TRANSIENTS IN MOUSE MUSCLE FIBERS. **Yaxin Zhang**, Bernd W. Pritschow, Heinrich Brinkmeier

2723-Pos BOARD #B493

A SELF-LIMITING REGULATION OF TRPC3 C6 C7 CHANNELS LINKED WITH PI(4,5)P₂-DIACYLGLYCEROL SIGNALING. **Yuko Imai**, Kyohei Itsuki, Yasushi Okamura, Ryuji Inoue, Mori X. Masayuki

2724-Pos BOARD #B494

SELECTIVE G_q SUBUNITS AS NOVEL DIRECT ACTIVATORS OF TRPC4 AND TRPC5 CHANNELS. **Jae-pyo Jeon**, Chasik Hong, Eun-jung Park, Ju-Hong Jeon, Han Choe, ChangKook Suh, HyunJin Kim, Insuk So