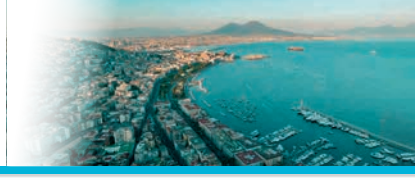
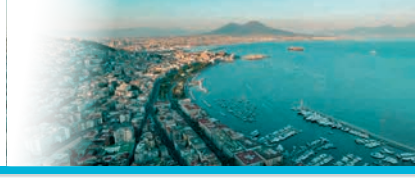


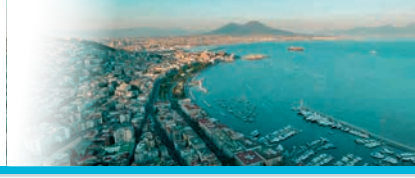
Preliminary Programme

WEDNESDAY – 16 SEPTEMBER 2026	
12:45 AM – 1:00 PM	**WELCOME AND OPENING CEREMONY** (Aula Magna)
1:00 PM – 1:45 PM	**PLENARY 1 - SARA LIIN: UTILIZING INSIGHTS FROM ENDOGENOUS MODULATION IN THE PHARMACOLOGICAL TARGETING OF KV7 CHANNELS** (Aula Magna) *Chair: Iain Greenwood*
2:00 PM – 3:40 PM	**SESSION 1: KV7.1 STRUCTURE** (Aula Magna) *Chairs: Harley Kurata, Luca Maragliano* • STATE-DEPENDENT KCNQ1 INHIBITOR BREAKS C4 SYMMETRY TO BLOCK ION CONDUCTION – *David Fedida, Canada* • CONFORMATIONS OF KV7.1 PORE MORPH WITH VOLTAGE SENSOR STATES AND REGULATORY SUBUNITS – *Jianmin Cui, United States of America* • STRUCTURE AND PHOSPHORYLATION MECHANISMS OF THE CARDIAC KCNQ1+KCNE1 CHANNEL UNDER STRESS CONDITION – *Panpan Hou, Macau S.A.R. (China)* • THE PERFECT Π: ATOM BY ATOM MAPPING OF A KV7 GATING MECHANISM – *Christopher Ahern, United States of America*
3:40 PM – 4:10 PM	**COFFEE BREAK** (Catering area – 1st floor)
4:10 PM – 6:10 PM	**YOUNG INVESTIGATORS** (Aula Magna) *Chairs: Lidia Carotenuto, Elizabeth Forrester* • FUNCTIONAL CHARACTERIZATION OF KV7.2/7.3, KV7.2/7.5, AND KV7.3/7.5 CHANNELS: IMPACT OF SUBUNIT COMPOSITION AND PHARMACOLOGICAL MODULATION – *Vivian Meiritz, Germany* • AT THE INTERSECTION BETWEEN SODIUM AND POTASSIUM CHANNELS: M-CURRENT DOWNREGULATION DRIVES CORTICAL HYPEREXCITABILITY IN THE SODIUM CHANNELOPATHY DRAVET SYNDROME – *Stefano Iavarone, Germany* • PREDICTING NEURODEVELOPMENTAL OUTCOME IN KCNQ2-RELATED DISORDERS – *Elisabeth Van Boxstael, Belgium* • A GATING NEXUS BETWEEN THE S6-HELIX A AND HELIX C DOMAINS STABILIZES THE ACTIVE CONFORMATION OF KV7 CHANNELS – *Shawn Lamothe, Canada* • RESOLVING CA^{2+}-DEPENDENT CALMODULIN REGULATORY STATES OF KV7.2 USING A FRET-BASED APPROACH – *Emily Walsh, United States of America* • MOLECULAR DISSECTION OF THE KV7.2-STARGAZIN INTERACTION – *Telmo Leal, Portugal* • ATOMISTIC INSIGHTS INTO KV7.2 VARIANT-INDUCED DYSFUNCTION: A MOLECULAR DYNAMICS STUDY – *Agnese Roscioni, Italy* • MECHANISTIC CHARACTERIZATION AND THERAPEUTIC TARGETING OF KCNQ2 DEVELOPMENTAL AND EPILEPTIC ENCEPHALOPATHY IN A KV7.2 THR274MET/+ MOUSE MODEL – *Shaimaa Haiba, Germany* • EFFECTS OF KV7 CHANNEL ACTIVATORS IN EXPERIMENTAL MODELS OF AMYOTROPHIC LATERAL SCLEROSIS – *Rossella Vitale, Italy* • MODELING KCNQ2-ENCEPHALOPATHY USING IPSC-DERIVED EXCITATORY-INHIBITORY NEURONAL NETWORKS – *Noortje Zonnekein, Belgium* • ENDOTHELIAL KV7.5 CHANNELS REGULATE BLOOD–BRAIN BARRIER INTEGRITY AND SEIZURE SUSCEPTIBILITY – *Camilla Celentano, Italy* • REGULATION OF VASCULAR KV7 CHANNELS BY G PROTEIN-COUPLED RECEPTOR KINASES – *Skye Lau, United Kingdom*
6:10 PM – 7:30 PM	**WELCOME RECEPTION** (Symposium venue catering area – 1st floor)



Preliminary Programme

THURSDAY – 17 SEPTEMBER 2026	
9:00 AM – 9:45 AM	**PLENARY 2 - THOMAS JENTSCH: UNRAVELLING THE KCNQ K+ CHANNEL FAMILY ("D.A. BROWN LECTURE"** SUPPORTED BY THE PHYSIOLOGICAL SOCIETY**)** (Aula Magna) Chair: Iain Greenwood
9:45 AM – 10:15 AM	**COFFEE BREAK** (Catering area – 1st floor)
10:15 AM – 12:05 AM	**SESSION 2: KV7.1 PATHOPHYSIOLOGY AND PHARMACOLOGY** (Aula Magna) *Chairs: Guiscard Seebohm, Nina Ottosson* • KV7.1: FROM IX1 TO LQT-1 MOLECULAR PHYSIOLOGY AND DISEASE – *Robert Kass, United States of America* • PROMISING QT-SHORTENING EFFECT OF THE ENDOCANNABINOID N-ARACHIDONOYL-L-SERINE (ARA-S) IN A TRANSGENIC MODEL OF LONG QT SYNDROME TYPE 1 – *Julien Louradour, Switzerland* • ARRHYTHMIA-MUTANT R231C STABILIZES THE VOLTAGE SENSOR IN CARDIAC POTASSIUM IKS CHANNELS IN THE INTERMEDIATE STATE – *Alicia De la Cruz, Sweden* • LOSS-OF-FUNCTION OF KV7.1 LEADS TO METABOLIC DYSFUNCTION THROUGH AGE-DEPENDENT PANCREATIC BETA-CELL DECLINE – *Anniek Lubberding, Denmark* • DETERMINE THE ANTI-ARRHYTHMIC POTENTIAL OF KV7.1/KCNE1 ACTIVATORS USING LQTS ZEBRAFISH MODEL – *Lucas Dauga, Sweden*
12:05 AM – 1:40 PM	**LUNCH & POSTERS** (Catering area – 1st floor & Poster area – 3rd floor)
1:40 PM – 3:45 PM	**SESSION 3: KV7 MODULATORS AS ANTICONVULSANTS** (Aula Magna) *Chairs: Sarah Weckhuysen, Thanos Tzounopoulos* • TOWARDS A NEW CLASS OF KCNQ CHANNEL MODIFIERS FOR POTENTIAL THERAPEUTIC APPLICATIONS – *Vitya Vardanyan, Armenia* • DEVELOPING ANTIEPILEPTIC DRUG CANDIDATES WITH THE NOVEL KCNQ2 AGONIST EBIO1 AS A LEAD – *Huaiyu Yang, China* • FROM KV7.2 ACTIVATION TO INHIBITION BY CHEMICAL REMODELING – *Carmine Ostacolo, Italy* • AKTIVA7E: A PROOF-OF-CONCEPT PHASE 1B STUDY TO EVALUATE THE SAFETY, TOLERABILITY, EFFICACY, AND PHARMACOKINETICS OF QRL-101, A NOVEL KV7.2/7.3 MODULATOR, IN KCNQ2/KCNQ3 RELATED EPILEPSY – *Manoj Malhorta, United States of America* • ENHANCED SEIZURE SUSCEPTIBILITY AND COGNITIVE DEFICITS IN MICE EXPRESSING A GAIN-OF-FUNCTION EPILEPSY VARIANT IN PIP2-BINDING RESIDUE OF KV7.2 – *Hee Jung Chung, United States of America*
3:45 PM – 4:15 PM	**COFFEE BREAK** (Catering area – 1st floor)
4:15 PM – 6:05 PM	**SESSION 4: KV7 IN BRAIN PHYSIOLOGY** (Aula Magna) *Chairs: Hee Jung Chung, Isabella Salzer* • ANGIOTENSIN II REGULATES KV7 CHANNELS IN CENTRAL NEURONS AND BRAIN ENDOTHELIAL CELLS – *Vincenzo Barrese, Italy* • GLIAL KCNQ CHANNELS REGULATE NEURONAL EXCITABILITY VIA GLIAL GABA RELEASE – *Laura Bianchi, United States of America* • KV7.2 IS THE PRINCIPAL M-TYPE K+ CHANNEL SUBUNIT MODULATING PAIN BEHAVIOURS IN RATS. – *Frederick Jones, United Kingdom* • KV7.2 CHANNELS SHAPE EXCITABILITY AND SALTATORY CONDUCTION AT THE NODE OF RANVIER IN HEAVILY MYELINATED NERVES – *Jianguo Gu, United States of America* • PHARMACOLOGICAL ACTIVATION OF KCNQ4 SUPPRESSES PERIPHERAL NOCICEPTIVE SIGNALING IN MICE – *Long Wang, China*
6:15 PM – 7:00 PM	**PLENARY 3 - ANASTASIOS TZINGOUNIS: UNRAVELING KCNQ2/3/5 CHANNEL FUNCTION IN THE BRAIN: FROM EPITOPE-TAGGED LINES TO DISEASE MODELS** (Aula Magna) Chair: Maurizio Taglialatela
8:00 PM – 11:00 PM	**SYMPOSIUM DINNER:** Restaurant Transatlantico , Centro Nautico Santa Lucia, Via Luculliana 15 – 80132 Naples (400m walk from the Symposium venue)



Preliminary Programme

FRIDAY – 18 SEPTEMBER 2026	
9:00 AM – 9:45 AM	**PLENARY 4 - JIANGTAO GUO: STRUCTURAL BASIS FOR LIGAND MODULATION OF HUMAN KCNQ2** (Aula Magna) *Chair: Maurizio Taglialatela*
9:45 AM – 10:15 AM	**COFFEE BREAK** (Catering area – 1st floor)
10:15 AM – 12:05 AM	**SESSION 5: KV7 CHANNEL REGULATION** (Aula Magna) *Chairs: Thomas Jepps, Nikita Gamper* • TDP-43-DEPENDENT MIS-SPLICING OF KCNQ2 TRIGGERS INTRINSIC NEURONAL HYPEREXCITABILITY IN ALS/FTD – *Evangelos Kiskinis, United States of America* • TUNING KV7/KCNQ CHANNEL DENSITY THROUGH ENDOSOMAL 2CL-/H+ EXCHANGE: IMPLICATIONS FOR NEURONAL EXCITABILITY – *Raul E. Guzman, Germany* • GBΓ DUALLY REGULATES THE M-CURRENT VIA INCREASED PIP2 SENSITIVITY AND TRAFFICKING – *Boris Shalomov, Israel* • DRUG:LIPID INTERACTIONS REVEAL AN ENORMOUS DYNAMIC RANGE OF KCNQ POTASSIUM CHANNEL REGULATION – *Harley Kurata, Canada* • AN UPSTREAM OPEN READING FRAME REPRESSES TRANSLATION OF KCNQ2 – *Dalton Huey, United States of America*
12:05 AM – 1:40 PM	**LUNCH & POSTERS** (Catering area – 1st floor & Poster area – 3rd floor)
1:40 PM – 3:30 PM	**SESSION 6: KV7 IN MUSCLE** (Aula Magna) *Chairs: Fabio Arturo Iannotti, Vincenzo Barrese* • OESTRUS CYCLE REGULATION OF CEREBRAL ARTERY KV7 CHANNELS – *Samuel N Baldwin, Denmark* • NOVEL CRYPTIC SPLICING EVENT IN THE MITOCHONDRIAL KV7.4 CHANNEL – *Thomas Jepps, Denmark* • CONTRIBUTION OF KV7 CHANNELS TO M2 MUSCARINIC RECEPTOR-DEPENDENT CONTRACTIONS OF AIRWAY SMOOTH MUSCLE – *Gerard P Sergeant, Ireland* • THERAPEUTIC EFFECTS OF A KV7.4 ACTIVATOR, URO-K10, ON PULMONARY ARTERIAL HYPERTENSIVE RATS: A NOVEL MODE OF ACTION VIA MITOCHONDRIA – *Sung Joon Kim, South Korea* • IDENTIFICATION OF SODIUM/MYO-INOSITOL TRANSPORTER 1 AS A MAJOR DETERMINANT OF ARTERIAL CONTRACTILITY THROUGH MODULATION OF KV7.4/5 CHANNEL ACTIVITY – *Elizabeth Forrester, United Kingdom*
3:30 PM – 4:00 PM	**COFFEE BREAK** (Catering area – 1st floor)
4:00 PM – 5:20 PM	**SESSION 7: NOVEL THERAPEUTIC APPROACHES** (Aula Magna) *Chairs: Evangelos Kiskinis, Francesco Miceli* • THERAPEUTIC STRATEGIES FOR KCNQ4-ASSOCIATED HEARING LOSS – *Heon Yung Gee, United States of America* • A ROLE OF KCNQ-INDUCED PLASTICITY ON NOISE-INDUCED NEURAL AND PERCEPTUAL HYPERSENSITIVITY TO SOUND – *Thanos Tzounopoulos, United States of America* • TOWARD SCALABLE PRECISION THERAPEUTICS FOR KCNQ2-DEE – *Aubrie Soucy Verran, United States of America* • DEVELOPMENT AND EVALUATION OF SYSTEMIC AAV GENE THERAPY TO TREAT NEONATAL KCNQ2 EPILEPTIC ENCEPHALOPATHY – *Rana Eser, United States of America* • ASO–MEDIATED RESCUE OF ELECTROPHYSIOLOGICAL NETWORK DYSFUNCTION IN IPSC-DERIVED KCNQ2 GAIN-OF-FUNCTION NEURONS – *Lidia Carotenuto, Belgium*
5:20 PM – 5:50 PM	**CLOSING CEREMONY / AWARDS / FAREWELL** (Aula Magna)

The Best Presentation Award is kindly supported by the Journal of General Physiology.

The D.A. Brown Lecture is kindly supported by the Physiological Society.