

Date	Time	Session	Format	Theme	Title	Presenting author
Saturday 25 July 2026	14:30–16:30	Session 1 Chair: Brenda Kwak	Keynote + 2 oral		<i>The dawn of the molecular era of gap junction research and where it has led us 45 years later</i>	Bruce J. Nicholson
				Cardiac GJA1 alternative translation and cardioprotection	Upstream mRNA cis-regulatory elements bias ribosomal start site selection to control alternative translation initiation of GJA1-20k	James W. Smyth
				Cardiac GJA1 alternative translation and cardioprotection	Exercise-Induced Cardioprotection Is Mediated by GJA1-20k Translation	Lindsey A. Taylor
	17:00–18:30	Session 2 Chair: James Smyth	3 oral	Cardiovascular channel remodeling, vascular inflammation and PANX1 regulation	Macrophage to smooth muscle cell gap junctions drive neointimal development	Scott Johnstone
				Cardiovascular channel remodeling, vascular inflammation and PANX1 regulation	A nanoscale gap junction–perinexus nanodomain governs sodium dependent balance of ephaptic and gap junctional activation in excitable cell pairs	Rob Gourdie
				Cardiovascular channel remodeling, vascular inflammation and PANX1 regulation	Internally Translated Connexin 40 Isoforms Regulate Trafficking and Are Reduced in Atrial Fibrillation	Joseph A. Palatinus
Sunday 26 July 2026	09:00–10:30	Session 3 Chair: Juan C. Sáez	Keynote + 2 oral		<i>Pannexins need a friend</i>	Brant E. Isakson
				Pannexin channel structure, ATP release and human disease mutations	Structural basis of ATP release and ion selectivity in Pannexin1 channels	Gerhard Dahl
				Pannexin channel structure, ATP release and human disease mutations	Characterizing Novel Human Pannexin Mutations in Erosive Osteoarthritis Patients	Justin Tang
	11:00–13:00	Session 4 Chair: Silvia Penuela	4 oral	Pannexin/connexin signaling	Pharmacological and Genetic Rescue Suggest a Role for Panx1a in Maintaining Neural Synchrony Under Metabolic Stress	Georg S.O. Zoidl
				Pannexin/connexin signaling	Connexin 43 shuttling from microglia to astrocytes and neuroimmune interaction in chronic neuroinflammation.	Nunzio Vicario
				Pannexin/connexin signaling	Cx43 as a new regulatory player of mTORC1-associated cellular metabolism	Henrique Girao
				Pannexin/connexin signaling	Cx43 and Panx1 hemichannels underlie SARS-CoV-2 Spike S1-induced astrocyte dysfunction via TLR4 and AT1 signaling	Juan Prieto-Villalobos
	14:30–16:30	Session 5 Chair: Artantxa Tabernero	4 oral	Glioma, extracellular vesicles and metastatic tumor microenvironment communication	Disrupting glioblastoma microenvironment communication through inhibition of connexin hemichannels	Viola Donati
				Glioma, extracellular vesicles and metastatic tumor microenvironment communication	A BMP4/β-catenin axis drives dynamic subcellular redistribution of Connexin43 to control glioblastoma stem cell plasticity.	Caleb Mensah
				Glioma, extracellular vesicles and metastatic tumor microenvironment communication	Connexin 43–Enriched Extracellular Vesicles as a Therapeutic Platform with Enhanced Uptake and Antitumour Activity	Soumadipta Mazumdar
				Glioma, extracellular vesicles and metastatic tumor microenvironment communication	Connexin 43 couples autophagy to extracellular vesicle-associated secretion of nuclear components during genotoxic stress	Tania Martins-Marques
Monday 27 July 2026	09:00–10:30	Session 6 Chair: Juan A. Orellana	Keynote + 2 oral		<i>Decoding Connexin Hemichannels: Structure, Function, and Regulatory Mechanisms</i>	Jorge E. Contreras
				Physiology and channel regulation	Controllable gap junctions by vitamin B 12 and light	Dao Cui
				Physiology and channel regulation	Mapping the Human Connexin Compatibility Landscape for Gap Junction Engineering	Liz Ramsey
	11:00–13:00	Session 7 Chair: Henrique Girao	4 oral	Physiology and channel regulation	Molecular mechanisms of conduction in connexin-46 and connexin-50	Bassam G. Haddad
				Physiology and channel regulation	Coupling conductance in heterotypic gap junctions is strongly influenced by a key docking residue within the E2 domain of connexins	Robert S. Wong
				Physiology and channel regulation	Integrative Modeling of the Cx32–Calmodulin Complex: Structural Insights into Ca ²⁺ -Dependent Gating using mass spectrometry-based methods	Roberta Florea
				Physiology and channel regulation	Pannexin 1 phosphorylation sites differentially modulate PANX1 channel activity and physiological outcomes	Brooke O'Donnell
	14:30–16:30	Session 8 Chair: Mauricio Retamal	3 oral	Physiology and channel regulation	Life cycle of the gap junction plaque: Ultrastructural analysis using TEM-based connectomics.	Crystal L. Sigulinsky
				Physiology and channel regulation	Pannexin 1 Regulates Skeletal Muscle Development in a Sex-Dependent Manner by Modulating Muscle Stem Cells, Myofiber Growth, and Fiber Type Specification.	Stéphanie Langlois
				Physiology and channel regulation	Connexin 50 Preserves Lens Epithelial Integrity by Regulating Cell–Cell Adhesion and β-Catenin Retention to Suppress EMT and Post-surgical Fibrosis	Jean X. Jiang
Tuesday 28 July 2026	09:00–10:30	Session 9 Chair: Jean X. Jiang	Keynote + 2 oral		<i>Targeting Connexin43 in Aging and Cancer: A Context-Dependent Therapeutic Opportunity</i>	Maria Mayán
				Pannexins/Connexins in cancer, development and proliferation	Pannexin 1 and pannexin 3 act through different cell proliferation pathways	Madison D. Williams
				Pannexins/Connexins in cancer, development and proliferation	Non-canonical roles of Cx46 in cancer cells: from protein–protein interactions to truncated Cx46 isoforms	Mauricio A. Retamal
	11:00–13:00	Session 10 Chair: Gerhad Dahl	4 oral	Pannexins/Connexins in cancer, development and proliferation	Pannexin 1 Ablation Disrupts Cell Cycle Progression and Compromises the Structural Architecture of Melanoma Tumours	Stephanie E. Leighton
				Pannexins/Connexins in cancer, development and proliferation	Cx43 Regulates Chemotherapy Response and Adaptive Tumor-Stromal Communication in Triple-Negative Breast Cancer	Trond Aasen
				Pannexins/Connexins in cancer, development and proliferation	Novel PANX1 Cytosolic C-terminal N-glycosylation in Melanoma	Dan Stefan
				Pannexins/Connexins in cancer, development and proliferation	Connexin channel composition governs hepatic niche communication and liver metastasis in colorectal cancer	Xiaoting Hong
	14:30–16:30	Session 11 Chair: Rosalba Parenti	4 oral	Tissue-specific connexin biology and therapeutic delivery in eye, skin, bone and injury	Regulation of cell-cell connectivity via gap junctions in the retinal pigment epithelium	Anna Mäkitiira
				Tissue-specific connexin biology and therapeutic delivery in eye, skin, bone and injury	Exploring Connexin Channels in Sebocytes	Tina Lehrich
				Tissue-specific connexin biology and therapeutic delivery in eye, skin, bone and injury	Injury Licensed, ATP Programmed Milk Extracellular Vesicles for Oral Delivery of a Connexin43 Peptide in Radiation and Myocardial Ischaemia–Reperfusion Injury	Laura Beth Payne
				Tissue-specific connexin biology and therapeutic delivery in eye, skin, bone and injury	Connexin 43 as a central regulator of osteocyte viability and function	Lilian I. Plotkin
Wednesday 29 July 2026	09:00–10:30	Session 12 Chair: Soile Nymark	Keynote + 2 oral		<i>The many ways astroglial connexins and pannexins regulate neurotransmission and behavior</i>	Nathalie Rouach
				Connexin channels in organ physiology and disease models	Spatial Transcriptomics Reveals Thalamic Downregulation of Connexin 47 in Female Mice Following Social Isolation.	Carlos Farkas
				Connexin channels in organ physiology and disease models	The molecular organization of the ‘Club ending’ electrical synapse on the Mauthner cell	Alberto Pereda
	11:00–13:00	Session 13 Chair: Marc Chanson	4 oral	Connexin channels in organ physiology and disease models	Cx43–Adenosine Crosstalk Disrupts Epithelial Polarization During Airway Regeneration in Cystic Fibrosis	Mehdi Badaoui
				Connexin channels in organ physiology and disease models	Investigating Connexin 32 Hemichannel Alterations in a CMT1X Patient-Derived Schwann Cell-Based Platform	Enrico C. Torre
				Connexin channels in organ physiology and disease models	Connexin 43 gap junctional coupling in neurological disorders: focus on Parkinson’s	Nataly Hastings
				Connexin channels in organ physiology and disease models	Conditional deletion of astroglial connexin 43 attenuates pain hypersensitivity in a preclinical neuropathic pain model	Simona Denaro