

Symposium Arrangements

1. Registration

Registration is open after 3 p.m. on August 3rd and throughout the meeting at the entrance to the Okazaki Conference center (OCC).

2. Information for oral presentation

Presentation time including discussion for each speaker is 30 min (5 speakers/session) or 25 min (6 speakers/session). Generally, presentations should be given with speaker's own laptop computer. All presenters in a session should set up and test the connection to the projector before the session begins.

3. Information for poster presentation

Please post your materials on the board indicating the correct poster number throughout the symposium. Size of the poster should not exceed 115 cm x 85 cm (height x width). The core time of poster presentation is scheduled for the 5th (10:45-12:00).

4. Get-together party

On August 3rd at 17:30-19:00 at OCC (room B). A jazz performance starts at 18:00. This party is free for the participants who paid full registration fee and her/his accompanied person.

5. Lunch service

Lunch will be served for all participants at OCC.

6. Group photo

After the PAT-CVR Lectures on Wednesday, Aug. 5th. Please gather at the entrance of OCC.

7. Reception and *Shamisen* Concert

The reception will be held on Tuesday, August 4th at 19:10-20:10 at OCC (room B). After the reception, the *Shamisen* concert will be held at Room A. Note that drinking and eating are prohibited in room A.

8. Excursion & Free Discussion & Barbeque with *Wadaiko* Concert (5,000 yen/person, 90 persons at maximum). Departure of tour bus: Aug. 5th, 13:00 at the Entrance of OCC.

9. Dinner with brief *Koto* Concert (Shabu-shabu dinner, 5000 yen/person, 100 persons at maximum). Departure of shuttle bus: Aug. 6th, 19:05 at the Entrance of OCC.

10. Shuttle Bus Service

The Okazaki New Grand Hotel provides daily complimentary shuttle bus service between Higashi Okazaki Station (south exit (★ on the map)) and the hotel every 15 minutes from 17:00 to 20:00 (the last bus departs at 20:00).

Arranged shuttle bus for PAT-CVR participants

(1) From Higashi Okazaki Station (south exit) to Okazaki New Grand Hotel

Departure time

August 3rd: 15:30 / 16:30 / 17:30

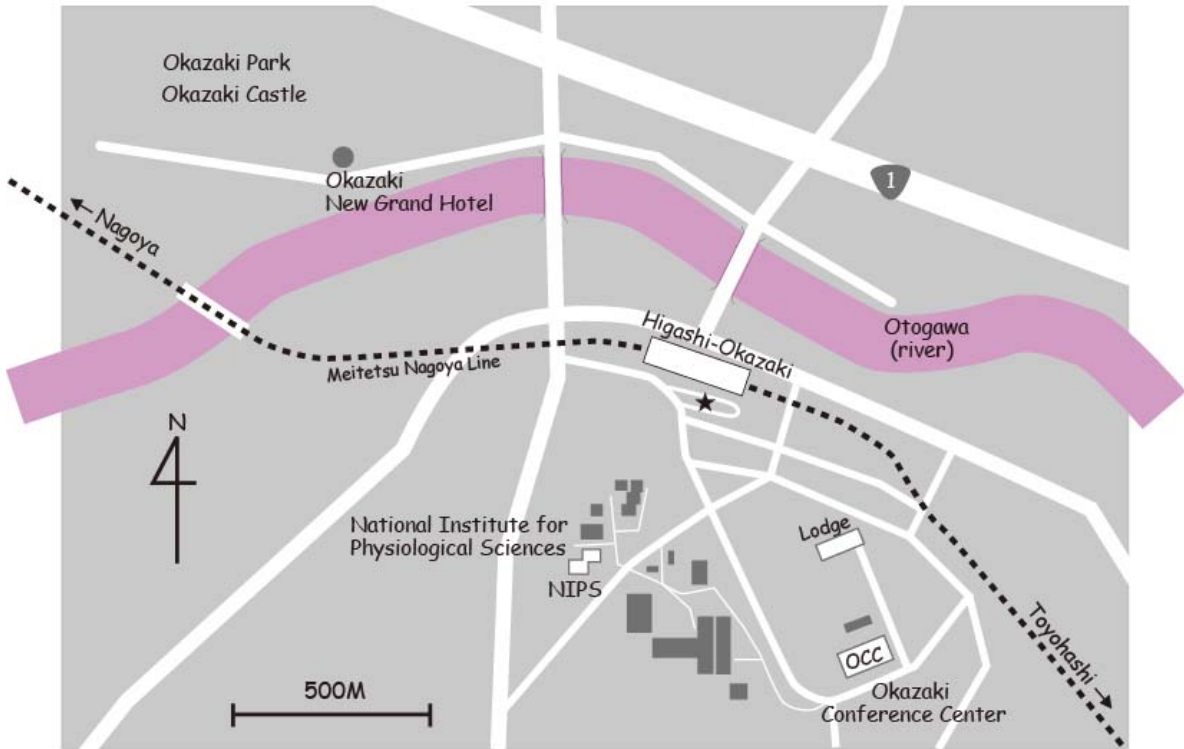
(2) From Okazaki New Grand Hotel to Okazaki Conference Center (OCC)

Departure time

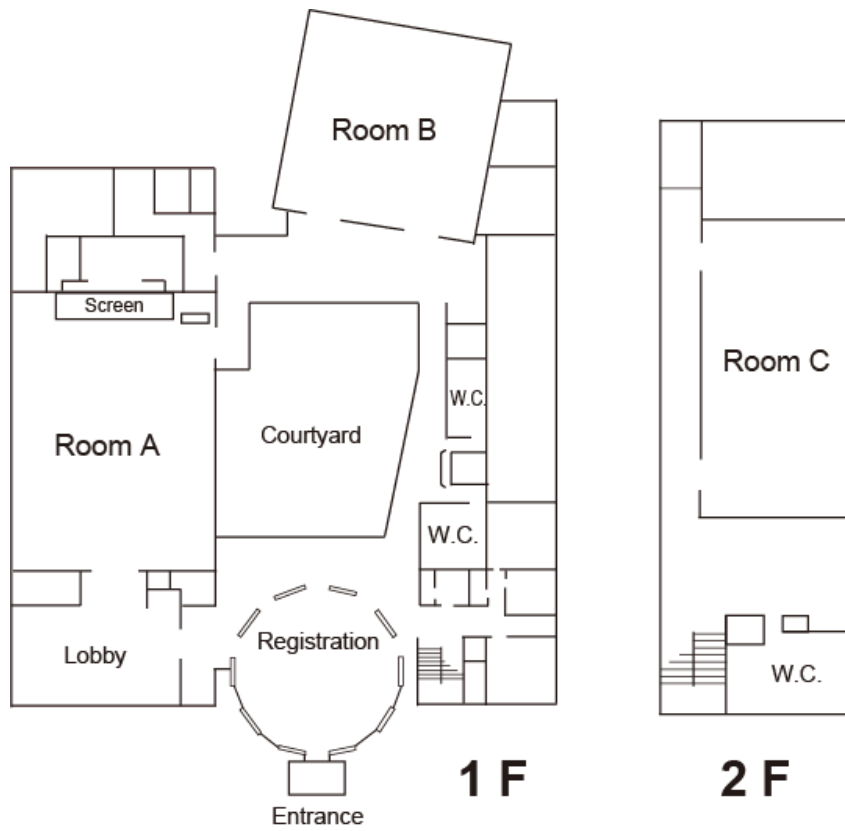
August 3rd: 15:00 / 16:00 / 17:00

August 4th, 5th and 6th: 7:50 am / 8:10 am / 8:30 am

Okazaki Map



Okazaki Conference Center (OCC)



	Aug.3 (Mon)	Aug. 4 (Tue)	Aug. 5 (Wed)	Aug. 6 (Thu)
8:00				
		8:10 Registration	8:10 Registration	8:10 Registration
		8:40 Opening Remark		
9:00		8:50 PAT-CVR Lectures (Room A)	8:45 PAT-CVR Lectures (Room A)	8:45 PAT-CVR Lectures (Room A)
10:00		9:50 <i>Coffee Break</i>		9:45 <i>Coffee Break</i>
		10:00 PAT-I	10:15 Group Photo	10:00 PAT-IV
11:00		CVR-I	10:45 Poster Presentation	CVR-IV
12:00		(Room A) (Room C)	12:00 -----	(Room B) (Room C)
		12:30 <i>Poster & Lunch</i>	12:00 <i>Poster & Lunch</i>	12:30 <i>Poster & Lunch</i>
13:00			13:00	
14:00		13:30 PAT-II	Excursion & Free Discussion & Barbecue with Wadaiko Concert	13:30 PAT-V
15:00		CVR-II		CVR-V
16:00	15:00 Registration	(Room A) (Room C)		(Room B) (Room C)
		16:00 <i>Coffee Break</i>		16:00 <i>Coffee Break</i>
17:00		16:30 PAT-III		16:30 PAT-VI
18:00	17:30 Get-Together with Jazz Concert	CVR-III		CVR-VI
19:00		(Room A) (Room C)		(Room B) (Room C)
		19:00		19:00 Closing Remark Closing Remark
20:00		19:10 <i>Reception</i> (Room B)		19:30 Dinner with Koto Concert
21:00		20:10 <i>Shamisen Concert</i> (Room A)		

Program

August 3rd, Monday

15:00-17:30 *Registration*

17:30-19:00 *Get-Together with Jazz Concert (OCC Room B)*

August 4th, Tuesday

Opening Remarks (Room A)

08:40-08:50 Yasunobu Okada Director-General, NIPS, Japan

PAT-CVR Lectures (Room A)

08:50-09:20 *Chairperson:* Else K Hoffmann

Yasunobu Okada, Takahiro Shimizu, Elbert L. Lee, Hana Inoue, Hiromi Uramoto, Kaori Sato & Tomohiro Numata (NIPS, Japan)

Roles of anion channels and disordered cell volume regulation in apoptotic and necrotic cell death

09:20-09:50 *Chairperson:* Junichi Nabekura

Kai Kaila (Univ. Helsinki, Finland)

Neuronal chloride regulation and epilepsy

PAT Symposium (Room A)

PAT-I

CFTR: From Molecular Structure to Tissue Physiology and Therapy for CF

Chaired by David N. Sheppard and Yoshiro Soma

10:00-10:30 Ruth Muchekehuru, Ning Yang, Mary Abigail S. Garcia¹ & Paul M. Quinton
(University of California, USA)

Does Mucus need HCO₃⁻ ?

10:30-11:00 Stan Pasyk, Leigh Wellhauser, Patrick Kim Chiaw, Canhui Li, Mohabir Ramjeesingh
& Christine E. Bear (SickKids Hospital, CANADA)

Biochemical studies of the enzymatic activity of full length CFTR and catalytic site mutants

11:00-11:30 Jeng-Haur Chen, Zhiwei Cai & David N. Sheppard (University of Bristol, UK)

Direct sensing of intracellular pH by the CFTR Cl⁻ channel

11:30-12:00 Hsiao Chang Chan (The Chinese University of Hong Kong, Hong Kong)

Involvement of CFTR in oviductal bicarbonate transport and embryo development

12:00-12:30 Haouaria Balghi, Alexandra Evagelidis, David Y. Thomas & John W. Hanrahan (McGill Univ., Canada)

Enhanced calcium entry in cells that express $\Delta F508$ CFTR: crosstalk between mature CFTR, ORAI1, and the ER-resident protein STIM1

12:30-13:30 *Poster & Lunch*

PAT-II

CLC Chloride Channel

Chaired by Shinichi Uchida and Thomas Jentsch

13:30-13:55 Christoph Fahlke (Institut für Neurophysiologie, Medizinische Hochschule Hannover, Germany)

Function of renal ClC channels and regulation by the accessory subunit barttin

13:55-14:20 Thomas J. Jentsch (FMP and MDC, Germany)

CIC/barttin Cl channels – role in the kidney and the inner ear

14:20-14:45 María Isabel Niemeyer, L. Pablo Cid, Yamil R. Yusef, Rodolfo Briones & Francisco V. Sepúlveda (CECS and CIN, Chile)

Titration of specific residues account for complex gating of a ClC chloride channel by extracellular protons

14:45-15:10 Alessandra Picollo, Mattia Malvezzi, Jon Houtman & Alessio Accardi (University of Iowa, USA)

Anion binding and selectivity in the CLC family of channels and transporters

15:10-15:35 S. Uchida, N. Nomura, N. Sugawara, T. Morimoto, Y. Kondo, S. Naito, N. Yui, K. Oi, G. Talat, K.M.Z. Hossain, M. Wakabayashi, H. Nishida, E. Ohta, A. Ohta, E. Sohara, T. Rai, S. Sasaki (Tokyo Medical and Dental University, Japan)

Molecular pathogenesis of Bartter syndrome caused by R8L barttin mutation

15:35-16:00 Jorge E. Sanchez-Rodriguez, Jose A. de Santiago-Castillo & Jorge Arreola (University of San Luis Potosi, Mexico)

Proton and Chloride Ions Alter ClC-2 Gating by Interfering with Closing of Protopore Gate

16:00-16:30 *Coffee Break*

PAT-III

Ligand-gated Anion Channel

Chaired by Junichi Nabekura and Atsuo Fukuda

16:30-17:00 Andrew J Moorhouse, Jane E. Carland, Michelle A. Cooper, Silas Sugiharto, Trevor M. Lewis, Peter H. Barry, John A. Peters, Jeremy J. Lambert (The University of New South Wales, Australia)

Molecular Determinants and Biophysical Mechanisms of Anion Selectivity in Glycine Receptor-Channels

- 17:00-17:30 H.J. Luhmann, W. Kilb, I.L. Hanganu-Opatz, A. Okabe, B.A. Sava, C. Shimizu-Okabe & A. Fukuda (Johannes Gutenberg University, Germany)
Function of ligand-gated chloride channels in the newborn rodent cerebral cortex
- 17:30-18:00 Claudio Rivera (University of Helsinki, Helsinki, Finland)
Mechanisms of KCC2 gene regulation in immature neurons
- 18:00-18:30 Rustem Khazipov, Marat Minlebaev & Yehezkel Ben-Ari (INMED-INSERM U901, France)
Actions of GABA on the immature cortical neurons in vitro and in vivo
- 18:30-19:00 A. Fukuda, T. Furukawa, T. Morishima & T. Kumada (Hamamatsu University School of Medicine, Japan)
Endogenous taurine tonically activates GABA_A receptors in embryonic mouse neocortex

CVR Symposium (Room C)

CVR-I

CVR & Anion Channel/Transporter

Chaired by Andrés Stutzin and Hideki Sakai

- 10:00-10:30 Clive M. Baumgarten, Wu Deng & Frank J. Raucci Jr. (Virginia Commonwealth University, USA)
Reactive oxygen species produced by NADPH oxidase and mitochondria regulate volume-sensitive Cl⁻ channels: A common theme for multiple pathways
- 10:30-11:00 Dazhi Xiong, Nathanael S. Heyman, Judith Airey, Linda Ye, Cherie A. Singer, Shanti Rawat, Mi Zhang, Rebecca Evans, Dean J. Burkin, Fiona C. Britton, Dayue Duan & Joseph R. Hume (University of Nevada School of Medicine, USA)
Cardiac-specific manipulation of CIC-3 gene alters native volume-sensitive outwardly rectifying anion channels (VSOACs) and heart function in transgenic mice
- 11:00-11:30 Takahiro Shimizu, Elbert L. Lee, Tomoko Ise & Yasunobu Okada (Toyama University, Japan)
Volume-sensitive Cl⁻ channel as a regulator of acquired cisplatin resistance
- 11:30-12:00 Shintaro Yamamoto & Tsuguhisa Ehara (Fukuoka University, Japan)
Cell-volume regulation in mammalian heart
- 12:00-12:30 Diego Varela, Antonello Penna, Felipe Simon, Ana Luisa Eguiguren, Elías Leiva-Salcedo, Francisco Sala & Andrés Stutzin (Universidad de Chile, Chile)
Calcium entry modulates the time course for VSOR Cl⁻ current onset in rat hepatoma cells
- 12:30-13:30 *Poster & Lunch*

CVR-II

CVR & Cation Channel/Transporters

Chaired by Frank Wehner and Francisco J Alvarez-Leefmans

- 13:30-14:00 Frank Wehner, Tongju Li, Elmar Endl & Maryna Bondarava (Max-Planck-Institute of Molecular Physiology, Germany)
The hypertonicity-induced cation channel (HICC) in human hepatocytes: Role in proliferation vs. apoptosis and molecular characterization
- 14:00-14:30 Shihong Mao & F. Javier Alvarez-Leefmans (Wright State University, USA)
Role of NKCC1 in isosmotic volume control studied in rodent dorsal root ganglion neurons
- 14:30-15:00 Rainer Hedrich (University of Würzburg, Germany)
Guard cell volume is controlled by anion channels via draught stress signaling kinase and phosphatase
- 15:00-15:30 Miguel A. Valverde, Anna Garcia-Elias, Carole Jung, César Fandos, Gerard Cantero, José M. Fernández-Fernández & Rubén Vicente
Regulation and pathophysiological relevance of the TRPV4 channel
- 15:30-16:00 Dandan Sun (Univ. of Wisconsin School of Medicine and Public Health, USA)
ER Ca²⁺ dysregulation and ER stress following in vitro neuronal ischemia: role of Na⁺-K⁺-Cl⁻ cotransporter
- 16:00-16:30 *Coffee Break*

CVR-III

CVR & Organic Solute Transport

Chaired by Alexander A. Mongin and Ravshan Z. Sabirov

- 16:30-17:00 Kishio Furuya, Kyoko Harada, Masahiro Sokabe (Nagoya University, Japan)
ATP-releases via multiple pathways in mammary epithelial cells revealed by ATP imaging
- 17:00-17:30 Ryszard Grygorczyk & Sergei N. Orlov (University of Montreal, Canada)
Volume-sensitive nucleotide release from epithelial cells
- 17:30-18:00 Alexander A. Mongin, Renee E. Haskew-Layton, Alena Rudkouskaya, Timothy J. Harrigan & Iskandar F. Abdullaev (Albany Medical College, USA)
Redox-regulation of volume-sensitive organic osmolyte release in the brain: mechanisms and (patho)physiological significance
- 18:00-18:30 Harold K. Kimelberg (Ordway Research Institute, USA)
Pros and cons of glutamate transport through cell volume regulated (CVR) anion channels in astrocytes: are there therapeutic implications?
- 18:30-19:00 Ravshan Z. Sabirov & Yasunobu Okada (Institute of Physiology and Biophysics, Uzb. Acad. Sci., Uzbekistan)
Transport of organic solutes through the maxi-anion channel

August 5th, Wednesday

PAT-CVR Lectures (Room A)

08:45-09:15 *Chairperson:* Bernd Nilius

Makoto Tominaga (NIPS, Japan)

Physiological significance of the thermosensitive TRP channels

09:15-09:45 *Chairperson:* Hideki Sakai

Else K Hoffmann, Kristian A Poulsen, Thomas K Klausen, Signe Kierkegaard, Carl Frederik Hansen, Ian H Lambert & Stine F Pedersen (University of Copenhagen, Denmark)

Regulation of cell volume, proliferation and programmed cell death: Role of ion channels and aquaporins

09:45-10:15 *Chairperson:* Shinichi Uchida

Thomas J. Jentsch (FMP and MDC, Germany)

CLC Cl channels and transporters – biophysics, physiology and pathology

10:15-10:45 *Group photo*

10:45-12:00 *Poster presentation*

12:00-13:00 *Poster & Lunch*

August 6th, Thursday

PAT-CVR Lectures (Room A)

08:45-09:15 *Chairperson:* Yoshiro Sohma

John. R. Riordan (University of North Carolina, USA)

CFTR at 20: evolving perspectives

09:15-09:45 *Chairperson:* Makoto Tominaga

Bernd Nilius (Katholieke Universiteit Leuven, Belgium)

Mechano-sensitive TRP channels: facts and fictions

PAT Symposium (Room B)

PAT-IV

New Directions in Cl⁻ Channel Research

Chaired by Michael A. Gray and Criss Hartzell

10:00-10:30 Robert J. Lee & J. Kevin Foskett (University of Pennsylvania, USA)

Molecular mechanisms of cholinergic- and VIP-stimulated Ca²⁺-dependent fluid secretion by porcine lung submucosal gland serous cells

10:30-11:00 Nael A. McCarty, Matthew D. Fuller & Christopher H. Thompson (Emory University, USA)

Novel peptide toxin inhibitors of the CFTR and ClC-2 chloride channels

11:00-11:30 Criss Hartzell, Charity Duran, Qinghuan Xiao, Kuai Yu & Zhiqiang Qu (Emory University School of Medicine, USA)

Bestrophins and Anoctamins as Molecular Candidates for Ca-activated Cl Channels

11:30-12:00 Luis J.V. Galiotta, Loretta Ferrera, Antonella Caputo, Elvira Sondo, Emanuela Caci, Olga Zegarra-Moran & Nicoletta Pedemonte (Gaslini Institute, Italy)

Functional and molecular analysis of TMEM16 proteins as plasma membrane chloride channels

12:00-12:30 Rebecca A Falin, Rebecca Morrison, Amy-Joan L Ham & Kevin Strange (Vanderbilt University Medical Center, USA)

Identification of Ste20 kinase regulatory phosphorylation sites in a cell cycle and cell volume sensitive ClC anion channel

12:30-13:30 *Poster & Lunch*

PAT-V

SLC & Organic Anion Transporters

Chaired by Hiroshi Ishiguro and Seth L. Alper

13:30-13:55 Hyun Woo PARK, Joo Hyun NAM & Min Goo LEE (Yonsei University College of Medicine, Korea)

Regulation of CFTR and SLC26 transporters by [Cl]_i-sensitive protein kinases

13:55-14:20 Yoshikatsu Kanai (Osaka University, Japan)

Novel organic anion transporters and new aspects of organic anion transport in renal proximal tubules

14:20-14:45 Seth L. Alper, Boris E. Shmukler, Liwen Ye, John F. Heneghan, David H. Vandorpe, & Andrew K. Stewart (Harvard Medical School, USA)

SLC4 AND SLC26 Anion Transporters in Flux

14:45-15:10 Daniel Sowah, Danielle E. Johnson, Patricio Morgan & Joseph Casey (University of Alberta, Canada)

An update on Bicarbonate Transport Metabolons

15:10-15:35 Hiroshi Ishiguro, Ying Song, Shigeru Ko, Takaharu Kondo & Akiko Yamamoto (Nagoya University Graduate School of Medicine, Japan)

Functional interaction between SLC26A6 Cl⁻-HCO₃⁻ exchange and CFTR in pancreatic ducts

15:35-16:00 Shigeru B.H.Ko, Akiko Yamamoto, Sakiko Azuma, Hidemi Goto, Shmuel Muallem & Hiroshi Ishiguro (Nagoya University Graduate School of Medicine, Japan)

Pancreatic ductal HCO₃⁻ secretion in a disease-implication for the role of ion channels and transporters

16:00-16:30 *Coffee Break*

PAT-VI

Molecular Relation between Anion Channel and Transporter: Evolutional Insight of Anion Channel/Transporter Molecules

Chaired by Tzyh-Chang Hwang and Tsung-Yu Chen

- 16:30-17:00 Merritt C. Maduke & Shelley M. Elvington (Stanford University School of Medicine, USA)
Substrate-driven conformational changes in ClC-ec1 observed by fluorine NMR
- 17:00-17:30 David C. Gadsby, Paola Vergani, Martin Mense, Attila Gulyás-Kovacs, Steve W. Lockless, Luiz Artur Poletto Chaves, & Angus C. Nairn (Rockefeller University, USA)
Controlling the gates of CFTR, a chloride channel evolved from an ABC transporter
- 17:30-18:00 Silvia G. Bompadre, Haruna Miki, Min Li & Tzyh-Chang Hwang (University of Missouri-Columbia, USA)
Kinetic role of CFTR's first nucleotide binding domain and its pharmacological implications
- 18:00-18:30 Joseph A. Mindell (National Institute of Neurological Disorders and Stroke, NIH, USA)
Ins and outs of the lysosomal chloride conductance: biophysics and biology of an organellar anion transporter
- 18:30-19:00 Uhtaek Oh (Seoul National University, Korea)
Anoctamin-1, a Cloned Ca²⁺-activated Chloride Channel and Its Physiological Implication
- 19:00-19:05 *Closing Remark*

CVR Symposium (Room C)

CVR-IV

CVR & Cell Signals

Chaired by Stine Falsig Pedersen and Yoshinori Marunaka

- 10:00-10:30 Ben C. Tilly, Christina H. Lim & Hugo R. de Jonge (Erasmus University Medical Center, The Netherlands)
Cell volume regulation in intestinal epithelial cells: a role for chloride channel recruitment?
- 10:30-11:00 Maria Wiwel, Henrik Klingberg, Donny Ly, András Masszi, András Kapus & Stine Falsig Pedersen (University of Copenhagen, Denmark)
Osmotic shrinkage regulates p90^{RSK}, Msk1, and transcription factors CREB and SRF: effectors in shrinkage-induced modulation of death/survival balance?
- 11:00-11:30 Niisato N, Ohta M & Marunaka Y (Kyoto Prefectural University of Medicine, Japan)
Dephosphorylation of ERK by MKP-1 stimulates beta- and gamma-ENaC mRNA expression of renal A6 cells in hypotonic stress

- 11:30-12:00 Ian Henry Lambert (University of Copenhagen, Denmark)
Reactive oxygen species modulate the taurine homeostasis in NIH3T3 mouse fibroblasts
- 12:00-12:30 Hideki Sakai, Tomoko Watanabe, Takuto Fujii, Takahiro Shimizu, Yuji Takahashi, Noriaki Takeguchi, Kazuhiro Tsukada (University of Toyama, Japan)
Osmotic regulation of cell differentiation via aquaporin-5 in human gastric cancer
- 12:30-13:30 *Poster & Lunch*

CVR-V

CVR & Cell Functions

Chaired by Markus Ritter and Vladimir Strbak

- 13:30-14:00 A. Fabian, T. Fortmann, O. Lindemann, V.C. Bomben, H.W. Sontheimer, E.K. Hoffmann & A. Schwab (University of Muenster, Germany)
Do TRPC1 channels modulate mechanosensitive signalling during cell migration?
- 14:00-14:30 Martin Jakab, Sabine Schmidt, Angelika Moder-Dzeladini, Arnulf Hartl, Christian Langelueddecke, Renata Sanovic, Sofya Bulatova, Eva Iglseeder, Clemens Hufnagl, Heidi Mair, Martin Gaisberger, Markus Ritter (Paracelsus Medical University, Austria)
The functional role of the non-gastric H⁺/K⁺-ATPase ATP12A (ATP1AL1) as anti-apoptotic ion transporter
- 14:30-15:00 Mingmin Chen, Anurag Singh & Ursula Seidler (Hannover Medical School, Germany)
Coupling of nutrient and electrolyte transporters in the small intestine
- 15:00-15:30 Rodrigo Franco (CINVESTAV, IPN. Mexico City, Mexico)
Efflux of organic molecules as signaling events in cell volume regulation and apoptosis
- 15:30-16:00 Vladimir Strbak, Zuzana Bacova, Jana Galcikova, Jana Matejikova, Martina Orecna, Roman Hafko & Tana Ravingerova (Slovak Medical University, Slovakia)
Cell swelling-induced peptide secretion; possible pathophysiological implications

CVR-VI

CVR & Cell Death

Chaired by Florian Lang and John A. Cidlowski

- 16:30-17:00 Florian Lang, Michael Föller, Daniela Kempe, Ekatherina Shumilina, Guiscard Seeböhm, Nathalie Strutz-Seeböhm & Volker Vallon (Eberhard-Karls-University of Tuebingen, Germany)
The functional significance of the cell volume regulated kinase SGK1
- 17:00-17:30 Carl D. Bortner & John A. Cidlowski (National Institute of Environmental Health Sciences, NIH, USA)
A Lymphoid Cell Model designed to Evaluate the Role of RVI and RVD in Apoptosis (Part A)

- 17:30-18:00 John A. Cidlowski & Carl D. Bortner (National Institute of Environmental Health Sciences, NIH, USA)
A Lymphoid Cell Model designed to Evaluate the Role of RVI and RVD in Apoptosis (Part B)
- 18:00-18:30 Tomohiro Numata, Frank Wehner, Kaori Sato & Yasunobu Okada (Kyoto University, Japan)
Cation channel activity determines cell death in human epithelial cells
- 18:30-19:00 Sergei N. Orlov, Olga Akimova, Johanne Tremblay & Pavel Hamet (University of Montreal Hospital Research Center, Canada)
Oncosis in cardiotoxic steroids-treated cells: evidence for Na^+ , K^+ -independent $\alpha 1\text{S-Na}^+$, K^+ -ATPase- and p38-mediated signaling
- 19:00-19:05 *Closing Remark*

Poster presentations

- P-01 **Identification of Ste20 kinase regulatory phosphorylation sites in a cell cycle and cell volume sensitive ClC anion channel**
Rebecca A Falin, Rebecca Morrison, Amy-Joan L Ham & Kevin Strange
- P-02 **Identification of novel CLC Chloride-Channel Inhibitors**
Merritt C. Maduke, Andrew Howery & Justin Du Bois
- P-03 **Two Different Binding Sites for Small Aromatic Carboxylic Acids in CFTR**
Ying-Chun Yu, Yumi Nakamura, Tomoka Furukawa, Yoshiro Sohma, Zhen Zhou, Masato Yasui & Tzyh-Chang Hwang
- P-04 **Open-channel block of the CFTR Cl⁻ channel by loop diuretics**
Jia Liu, Min Ju, Toby S. Scott-Ward, Zhiwei Cai & David N. Sheppard
- P-05 **Cardiac CFTR exerts a protective action against ischemia/reperfusion-induced myocardial infarction *in vivo* and necrotic death of cardiomyocytes *in vitro***
Hiromi Uramoto & Yasunobu Okada
- P-06 **Activation of cardiac ventricular ATP-sensitive potassium channel by Cl⁻ channel blocker NPPB**
Da Li, Fu-Cheng Xiao, Wu-Ping Sun, Yi-Ming Zhou, Li-Bin Zhang & Shi-Sheng Zhou
- P-07 **Cholesterol depletion modulates the taurine homeostasis in Ehrlich-Lettré cells**
Kasper Rømer Villumsen, Lars Duelund & Ian Henry Lambert
- P-08 **Role of membrane cholesterol in insulin secretion from pancreatic islets and insulinoma tumor cells**
Zuzana Bacova, Martina Orecna, Peter Kohut, Ivan Hapala, Roman Hafko & Vladimir Strbak
- P-09 **Formation of symmetric and asymmetric DAPC-DLPC lipid bilayer rafts**
Sabine Schmidt, Martin Jakab, Markus Ritter Markus Paulmichl & Robert Henderson
- P-10 **The non-gastric H⁺/K⁺-ATPase ATP12A exerts an anti-apoptotic effect on butyrate-treated myelomonocytic HL60 cells**
Sabine Schmidt, Davide Mercorillo, Clemens Hufnagl, Sofya Bulatova & Martin Jakab, Markus Ritter
- P-11 **[Ca²⁺]_i and [Cl⁻]_i alterations in migrating glioblastoma cells**
Tatsuro Kumada & Atsuo Fukuda
- P-12 **Hypotonicity-induced [Ca²⁺]_i elevation of principal cells in isolated rat kidney cortical collecting ducts**
You Komagiri, Toshiyuki Kojo, Kazuyoshi Nakamura & Manabu Kubokawa
- P-13 **The Role of ANO (TMEM16) Family of Proteins Expressed in Human Pancreatic Acinar Cells**
Joo Hyun Nam, Jae Seok Yoon, Uhtaek Oh & Min Goo Lee

- P-14 **The role of AMPK in the regulation of insulin secretion and proliferation in INS-1E rat insulinoma cells at standard cell culture conditions**
Langelueddecke, C., Jakab, M., C.Hufnagl, & Ritter, M.
- P-15 **Activation of TASK-2 by a tyrosine phosphorylation of the channel**
Signe S. Kirkegaard, Steen Gammeltoft, Ian H. Lambert, Else K. Hoffmann
- P-16 **Regulation of WNK1 kinase activity by extracellular ionic conditions**
Shotaro Naito, Akihito Ohta, Eisei Sohara, Tatemitsu Rai, Sei Sasaki & Shinichi Uchida
- P-17 **Regulation of intestinal Cl/HCO₃⁻ exchanger SLC26A3 by intracellular pH**
Hisayoshi Hayashi, Kazuhito Suruga, Yukari Yamashita & Yuichi Suzuki
- P-18 **Na⁺ H⁺ exchangers (NHE) and the Cl⁻ -HCO₃⁻ exchanger (AE2) contribute to regulatory volume increase in epithelial cells isolated from the choroid plexus**
Alexandra L H Hughes, & Peter D Brown
- P-19 **The apical Cl/HCO₃⁻ exchanger DRA mediates Cl absorption and HCO₃⁻ secretion in the murine large intestine**
Suzuki Y, Kawamata K, Ooba, Schweinfest CW, Soleimani M & Hayashi H
- P-20 **Resveratrol inhibits stimulus-secretion-coupling and induces apoptosis in INS-1E rat insulinoma cells**
Martin Jakab, Cornelia Bortolotti, Thomas Kunit, Christian Langelueddecke & Markus Ritter
- P-21 **Role of AQP5 in cisplatin-induced cell death in Ehrlich ascites tumor cells**
Hansen C F, Hoffmann E K & Poulsen K A.
- P-22 **New aspects of AVD and roles of putative anion channels**
Grubb, S., Poulsen, KA., Klausen, TK., Larsen, EH. & Hoffmann, EK.
- P-23 **Role of TRPV4 in cartilage – insights from a porcine model**
Wolfgang Liedtke, Suk Hee Lee, Holly Leddy & Farshid Guilak
- P-24 **Reduced volume-regulated outwardly rectifying anion channel activity in ventricular myocyte of type 1 diabetic mice**
Shintaro Yamamoto
- P-25 **Regulation of bradykinin-induced activation of volume-sensitive outwardly rectifying (VSOR) anion channels via “Ca²⁺ nanodomains” in mouse cortical astrocytes**
Tenpei Akita & Yasunobu Okada
- P-26 **A novel role of arginine-vasopressin released from osmosensory neurons in hypoosmolarity conditions**
Kaori Sato, Tomohiro Numata, Yoichi Ueta & Yasunobu Okada
- P-27 **The hydrogel nature of mammalian cytoplasm contributes to osmosensing**
Johannes Fels, Sergei N. Orlov, Ryszard Grygorczyk
- P-28 **Role of ion channels in the cell volume regulation of thymocytes**
Ranokhon S. Kurbannazarova, Yasunobu Okada & Ravshan Z. Sabirov

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