

REPORT TO THE INTERNATIONAL SOCIETY FOR NEUROCHEMISTRY

“THE TRANSPORTER TRANSITION”

General conference details

The 11th annual SFB35 Symposium entitled “The Transporter Transition” organized by Harald H. Sitte (Medical University of Vienna) and Lynette Daws (University of Texas Health Science Center at San Antonio) was held September 18 – 21, 2018 at the University Clinic of Dentistry Vienna, Sensengasse 2a, 1090 Vienna, Austria.

Steering Committee:

- ❖ Harald H. Sitte, Medical University of Vienna, Vienna, Austria
- ❖ Lynette C. Daws, University of Texas Health Science Center at San Antonio, San Antonio, USA
- ❖ Balázs Sarkadi, Hungarian Academy of Sciences, Budapest, Hungary
- ❖ Habibeh Khoshbouei, University of Florida, Gainesville, USA
- ❖ Haley Melikian, Brudnick Neuropsychiatric Research Institute, University of Massachusetts Medical School, Worcester, USA

Registration and registration fees

The registration fee for the conference was 200,00 Euro, members of the ITTS could claim a reduced registration fee (EUR 100,00).

The registration fee for speakers and chairs with an ongoing ITTS membership was waived.

Speakers

Jenny Aguilar, US	Rita Fagan, US	Anne Nies, DE
Ivet Bahar, US	Louise Fets, UK	Bala Krishna Prabhala, DK
Selva Baltan, US	Ulrik Gether, DK	Manuele Rebsamen, AT
Andre Bazzone, DE	Freja Herborg, DK	Nicolas Reyes, FR
Shreyas Bhat, AT	Scott Jackson, CH	Claudio Rivera, FI
Laura Bianchi, US	Baruch Kanner, IL	Paul Rosenberg, US
Elizabeth Bilsland, BR	Douglas Kell, UK	Renaë Ryan, AU
Irina Borodina, DK	Habibeh Khoshbouei, US	Lei Shi, US
Olga Boudker, US	David Krantz, US	Claire Steppan, US
Roch-Philippe Charles, CH	Daniel Lackner, AT	Sonja Sucic, AT
Roberta de Ceglia, CH	Kenneth Lindegaard Madsen, DK	Giulio Superti-Furga, AT
Eric Delpire, US	Claus Loland, DK	Dániel Szöllősi, AT
Mauricio Di Fulvio, US	Cristina Manatschal, CH	Mladen Tzvetkov, DE
David Dickens, UK	Felix Mayer, US	Suzanne Underhill, US
Daniela Digles, AT	Laura F. McNair, DK	Don van Meyel, CA
Katharina Duerr, UK	Ahmad Reza Mehdipour, DE	Alyssa West, US
Tanja Dujic, BA	Haley Melikian, US	Yun Zhou, NO
Lena Eliasson, SE	Caroline Neumann, DK	

Plenary Speakers

Susan G. Amara, National Institute of Mental Health, National Institutes of Health, USA
Thomas Jentsch, Leibniz-Institut fuer Molekulare Pharmakologie, Berlin, Germany
Satoshi Murakami, Tokyo Institute of Technology, Japan
Christine Ziegler, University Regensburg, Germany

Scientific program

Tuesday, September 18th

09:00 - 11:00 **Registration**

11:00 - 11:15 **Opening Harald H. Sitte**

11:15 - 12:15 Keynote lecture 1

Chair: **Lynette Daws** (University of Texas Health Science Center at San Antonio, USA)

11:15 - 11:20 *Introduction*

11:20 - 12:05 **Susan G. Amara** (National Institute of Mental Health, National Institutes of Health, USA)

Regulation of neurotransmitter transporters by G-protein signaling in dopamine neurons: new insights into psychostimulant action

12:05 - 12:15 Discussion

12:15 - 13:00 Lunch break, mounting of posters

13:00 - 14:50 Session 1: The importance of organic cation transporters (OCTs, MATEs) in drug therapy

Chair: **Anne Nies** (Dr. Margarete Fischer-Bosch Institute of Clinical Pharmacology, Stuttgart, Germany)

13:00 - 13:10 *Introduction*

13:10 - 13:30 **Anne Nies** (Dr. Margarete Fischer-Bosch Institute of Clinical Pharmacology, Stuttgart, Germany)

The role of OCTs and alternative transporters in transport of and response to protein kinase inhibitors

13:30 - 13:35 Discussion

13:35 - 13:55 **Tanja Dujic** (University of Sarajevo, Sarajevo, Bosnia and Herzegovina and University of Dundee, Dundee, Scotland, UK)

Association of OCT1 with intolerance to metformin in Type 2 diabetes

13:55 - 14:00 Discussion

14:00 - 14:20 **Mladen Tzvetkov** (Center of Drug Absorption and Transport (C_DAT), University Medicine, Greifswald, Germany)

OCT1 pharmacogenetics in pain management: is clinical application within reach?

14:20 - 14:25 Discussion

14:25 - 14:45 **Felix P. Mayer** (Brain Institute, Florida Atlantic University, USA)

The combination of alcohol and cocaine affects monoamine transporters of the SLC-6 family and organic cation transporter 3

14:45 - 14:50 Discussion

14:50 - 15:20 Coffee/Tea break, refreshments

15:20 - 17:30 Session 2

Young Scientists Session - Young ISN Neurochemistry Awardees selected from abstract



Chair: **Peter Chiba** (Medical University Vienna, Austria)

15:20 - 15:30 *Introduction*

15:30 - 15:42 **Freja Herborg** (University of Copenhagen, Denmark)

Loss of function variants in monoamine transporters as a risk factor for neuropsychiatric disease? – Insights from a population based case-cohort sample

15:42 - 15:45 Discussion

15:45 - 15:57 **Jenny I. Aguilar** (Vanderbilt University, USA)

Phosphatidylinositol (4, 5)-bisphosphate coordinates functional interactions in the dopamine transporter to promote amphetamine preference

15:57 - 16:00 Discussion

- 16:00 - 16:12 **Louise Fets** (Cancer Metabolism Laboratory, The Francis Crick Institute, UK)
MCT2-mediated MOG transport dictates intracellular target engagement to drive toxicity in cancer cells
- 16:12 - 16:15 Discussion
- 16:15 - 16:27 **Rita R. Fagan** (University of Massachusetts Medical School, USA)
PKC-stimulated dopamine transporter internalization: Interdependent roles of Rin, Ack1 and transporter amino- and carboxy termini
- 16:27 - 16:30 Discussion
- 16:30 - 16:42 **Manuele Rebsamen** (CeMM, Austria)
Identification of solute carriers involved in responses to amino acid starvation by gain-of-function genetic screens
- 16:42 - 16:45 Discussion
- 16:45 - 16:57 **Bala Krishna Prabhala** (University of Copenhagen, Denmark)
Chloramphenicol is a substrate of prototypical proton coupled oligopeptide transporter from E. coli
- 16:57 - 17:00 Discussion
- 17:00 - 17:12 **Alyssa West** (University of South Carolina, USA)
Serotonin in the Medial Prefrontal Cortex: How Transport is Altered in Autism Spectrum Disorder Models
- 17:12 - 17:15 Discussion
- 17:15 - 17:27 **Shreyas Bhat** (Medical University of Vienna, Austria)
Correction of folding deficits exhibited by monoamine transporter mutants using a non-classical pharmacological approach
- 17:27 - 17:30 Discussion
- 18:30 - 21:30 Welcome Dinner, Van Swieten Hall, MedUni Vienna

Wednesday, September 19th

08:00 - 08:45 **Registration**

08:45 - 10:35 **Session 3: Regulation of Dopamine Transporters: From Molecules to Behavior and Beyond**

Chair: **Haley Melikian** (University of Massachusetts Medical School, USA)
Co-Chair: **Habibeh Khoshbouei** (University of Florida, USA)

08:45 - 08:55 *Introduction*

08:55 - 09:15 **Habibeh Khoshbouei** (University of Florida, USA)

Immune regulation of dopamine transporter activity

09:15 - 09:20 Discussion

09:20 - 09:40 **Suzanne Underhill** (National Institute on Mental Health, USA)

Mechanisms of amphetamine-mediated DAT trafficking

09:40 - 09:45 Discussion

09:45 - 10:05 **Ulrik Gether** (University of Copenhagen, Denmark)

Nanoscale architecture of presynaptic dopamine terminals: regulation of the dopamine transporter at the single molecule level

10:05 - 10:10 Discussion

10:10 - 10:30 **Haley Melikian** (University of Massachusetts Medical School, USA)

Dopamine transporter trafficking and regulation: Native mechanisms and behavioral consequences

10:30 - 10:35 Discussion

10:35 - 11:00 **Coffee/Tea break, refreshments**

11:10 - 12:10 **Keynote lecture 2**

Chair: **Balazs Sarkadi**
(Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary)

11:10 - 11:15 *Introduction*

11:15 - 12:00 **Satoshi Murakami** (Tokyo Institute of Technology, Japan)

Structure and function of tripartite drug efflux transporters in Gram-negative bacteria

12:00 - 12:10 Discussion

12:10 - 13:00 **Lunch break**

12:10 - 14:15 **Postersession**

14:15 - 16:05 **Session 4: NCCR TransCure: interdisciplinary membrane transport research**

Chair: **Bruno Stieger** (University of Zürich, Switzerland)
Co-Chair: **Cristina Manatschal** (University of Zürich, Switzerland)

14:15 - 14:25 *Introduction*

14:25 - 14:45 **Roch-Philippe Charles** (University of Bern, Switzerland)

The LAT1 inhibitor JPH203 reduces growth of thyroid carcinoma in a fully immunocompetent mouse model

14:45 - 14:50 Discussion

14:50 - 15:10 **Cristina Manatschal** (Department of Biochemistry, University of Zürich, Switzerland)

Structural and mechanistic basis of proton-coupled metal ion transport in the SLC11/NRAMP family

15:10 - 15:15 Discussion

15:15 - 15:35 **Scott Jackson** (Institute of Molecular Biology and Biophysics, ETH Zurich, Switzerland)

Structural basis of small-molecule inhibition of human multidrug transporter ABCG2

15:35 - 15:40 Discussion

15:40 - 16:00 **Roberta de Ceglia** (Department of Fundamental Neurosciences, University of Lausanne, Switzerland)

Exploring astrocyte-specific VGLUTs activity: a new role in controlling glutamatergic circuits relevant in Parkinson's disease and epilepsy

16:00 - 16:05 Discussion

16:05 - 16:40 **Coffee/Tea break, refreshments**

16:40 - 18:30 **Session 5: Innovative approaches to structural/computational/biophysical analyses of the glutamate and biogenic amine transporter families**

Chair: **Susan G. Amara** (National Institute of Mental Health, National Institutes of Health, USA)
Co-Chair: **Ivet Bahar** (School of Medicine, University of Pittsburgh, USA)

16:40 - 16:50 *Introduction*

16:50 - 17:10 **Olga Boudker** (Weill Cornell Medical College, USA)

Hills and valleys in the functional cycle of the thermophilic transporter GltPh

17:10 - 17:15 Discussion

17:15 - 17:35 **Claus Juul Løland** (Department of Neuroscience, University of Copenhagen, Copenhagen, Denmark)

Substrate-induced conformational dynamics of the dopamine transporter

17:35 - 17:40 Discussion

17:40 - 18:00 **Ivet Bahar** (School of Medicine, University of Pittsburgh, USA)

Signature dynamics of LeuT family of transporters: conserved vs. specific mechanisms of motions and their functional impact

18:00 - 18:05 Discussion

18:05 - 18:25 **Lei Shi** (National Institute on Drug Abuse - Intramural Research Program, USA)

Characterization of the dynamics in the central binding site and the extracellular vestibule of the serotonin transporter reveals new ligand discovery opportunities

18:25 - 18:30 Discussion

20:30 - 22:30 Free evening / Jazz concert: **Benny Sharoni & Oliver Kent Trio @ Porgy & Bess**

Thursday, September 20th

08:00 - 08:45 **Registration**

08:45 - 10:35 **Session 6: Structure, Function and Regulation of Excitatory Amino Acid Transporters**

Chair: **Claus Juul Løland** (Department of Neuroscience, University of Copenhagen, Denmark)

08:45 - 08:55 *Introduction*

08:55 - 09:15 **Nicolas Reyes** (Molecular Mechanisms of Membrane Transport Laboratory, Institut Pasteur, Paris, France)

Ion Coupling in Human Excitatory Amino Acid Transporters

09:15 - 09:20 Discussion

09:20 - 09:40 **Renaë Ryan** (Transporter Biology Group, Sydney Medical School, University of Sydney, Australia)

The Split Personality of Glutamate Transporters: A Chloride Channel and a Transporter

09:40 - 09:45 Discussion

09:45 - 10:05 **Baruch Kanner** (School of Medicine-IMRIC-Biochemistry and Molecular Biology, The Hebrew University of Jerusalem, Israel)

Both reentrant loops of the sodium-coupled glutamate transporters contain molecular determinants of cation selectivity

10:05 - 10:10 Discussion

10:10 - 10:30 **Kenneth Madsen** (Department of Neuroscience, University of Copenhagen, Denmark)

Functional regulation of GLT1b by the scaffold protein PICK1

10:30 - 10:35 Discussion

10:35 - 11:10 **Coffee/Tea break, refreshments**

11:10 - 12:10 **Keynote lecture 3**

Chair: **Michael Freissmuth** (Medical University Vienna, Austria)

11:10 - 11:15 *Introduction*

11:15 - 12:00 **Christine Ziegler** (University Regensburg, Germany)

Impact of specific lipid-protein interactions on membrane transport

12:00 - 12:10 Discussion

12:10 - 14:15 **Postersession**

14:15 - 14:45 **Business Meeting**

14:45 - 16:35 **Session 7: Discovery of novel cell-type specific functions of the glutamate transporter GLT-1 using a conditional knockout approach**

Chair: **Paul A. Rosenberg** (Boston Children's Hospital and Harvard Medical School, USA)

14:45 - 14:55 *Introduction*

14:55 - 15:15 **Paul A. Rosenberg** (Boston Children's Hospital and Harvard Medical School, USA)

Multiple lines of evidence suggest neuronal GLT-1 KO mice have a synaptopathy

15:15 - 15:20 Discussion

15:20 - 15:40 **Zhou Yun** (University of Oslo, Norway)

Axon-terminals expressing EAAT2 (GLT-1; slc1a2) are common in the forebrain and not limited to the hippocampus

- 15:40 - 15:45 Discussion
- 15:45 - 16:05 **Laura F. McNair** (University of Copenhagen, Denmark)
The glutamate transporter GLT-1 expressed in neurons is important for glutamate homeostasis and synaptic energy metabolism
- 16:05 - 16:10 Discussion
- 16:10 - 16:30 **Selva Baltan** (Cleveland Clinic, Lerner Research Institute, Cleveland, USA)
Oligodendrocytes Support Axon Function via Glutamate Signaling through Glutamate Transporters (GLT-1) in a Gender and Age-specific Manner
- 16:30 - 16:35 Discussion
- 16:35 - 17:10 Coffee/Tea break, refreshments**

17:10 - 19:25 Session 8: ReSOLUTE: an academic-industry IMI partnership to tackle SLCs

Chair: **Giulio Superti-Furga** (Research Center for Molecular Medicine of the Austrian Academy of Sciences – CeMM, Austria)

17:10 - 17:20 *Introduction*

17:20 - 17:40 **Giulio Superti-Furga** (CeMM, Austria)

ReSOLUTE: an academic-industry IMI partnership to tackle SLCs

17:40 - 17:45 Discussion

17:45 - 18:05 **Claire Steppan** (Pfizer, USA)

SLCs and drug discovery - a pharma perspective

18:05 - 18:10 Discussion

18:10 - 18:30 **Daniel Lackner** (CeMM, Austria)

A deorphanization pipeline for SLCs

18:35 - 18:55 **Daniela Digles** (University of Vienna, Austria)

ReSOLUTE databases and tools for the scientific community

18:55 - 19:00 Discussion

19:00 - 19:20 **Katharina L. Duerr** (University of Oxford, UK)

Harnessing the SGC integral membrane pipeline for solute carrier protein production

19:20 - 19:25 Discussion

19:30 - 22:00 Wine and Cheese / Postersession

And: Josephinum - Collection Of The Medical University Of Vienna

Friday, September 21st

08:00 - 08:45 **Registration**

08:45 - 10:35 Session 9: Transmembrane transport of drugs and xenobiotics

Chair: **Douglas B. Kell** (The University of Manchester, UK)

08:45 - 08:55 *Introduction*

08:55 - 09:15 **Douglas B. Kell** (The University of Manchester, UK)

The 'real' (natural) substrates of pharmaceutical drug transporters

09:15 - 09:20 Discussion

09:20 - 09:40 **Elizabeth Bilisland** (Unicamp, São Paulo, Brazil)

The transporter-mediated uptake and efflux of drugs across the blood-brain barrier

09:40 - 09:45 Discussion

09:45 - 10:05 **Irina Borodina** (The Novo Nordisk Foundation Centre for Biosustainability, Danish Technical University, Denmark)

Deciphering the transport mechanisms of small molecules for improved cell factories

10:05 - 10:10 Discussion

10:10 - 10:30 **David Dickens** (University of Liverpool, UK)

Cellular uptake of the atypical antipsychotic clozapine is a carrier-mediated process

10:30 - 10:35 Discussion

10:35 - 11:10 Coffee/Tea break, refreshments

11:10 - 12:10 Keynote lecture 4

Chair: **Harald Sitte** (Medical University Vienna, Austria)

11:10 - 11:15 *Introduction*

11:15 - 12:00 **Thomas Jentsch** (Leibniz-Institut fuer Molekulare Pharmakologie, Berlin, Germany)

Properties and physiological roles of VRAC/LRRC8 volume-regulated anion channels

12:00 - 12:10 Discussion

12:10 - 13:10 Lunch break

13:10 - 15:00 Session 10: Chloride Physiology/Homeostasis: Channels and co-transporters in Neuronal and Pancreatic B cell physiology and disease

Chair: **Lydia Aguilar-Bryan** (Pacific Northwest Diabetes Research Institute, USA)

13:10 - 13:20 *Introduction*

13:20 - 13:40 **Claudio Rivera** (University of Helsinki, Neuroscience Center, Finland)

Depolarizing GABA triggers Glutamatergic sprouting in epilepsy

13:40 - 13:45 Discussion

13:45 - 14:05 **Eric Delpire** (Vanderbilt University Medical Center, Anesthesiology, Molecular Physiology and Biophysics, USA)

GABA, K-Cl and Na-K-2Cl cotransporters in epilepsy and pain

14:05 - 14:10 Discussion

14:10 - 14:30 **Mauricio Di Fulvio** (Wright State University, School of Medicine, USA)

Chloride transporters and channels in β -cell physiology and insulin secretion

14:30 - 14:35 Discussion

14:35 - 14:55 **Lena Eliasson** (Lund University Diabetes Centre, Sweden)

Chloride transporters and channels in alpha-cell physiology and glucagon secretion

14:55 - 15:00 Discussion

15:00 - 15:30 Coffee/Tea break, refreshments

15:30 - 16:40 Session 11

Young Scientists Session - Young ISN Neurochemistry Awardees selected from abstract



Chair: **Thomas Stockner** (Medical University Vienna, Austria)

15:30 - 15:40 *Introduction*

15:40 - 15:52 **Andre Bazzone** (Nanion Technologies GmbH, Germany)

H⁺ coupling and pH regulation in MFS sugar transporters: An application of SSM-based electrophysiology

15:52 - 15:55 Discussion

15:55 - 16:07 **Caroline Neumann** (Aarhus University, Denmark)

Investigations into the binding site promiscuity of Mhst

16:07 - 16:10	Discussion
16:10 - 16:22	Ahmad Reza Mehdipour (Max Planck Institute of Biophysics, Germany) <i>Mechanism of recognition of lipid substrates by ABC transporters</i>
16:22 - 16:25	Discussion
16:25 - 16:37	Dániel Szöllösi (Medical University of Vienna, Austria) <i>ABCB1 nucleotide binding domain dimerization cycle</i>
16:37 - 16:40	Discussion
16:40 - 16:45	Refreshments
16:45 - 18:35	Session 12: Invertebrates as a model organism to study transporter function and dysfunction Chair: Renae Ryan (University of Sydney, Australia) Co-Chair: Aurelio Galli (University of Alabama Birmingham, USA)
16:45 - 16:55	<i>Introduction</i>
16:55 - 17:15	Sonja Sucic (Medical University of Vienna, Austria) <i>Functional rescue of misfolded dopamine transporter variants by pharmacochaperoning</i>
17:15 - 17:20	Discussion
17:20 - 17:40	Don van Meyel (McGill Centre for Research in Neuroscience, Canada) <i>Using Drosophila to understand the function (and dysfunction) of Excitatory Amino Acid Transporters</i>
17:40 - 17:45	Discussion
17:45 - 18:05	Laura Bianchi (Miller School of Medicine, University of Miami, USA) <i>Glial channels and transporters that mediate excretion of ions in the microenvironment between glia and neurons shape neuronal output in C. elegans</i>
18:05 - 18:10	Discussion
18:10 - 18:30	David Krantz (David Geffen School of Medicine at UCLA, USA) <i>Transporter trafficking mutations and their effects on circuit function</i>
16:30 - 18:35	Discussion
18:35 - 18:45	Closing words/poster awards Harald H. Sitte
20:00 - 23:00	Farewell Dinner: Heuriger Ing. Werner Welser

Highlights of the meeting

Meeting highlights were plentiful. They begin with the pre-meeting process, including the call for session proposals, and abstracts. The warm and inspiring atmosphere and the positive enthusiasm that was conveyed by the participants, especially the young investigators, was gratifying.

An important part of the pre-meeting process was selection of symposia. The steering committee and members of SFB35 evaluated the 17 proposals received, and selected 10 to participate in the conference. Similarly, we invited young investigators to submit abstracts for poster presentations. From these submissions the same evaluation team selected individuals to give a short talk in the young investigators' sessions. A real highlight for us was the number of participants at the meeting...178! We were overwhelmed with the support and enthusiasm that marked this inaugural meeting of the ITTS. Our success was only further exemplified by the near perfect gender-balance, as well as the geographical diversity. We are delighted that so many researchers in the field of transporters followed our call to Vienna.

Every plenary lecture was a highlight of its own – and so were the individual symposia. Importantly, the poster sessions were very well attended, including the evening poster session.

The scientific transporter community showed its strong commitment to the field by gathering in Vienna, and by showing the finest pieces of their most recent work, including unpublished material. During the discussions, there was lively interaction between researchers in the plenum and the lecturers, and in many instances, young investigators also posed the questions. A special highlight was the young investigator’s sessions, which, like all sessions were exceptionally well attended, with lively discussions.

In addition to the abundant academic highlights, were the evening social events (see below). Attendance and participation at all events was outstanding. The dinners and evening poster session in particular, provided wonderful networking platforms. Overall, the entire meeting was a highlight in itself.

Participants

A total of 178 participants from 24 nations (Australia, Austria, Bosnia and Herzegovina, Brazil, Canada, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Israel, Italy, Japan, The Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, United Kingdom, United States of America) attended the 11th SFB35 Symposium.

We would like to emphasize that our goal was to achieve an equal gender balance, which we achieved across the board.

	Male	female	total
Number of participants	91	87	178
Plenary speakers	2	2	4
Chairs	10	6	16
Co-chairs	1	3	4
Invited speakers	20	21	41
Young Scientists speakers selected from abstracts	6	6	12
Poster presenters	32	36	68

Social events

Each conference day ended with a social event, where we offered a varied program.

On the first evening, our welcome dinner took place in the Van Swieten hall of the Medical University of Vienna.

On the second evening, our participants had the opportunity to end the day with a jazz concert by Benny Sharoni & Oliver Kent Trio at the renowned Viennese Jazz Club Porgy & Bess.

On the third evening, our poster presenters had the opportunity to present their work to interested participants (and the poster award jury) in a relaxed atmosphere with cheese and wine. Parallel to this scientific event, we offered guided tours through the exhibitions of the Josephinum (Medical-historical collection of the Medical University of Vienna):

- The 18th century anatomical wax models for the training of surgeons / Chiasmata 17-18 Anna Artaker/Tatiana Lecomte (arts exhibition)
- The Medical Faculty of Vienna 1938 to 1945
- The Josephina Library (superb books on medicine and botany/pharmacy)

Our farewell dinner on the last evening was held at the Heurigen-Restaurant “Werner Welser” in Nussdorf, Vienna, the traditional venue for farewells dinners of the 10 year spanning SFB35 transporter conferences.

All social events were very well attended.

Travel awards

ISN – Travel awardees:

Jenny Aguilar (USA)	\$ 1.000,00
Rita Fagan (USA)	\$ 1.000,00
Louise Fets (UK)	\$ 350,00
Freja Hansen (DK)	\$ 350,00
Felix Mayer (USA)	\$ 1.000,00
Ahmad Reza Mehdipour (DE)	\$ 350,00
Caroline Neumann (DK)	\$ 350,00
Bala Krishna Prabhala (DK)	\$ 350,00
Alyssa West (USA)	\$ 1.000,00

ISN – Poster awardees:

Alyssa West (USA)	\$ 350,00
Rita Fagan (USA)	\$ 235,00
Adithya Gopinath (USA)	\$ 118,00
Manuele Rebsamen (AUT)	\$ 59,00

Travel subsidies for Plenary Speakers

Travel for three plenary speakers (Thomas Jentsch, Germany; Satoshi Murakami, Japan; Christine Ziegler, Germany):
\$ 1.805,00

As an employee of the National Institutes of Health, Dr. Amara is not allowed to receive honoraria or travel funds.

Sponsorship

We gratefully acknowledge the support of the following sponsors:

AstraZeneca Österreich GmbH
FWF Der Wissenschaftsfonds
Glock Health
Glock Science
International Society for Neurochemistry
Nanion Technologies GmbH

General budget; detailed ISN budget, how the ISN funds were utilized

Travel awards for young investigators (for 9 persons):	\$ 5.750,00
Poster awards for young investigators (for 4 persons):	\$ 762,00
Hotel for young investigators (for 1 person):	\$ 398,00
Registration fee for young investigators (for 1 person):	\$ 118,00
Transportation (Taxi) for young investigators:	\$ 184,00
Travel for plenary speakers (3 persons):	\$ 1.805,00
Registration fee for plenary speakers (3 persons):	\$ 704,00
Hotel for plenary speakers (3 persons):	\$ 912,00
Transportation (Taxi) for plenary speakers:	\$ 254,00
Poster displays	\$ 1.113,00

List of participants

- 1 Abas Melinda F., Austria
- 2 Aguilar Jenny, USA
- 3 Aguilar-Bryan Lydia, USA
- 4 Amara Susan G., USA
- 5 Andersen Jens, Denmark
- 6 Bahar Ivet, USA
- 7 Baltan Selva, US, USAA
- 8 Baronina Agnese; United Kingdom
- 9 Bazzone Andre, Germany
- 10 Becker Andreas, Germany
- 11 Bhat Shreyas, Austria
- 12 Bianchi Laura, USA
- 13 Bilsland Elizabeth, Brazil
- 14 Borodina Irina, Denmark
- 15 Boudker Olga, USA
- 16 Bryan Joseph, USA
- 17 Burger Melanie, Austria
- 18 Burtscher Verena, Austria
- 19 Cabra Romina, Switzerland
- 20 Canul Juan, France
- 21 Ceckova Martina, Czech Republic
- 22 Chang Yung-Ning, Germany
- 23 Charles Roch-Philippe, Switzerland
- 24 Chiba Peter, Austria
- 25 Colas Claire, Austria
- 26 Console Lara, Italy
- 27 Csizmadia Georgina, Hungary
- 28 Danbolt Niels Chr., Norway
- 29 Darbani Behrooz, Denmark
- 30 Das Anand, Austria
- 31 Daws Lynette, USA
- 32 de Ceglia Roberta, Switzerland
- 33 Delpire Eric, USA
- 34 Di Fulvio Mauricio, USA
- 35 Dickens David, United Kingdom
- 36 Digles Daniela, Austria
- 37 Duerr Katharina, United Kingdom
- 38 Dujic Tanja, Bosnia and Herzegovina
- 39 Dürrenberger Franz, Switzerland
- 40 Dvorak Vojtech, Austria
- 41 Ecker Gerhard F., Austria
- 42 Ehrmann Alexander, Germany
- 43 Eliasson Lena, Sweden
- 44 Esendir Eray, Austria
- 45 Essletzbichler Patrick, Austria
- 46 Fagan Rita, USA
- 47 Farkas Bianka, Hungary
- 48 Fets Louise, United Kingdom
- 49 Foster James D., USA
- 50 Freissmuth Michael, Austria
- 51 Friemann Rosmarie, Sweden
- 52 Fuchs Claudia, Austria
- 53 Füzi Barbara, Austria
- 54 Galli Aurelio, USA
- 55 Gechijian Lara, USA
- 56 Geertsma Eric, Germany
- 57 Gether Ulrik, Denmark
- 58 Gilman Lee, USA
- 59 Girardi Enrico, Austria
- 60 Goldmann Ulrich, Austria
- 61 Gopinath Adithya
- 62 Grube Markus, Germany
- 63 Gyimesi Gergely, Switzerland
- 64 Hashemi Parastoo, USA
- 65 Héja László, Hungary
- 66 Hellsberg Eva, Austria
- 67 Henry Loren, USA
- 68 Herborg Freja, Denmark
- 69 Hersey Melinda, USA
- 70 Hofstetter Willy, Switzerland
- 71 Holy Marion, Austria
- 72 Homolya Laszlo, Hungary
- 73 Hovde Moriah, USA
- 74 Huttunen Kristiina, Finland
- 75 Ielasi Francesco, France
- 76 Ilic Marija, Austria
- 77 Indiveri Cesare, Italy
- 78 Ingles-Prieto Alvaro, Austria
- 79 Jackson Scott, Switzerland
- 80 Jäntsch Kathrin, Austria
- 81 Jedlitschky Gabriele, Germany
- 82 Jentsch Thomas, Germany
- 83 Jungnickel Katharina, Germany
- 84 Kanner Baruch, Israel
- 85 Karch Rudolf, Austria
- 86 Kardos Julianna, Hungary
- 87 Kell Douglas, United Kingdom
- 88 Khan Jawad, Austria
- 89 Khoshbouei Habibeh, USA
- 90 Khunweeraphong Narakorn, Austria
- 91 Kickingner Stefanie, Austria
- 92 Klimek Christoph, Austria
- 93 Koban Florian, Austria
- 94 Konrad Lisa, Denmark
- 95 Kovacs Peter, Hungary
- 96 Kovalchuk Vasylyna, Poland
- 97 Krantz David, USA
- 98 Kunert Lisa, Austria
- 99 Kunze Markus, Austria
- 100 Lackner Daniel, Austria
- 101 Langer Oliver, Austria
- 102 Lin Landon, USA
- 103 Lindegaard Madsen Kenneth, Denmark
- 104 Lineiro Retes Eva, Austria
- 105 Liu Shenping, USA
- 106 Ljubišić Tea, Croatia
- 107 Loland Claus, Denmark
- 108 López-Corcuera Beatriz, Spain
- 109 Luethi Dino, Switzerland
- 110 Maier Julian, Austria
- 111 Malinen Melina, Finland
- 112 Manatschal Cristina, Switzerland
- 113 Markowicz-Piasecka Magdalena, Poland
- 114 Martini Riccardo, Austria
- 115 Mayer Felix, USA
- 116 McNair Laura F., Denmark

- 117 Mehdipour Ahmad Reza, Germany
118 Melikian Haley, USA
119 Moskovskich Anna, Austria
120 Mózner Orsolya, Hungary
121 Mueller Andre, Austria
122 Murakami Satoshi, Japan
123 Nalecz Katarzyna, Poland
124 Neumann Caroline, Denmark
125 Niello Marco, Austria
126 Nies Anne, Germany
127 Onstein Svenja, Austria
128 Papakostas Konstantinos, Austria
129 Prabhala Bala Krishna, Denmark
130 Preobraschenski Julia, Germany
131 Rebsamen Manuele, Austria
132 Reyes Nicolas, France
133 Rigó Réka, Hungary
134 Rivera Claudio, Finland
135 Rosenberg Paul, USA
136 Ryan Renae, Australia
137 Sandtner Walter, Austria
138 Sarkadi Balazs, Hungary
139 Scarabottolo Lia, Italy
140 Schütz Gerhard, Austria
141 Sedlyarov Vitaly, Austria
142 Shi Lei, USA
143 Sijben Huub, The Netherlands
144 Sikimic Jelena, Germany
145 Sitte Harald, Austria
146 Skucha Anna, Austria
147 Steppan Claire, USA
148 Stieger Bruno, Switzerland
149 Stockner Thomas, Austria
150 Sucic Sonja, Austria
151 Superti-Furga Giulio, Austria
152 Svoren Martin, Czech Republic
153 Szakacs Gergely, Austria
154 Szczygiel Malgorzata, Poland
155 Szekely Virag, Hungary
156 Szilvasy Nora, Hungary
157 Szöllösi Dániel, Austria
158 Terajima Masaomi, Japan
159 Tzvetkov Mladen, Germany
160 Underhill Suzanne, USA
161 Vagiannis Dimitrios, Czech Republic
162 van der Hoek Steven, Denmark
163 van Meyel Don, Canada
164 Vandenberg Robert, Australia
165 Vaughan Roxanne, USA
166 Vellonen Kati-Sisko, Finland
167 Vlachodimou Anna, The Netherlands
168 West Alyssa, USA
169 Wiedmer Tabea, Austria
170 Windt Timea, Hungary
171 Wolf Gernot, Austria
172 Yang Jae-Won, Austria
173 Zagubnaya Olga, Russia
174 Zdrzil Barbara, Austria
175 Zhou Yun, Norway
176 Zhu Rong, Austria
177 Ziegler Christine, Germany
178 Kasture Ameya, Austria

Photos

Young Scientists speakers supported by ISN:



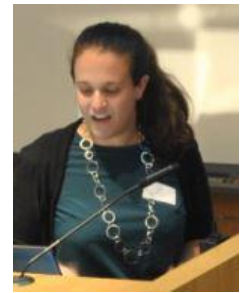
Freja Herborg



Jenny I. Aguilar



Louise Fets



Rita R. Fagan



Manuele Rebsamen



Bala Krishna Prabhala



Alyssa West



Shreyas Bhat



Andre Bazzone



Caroline Neumann



Ahmad Reza Mehdipour



Dániel Szöllősi



Felix Mayer (who was promoted to speak in Session 1 last minute due to an emergency cancellation)



(Almost) all speakers of the Young Scientists sessions together with Chairs Peter Chiba and Thomas Stockner

Plenary speakers:



Susan G. Amara



Thomas Jentsch



Satoshi Murakami



Christine Ziegler

Comments of attendants about the Meeting

Prof. Dr. Giulio Superti-Furga (Scientific Director, CeMM):

“The first ITTS conference was a great success, congratulations. You have done a wonderful job in assembling and organizing the community of transporters scientists. On behalf of all scientists involved at RESOLUTE but also from me personally: thank you for allocating a whole session to the RESOLUTE effort. It was a defining moment for this effort and we are grateful for the opportunity. But we are also very grateful from my Vienna research group perspective. The posters were very well attended and we got useful input. Manuele was thrilled to give a talk and also of course very glad to get a prize. I do not need to tell you, as you invented it, how motivating this is for him, and the entire group.”

Prof. Dr. Satoshi Murakami (Department of Life Science and Technology Tokyo Institute of Technology):

“... Conference itself was really interesting, of course. And all the events were just fantastic. You and your team organized and managed so well. Thanks.”

Prof. Dr. Anne T. Nies (Dr. Margarete Fischer-Bosch-Institut für Klinische Pharmakologie):

“... Once again I would like to thank you and your team for the excellent conference. And thank you very much for choosing my proposed symposium for presentation.”

Dr. Manuele Rebsamen (Postdoctoral Fellow, CeMM):

“Thank you very much for the great organisation of the conference!
I really enjoyed the ITTS meeting.”

Alyssa West (Graduate Student / Hashemi Group, Department of Chemistry and Biochemistry, Univ. Of South Carolina):

“I greatly enjoyed the conference as well as the chance to present my research.”