

Final report on the "Dopamine 2016" conference held in Vienna, Austria, September 5th to September 8th, 2016.

Dopamine is one of the major catecholaminergic neurotransmitters in the brain. It controls movement and plays a major role in the development of addiction and psychotic illness. The lack of dopaminergic innervation underlies the clinical picture of Parkinson's disease – which is of special importance to this conference. The Dopamine 2016 conference is in line with a number of preceding conferences, which discussed timely and novel findings in relation to dopamine research, from both a preclinical and a clinical perspective. It aimed at fostering translational aspects in dopamine research for bringing together researchers from bench and bedside. Moreover, our eight plenary speakers covered a broad range of ground-breaking research including the use of optogenetics (Karl Deisseroth), computational aspects of membrane physics and dopamine transporters and receptors (Harel Weinstein), dopamine flux measurements (Mark Wightman), basic and translational aspects of the circuitry underlying addictive processes (Patricia Janak, Trevor Robbins and Christian Lüscher), up to more clinically oriented research in psychiatric disorders including dopamine and schizophrenia (Anissa Abi-Dargham) and addiction research (Nora Volkow). The plenary lectures took place in the morning and in the afternoon of each conference day -parallel symposia took place in between.

Furthermore, we celebrated the 90th birthday of Oleh Hornykiewicz with a special plenary symposium highlighting current research themes in Parkinson's disease. Again, especially the transition from bench to bedside were highlighted by Ann Graybiel, Michael Schlossmacher, and Werner Poewe: from steps toward the identification of functions of the striosomal system and current modelling attempts of variants of Parkinson's disease in mice based on complex aetiologies in humans to the changing concept of Parkinson's Disease in the clinics.

The format of our conference specifically supported the interaction between senior researchers and junior fellows: Out of 72 applications, the scientific advisory board (SAB) and local organizing committee (LOC) selected 35 successful parallel symposia, including three speakers. The criteria for a successful application were based primarily on the scientific merit of the individual proposal, apart from a check of the gender balance, the balance between junior and senior speakers – and a good geographical distribution of the speakers around the globe. After having set the stage, all scientists were invited to apply for a fourth slot (short oral communication) of specific symposia by submitting abstracts. Again, SAB and LOC had to vote for 35 fellows out of 166 applications. Finally, the program was finalized and published online.

The junior scientists received grants to foster the attendance of these young fellows - with the help of the ISN support, at least in part. Speakers respectively their abstracts for short oral communications were predominantly chosen from junior attendees in order to give them increased visibility. Also, we indicated the support by ISN in the program by labelling the session with the ISN logo.

In addition, we also had four poster sessions where young researchers displayed their latest results and discussed with peers and prospective future employers. We have aimed for a particularly high proportion of junior researchers / students among our speakers. We thank ISN for the generous support of this meeting, and we communicated the ISN efforts to support young researchers / students repeatedly to the audience.



In total, Dopamine 2016 welcomed 470 participants from 28 countries, from Australia to the United States of America, from Chile to Japan. Forty-eight junior speakers were present, as well as 97 junior poster presenters.

The ISN-grant support was fuelled entirely into the grant applications of the 48 junior speakers who were selected either as part of the original symposium submission or upon application for the fourth slot of the parallel symposia, acknowledging the suitability of the title for a short oral communication in that particular (chosen) symposium. Every parallel symposium in which one or more speakers received support by ISN was marked in the programme as ISN-supported symposium.

Structure of the conference:

Organising institution: Medical University Vienna

Organisers: Harald Sitte, Matthäus Willeit

Scientific Advisory Board: A. Bonci (NIDA, USA), M.G. Caron (Durham, USA), G. DiChiara (Cagliari, Italy), R. Gainetdinov (Genova, Italy), U. Gether (Copenhagen, Denmark), N. Ginovart (Geneva, Switzerland), T. Hökfelt (Stockholm, Sweden), O. Howes (London, UK), Y.I. Hurd (New York, USA), J. Javitch (New York, USA), D.J. Nutt (London, UK), D. Sulzer (New York, USA), W. Schultz (Cambridge, UK), L. Zecca (Milan, Italy), T. Outeiro (Göttingen, Germany), E. Melamed (Tel Aviv, Israel)†, A. Phillips (Vancouver, Canada).

<u>Local Organising Committee:</u> T. Brücke, M. Freissmuth, W. Haubensak, H. Hörtnagl, S. Kasper, C. Pifl, W. Pirker, G. Sperk.

Scientific Programme:

The final programme of Dopamine 2016 included 8 plenary lectures, the Oleh-Horykiewicz Birthday Symposium with three plenary lecturers, 35 parallel symposia with four speakers including a short talk given by a speaker chosen from the submitted abstracts.

Invited Speakers, Dopamine 2016:

Anissa Abi-Dargham (CUMC, USA)
Karl Deisseroth (Stanford, USA)
Patricia Janak (JHU, USA)
Christian Lüscher (Univ. Geneva, CH)
Trevor Robbins (Cambridge, UK)
Nora Volkow (NIDA, USA)
Harel Weinstein (Cornell, USA)
Mark Wightman (UNC, USA)

<u>Special Birthday Plenary Symposium:</u>

A tribute to Oleh Hornykiewicz on the occasion of his 90th birthday (plenary session with specific focus on dopamine in relation to Parkinson's disease).



Invited speakers, Special Birthday Plenary Symposium:

Werner Poewe (MUI, Innsbruck, Austria)

Ann M. Graybiel (MIT, Boston, USA)

Michael Schlossmacher (OHRI, Ottawa, Canada)

Social Programme:

The first day of the conference was concluded by the Oleh Hornykiewicz birthday symposium and the invitation to the great festival hall of the Vienna town hall, where the mayor had invited us to. Here, more than 460 of the participants talked to each other, had food and drinks, and enjoyed themselves also by looking around the majestic, neo-gothic hall.

Tuesday night, we organized 'cultural lounges': the Van Swieten Hall of festivities of the Medical University of Vienna opened its doors to the dopamineurs and welcomed with a large dinner buffet. After dinner, the 'lounges' started: a 'Jazz lounge' featuring the "Benny Sharoni Quartet" from Boston in the Van Swieten hall, a 'Classical lounge' with a tour through the exhibits in the Josephinum and later on the "Varietas Ensemble" from Vienna, and the 'Electronic lounge' in the Narrenturm (Fool's tower), the first hospital building dedicated to the mentally ill in Europe, now hosting the pathological-anatomical museum. This lounge also started with a tour and ended with a dance floor in a separate part of the building.

After the free evening on Wednesday, the conference was concluded with the final Gala dinner at the Heurigen Restaurant Fuhrgassl-Huber in Neustift am Walde, a former suburb of Vienna, where traditional Viennese cuisine was served – and, obviously, Heurigen wine, the traditional white wine produced on site.

Participants:

In total, more than 470 participants came from a large number of different countries: Australia, Austria, Belgium, Brazil, Canada, Chile, China, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Republic of Korea, Malta, Netherlands, New Zealand, Poland, Russian Federation, South Africa, Spain, Sweden, Switzerland, Taiwan, Turkey, United Kingdom, United States of America.

List of ISN-grant awardees (that have in part been supported by an ISN-stipend):

- 1. Dasiel O. Borroto-Escuela, Karolinska Institutet
- 2. Katherine R. Brimblecombe, University of Oxford
- 3. Emma Cahill, University of Cambridge
- 4. Mareike Clos, University Medical Center Hamburg-Eppendorf
- 5. Paul Cocker, University of British Columbia
- 6. Silvia Corongiu, University of Cagliari
- 7. Lorenz Deserno, Max Planck Institute for Human Cognitive and Brain Sciences
- 8. Fabien Ducrocq, University of Bordeaux
- 9. Patrik Fazio, Karolinska Institutet
- 10. Alexander Genauck, Charité Universitätsmedizin Berlin
- 11. Stephanie Groman, Yale University
- 12. Freja Hansen, University of Copenhagen
- 13. Christopher D. Howard, Salk Institute for Biological Studies
- 14. Sandra Iglesias, University of Zurich & ETH Zurich
- 15. Kimberly A. Kempadoo, Columbia University



- 16. Jennifer I. Lissemore, McGill University
- 17. Sweyta Lohani, University of Pittsburgh
- 18. Violeta Lopez Huerta, Broad Institute Cambridge
- 19. Signe Mathiasen, Columbia University Medical Center
- 20. Felix P. Mayer, Medical University of Vienna
- 21. Maddalena Mereu, Università degli Studi di Padova
- 22. Daniela Neuhofer, Medical University of South Carolina
- 23. Kyoji Okita, University of California, Los Angeles
- 24. Junchol Park, University of Pittsburgh
- 25. Amy Reichelt, University of New South Wales
- 26. Andrea Reiter, MPI for Cognitive and Brain Sciences/TU Dresden
- 27. Jocelyn M. Richard, Johns Hopkins University
- 28. Janine I. Rossato, Brain Institute Natal
- 29. Irene Ruiz De Diego, Cajal Institute, CSIC
- 30. Philipp Schwartenbeck, Centre for Cognitive Neuroscience Salzburg
- 31. Miriam Sebold, Charité Universitätsmedizin
- 32. Oscar Solis, Cajal Institute, CSIC
- 33. Ruth J. van Holst, Radboud University, University of Amsterdam
- 34. Valerie Voon, University of Cambridge
- 35. Ana Weidenauer, Medical University of Vienna
- 36. Karolina Wydra, Institute of Pharmacology Polish Academy of Sciences
- 37. Andrew G. Yee, University of Auckand

Some photographs taken at various times throughout the conference:

Main auditorium:





Michael Schlossmacher with the Birthdaywishes from the Canadian Prime Minister, Trudeau, together with Oleh Hornykiewicz, the laureate:



Oleh Hornykiewicz and his wife Christine with Prime Minister Trudeau's birthday letter:



...and birthday wishes from his Canadian colleagues:





Oleh Hornykiewicz together with Ann Graybiel:



The "Classical Lounge" in the "Reading Room" of the "Josephinum": ¾ of the "Varietas" quartet visible, underneath the bust of Emperor Joseph II, the founder of the Josephinum Academy for the training of young surgeons:



4/4 of the the "Benny Sharoni Quartet" visible in the Van Swieten Hall of the Medical University of Vienna: the "Jazz Lounge"



And here's Benny Sharoni and his audience (some 170 participants):



The fool's tower ("Narrenturm"), where the "Electronic Lounge" took place after a tour through the exhibits of the pathological-anatomical museum:



Financial Report for ISN CC:

List of Dopamine 2016 / ISN stipend awardees:

As already explained above, the money granted by the ISN-CC was entirely used for the support of young scientists. Therefore, we are happy to list the successful applicants who underwent a rigorous selection process by both the scientific advisory board and the local organizing committee. Mainly, the selection was based on the scientific quality of the contribution and we awarded 37 stipends of various height based on the contribution: talk slot or poster presentation.

1.	Dasiel O. Borroto-Escuela	€ 585,00
2.	Katherine R. Brimblecombe	· · · · · · · · · · · · · · · · · · ·
3.	Emma Cahill	€ 585,00
4.		€ 585,00
	Paul Cocker	€ 585,00
6.	Silvia Corongiu	€ 585,00
	Lorenz Deserno	€ 300,00
8.	Fabien Ducrocq	€ 300,00
9.	Patrik Fazio	€ 585,00
10.	Alexander Genauck	€ 585,00
11.	Stephanie Groman	€ 585,00
12.	Freja Hansen	€ 585,00
13.	Christopher D. Howard	€ 585,00
14.	Sandra Iglesias	€ 585,00
15.	Kimberly A. Kempadoo	€ 300,00
16.	Jennifer I. Lissemore	€ 585,00
17.	Sweyta Lohani	€ 300,00
18.	Violeta Lopez Huerta	€ 585,00
19.	Signe Mathiasen	€ 300,00
20.	Felix P. Mayer	€ 500,00
21.	Maddalena Mereu	€ 585,00
22.	Daniela Neuhofer	€ 300,00
23.	Kyoji Okita	€ 585,00
	Junchol Park	€ 585,00
	Amy Reichelt	€ 585,00
26.	Andrea Reiter	€ 300,00
	Jocelyn M. Richard	€ 300,00
	Janine I. Rossato	€ 585,00
	Irene Ruiz De Diego	€ 585,00
	Philipp Schwartenbeck	€ 585,00
	Miriam Sebold	€ 585,00
	Oscar Solis	€ 585,00
	Ruth J. van Holst	€ 585,00
34.	Valerie Voon	€ 585,00
	Ana Weidenauer	€ 500,00
	Karolina Wydra	€ 585,00
37.	Andrew G. Yee	€ 300,00
	In total:	€ 18.625,00