

REPORT OF ISN-SUPPORTED SMALL CONFERENCE

Basic information (title of the meeting, dates, organizer, venue, etc.)

The Neurochemical Conference 2017 "Advances in molecular and epigenetic mechanisms in neurodegeneration and neuroinflammation: novel therapeutic approaches"

October 19-20, 2017, Warsaw, Poland

Website: <http://neuroconf2017.com.pl/>

Conference venue

Mossakowski Medical Research Centre Polish Academy of Sciences

Pawińskiego 5

02-106 Warsaw, Poland

www.imdik.pan.pl

Organizers

Mossakowski Medical Research Centre Polish Academy of Sciences

Polish Academy of Sciences, Division V: Medical Sciences, Committee of Neurological Sciences

Scientific Committee:

Joanna B. Strosznajder (chairperson), Poland

Józefa Gądek-Wesierski, Austria

Zbigniew Wszolek, USA

Gibson Wood, USA

Maria Barcikowska-Kotowicz, Poland

Piotr Lewczuk, Germany

Carsten Culmsee, Germany

David Beversdorf, USA

Walter Lukiw, USA

Nadežda Lukáčová, Slovak Republic

Robert P. Strosznajder, Poland

Amalia Dolga, The Netherlands

Agata Adamczyk, Poland

Local Organizing Committee

Agata Adamczyk (chairperson)

Joanna B. Strosznajder

Grzegorz A. Czapski

Anna Wilkaniec

Magdalena Cieślik

Henryk Jęsko

Robert P. Strosznajder

Beata Łuczyńska

Additional information

Conference abstracts were published in *Folia Neuropathologica* 3/2017 vol. 55: <https://www.termedia.pl/Journal/-20>. DOI: <https://doi.org/10.5114/fn.2017.70491>

Registration and registration fees

The registration fee for whole conference was 200 PLN and the fee for one day was 120 PLN. The registration fee included scientific events, conference materials and coffee breaks. The registration for the Conference was performed online <http://neuroconf2017.com.pl/Registration> until June 30, 2017. Onsite registration was available at the Conference Registration Desk.

Program, Speakers, Plenary speakers

Scientific Programme of the Neurochemical Conference 2017

"Advances in molecular and epigenetic mechanisms in neurodegeneration and neuroinflammation: novel therapeutic approaches"

October 19-20, 2017, Warsaw, Poland

Thursday, October 19, 2017

- 9.15-9.20 **Opening ceremony (Agata Adamczyk)**
- 9.20-9.50 **Opening lecture**
Joanna B. Strosznajder (Poland) *Interplay between bioactive lipids and presynaptic proteins - critical in initiation and progression of neurodegenerative disorders*
- 9.50-10.05 **Coffee break**
- 10.05-12.00 **Session I (Chairpersons: Agata Adamczyk and David Q. Beversdorf)**
The role of genetic/epigenetic changes and inflammatory processes in autism and other neurodevelopmental disorders
- 10.05-10.30 **David Q. Beversdorf (USA)** *Mechanisms of the effects of prenatal stress on neuro-development: genetics and epigenetics, and potential mitigating factors*
- 10.30-10.55 **Magdalena Cieřlik (Poland)** *Maternal immune activation alters immune response and induces synaptic protein changes in rat offspring*
- 10.55-11.20 **Andreas M. Grabrucker (Ireland)** *Convergence of non-genetic factors in Autism Spectrum Disorders*
- 11.20-11.45 **Walter J. Lukiw (USA)** *Down-regulated expression of the post-synaptic scaffolding protein SHANK3 by aluminum and miRNA-34a associates with multiple neuropsychiatric disorders*
- 11.45-12.00 **Joanna Drozdowska (BIOKOM sp.j.)** *The Takara Bio solutions for Meth-Seq analysis and highly efficient tools for genome editing – exhibitor’s presentation*
- 12.00-12.15 **Coffee break**
- 12.15-13.00 **Poster session I**

- 13.00-13.45 Lunch**
- 13.45-14.00 Presentation of The Golden Neuron Award (Introduction: Jan Albrecht)**
Przemysław Kaczor et al. (Poland) *Neuron-astrocyte interaction enhance GABAergic synaptic transmission in a manner dependent on key metabolic enzymes. Front. Cell. Neurosci. 2015; 9: 120.*
- 14.00-16.00 Session II (Chairpersons: Anna Wilkaniec and Maria Ankarcrona)**
From genetic mutations and environmental factors to protein misfolding in neurodegenerative diseases
- 14.00-14.30 Special lecture**
Zbigniew K. Wszolek (USA) *Clinical genetics of alpha-synucleinopathies and tauopathies*
- 14.30-14.55 Anna Wilkaniec (Poland)** *Aberrant purinergic signalling contributes to neurodegeneration and mitochondrial impairment induced by alpha-synuclein*
- 14.55-15.10 Anna M. Lenkiewicz (Poland)** *Cytoprotective role of Parkin against alpha-Synuclein evoked mitochondrial failure in PC12 cells. Relevance to Parkinson's disease and other neurodegenerative disorders*
- 15.10-15.35 Maria Ankarcrona (Sweden)** *The effect of amyloid beta-peptide on ER-mitochondria contact in Alzheimer's disease*
- 15.35-16.00 Piotr Lewczuk (Germany)** *Neurochemical dementia diagnostics: the role of the CSF biomarkers in early diagnosis of Alzheimer's disease*
- 16.00-16.25 Carsten Culmsee (Germany)** *Linking ferroptosis and regulated necrosis to mitochondrial mechanisms of neurodegeneration – new mechanisms and potential therapeutic targets*

Friday, October 20, 2017

- 10.00-11.40 Session III (Chairpersons: Robert P. Strosznajder and Halina Car)**
Molecular biology of bioactive lipids: their role in signal transduction, brain pathology and therapy
- 10.00-10.25 Grace Y. Sun (USA)** *New insights on docosahexaenoic acid (DHA) and its peroxidation products in microglia*
- 10.25-10.50 Joanna A. Motyl (Poland)** *Alteration of bioactive sphingolipids signalling and locomotor function in animal model of Parkinson's disease. Neuroprotective effect of Fingolimod.*
- 10.50-11.15 Kinga Czubowicz (Poland)** *Ceramide and sphingosine-1-phosphate crucial modulators of neuronal death. Relevance to neurodegenerative disorders*
- 11.15-11.40 Halina Car (Poland)** *Relationship of metformin and sphingolipids in brain of rats fed with high fat diet*
- 11.40-12.00 Coffee break**
- 12.00-13.00 Poster session II**

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|--------------------|---|
| 13.00-14.00 | Lunch |
| 14.00-15.40 | Session IV (Chairpersons: Józefa Gądek-Węsierski and Joanna B. Strosznajder) <i>Stress-response proteins, poly(ADP-ribose) polymerases (PARPs) and sirtuins in regulation of cell survival and death: promising targets for novel therapeutic approaches</i> |
| 14.00-14.25 | Józefa Gądek-Węsierski (Austria) <i>Pharmacological interference with PARP-1 activity in treatment of human diseases: one strategy but different cellular outcomes</i> |
| 14.25-14.50 | Przemysław L. Wencel (Poland) <i>Pharmacological inhibition of PARP-1 in experimental models of Alzheimer's Disease. The cross-talk between PARPs and Sirtuins in regulation of cell's fate.</i> |
| 14.50-15.15 | Amalia M. Dolga (The Netherlands) <i>SK channels are involved in mitochondrial metabolic shifts: implication for longevity?</i> |
| 15.15-15.40 | Nadežda Lukáčová (Slovak Republic) <i>Benefit Statins in spinal cord injury</i> |
| 15.40-15.45 | Closing ceremony |

Highlight of the meeting

The prevalence of neurological diseases from autism during childhood to Alzheimer's late in life is increasing, but the knowledge on pathogenesis and effective treatments are poor. The Conference „***Advances in molecular and epigenetic mechanisms in neurodegeneration and neuroinflammation: novel therapeutic approaches***” organized by Mossakowski Medical Research Centre PAS in Warsaw, Poland on October 19-20, 2017, focused on mechanisms, prevention and therapies of these neurological diseases. Conference uniquely combined distinct neurological diseases in one setting and discussed their similarities and differences. The conference concentrated on recent advances in autism and neurodegenerative diseases, ranging from basic science to clinical and pharmaceutical developments. Symposium highlighted current understanding of underlying mechanisms, new research directions, and novel therapeutic strategies. The multiple mechanisms of synaptic dysfunction, neuroinflammation and neurodegeneration in different diseases, as well as, inter- and intracellular signalling in inflammatory process during neurological disorders were discussed. The conference brought together basic and clinical scientists, early-career and senior investigators to explore the recent advances in molecular mechanisms underlying neurodegenerative processes and inflammation. The scientific programme included plenary lectures, symposia, as well as oral and poster presentations.

Participants

The registered participants of the conference were from Poland, Slovak Republic, The Netherlands, Austria, USA, Germany, Sweden, Ireland and Hungary. The full list is in section: List of participants. In the scientific events participated also numerous non-registered scientists, young investigators and PhD students from Mossakowski Medical Research Centre PAS in Warsaw.

Material distribution

Each participant received a conference bag with printed copy of Folia Neuropathologica (2017, vol. 55, No 3 <https://www.termedia.pl/Neurochemical-Conference-2017-Advances-in-molecular-and-epigenetic-mechanisms-r-nin-neurodegeneration-and-neuroinflammation-novel-therapeutic-approaches-,20,30746,0,1.html>) with published conference abstracts, printed scientific programme, an ID badge, notebook, pen and some commercial materials provided by our sponsors.

Social events

A dinner for invited speakers was organized on October 19, 2017 at Exclusive Restaurant "Pod Gigantami" (Al. Ujazdowskie 24, Warszawa).

Travel awards

Travel refund was individually adapted depending on distance and estimated travel costs to Warsaw (100-500 USD). Organizers covered also costs of registration fee (200 PLN = 56.23 USD) and hotel (375 PLN=105.43 USD). For converting PLN to USD we used an exchange rate=3,5570 which was published by National Bank of Poland (NBP) for 2017.10.19.

| | |
|------------------------------------|--------------|
| Travel (for 16 persons): | 14882,19 PLN |
| Registration fee (for 16 persons): | 3200,00 PLN |
| Hotel (for 16 persons): | 6000,00 PLN |

In total, **24082,16 PLN** (over 60% of ISN grant) was used to facilitate the attendance of young neurochemists at conference.

ISN awardees:

| | |
|----------------------------|---|
| Jana Fedorova | Institute of Neurobiology, Slovak Republic |
| Katarina Bimbova | Institute of Neurobiology, Slovak Republic |
| Ewelina Rojewska | Institute of Pharmacology PAS, Kraków |
| Katarzyna Popiolek-Barczyk | Institute of Pharmacology PAS, Kraków |
| Maria Svatova/Bacova | Institute of Neurobiology, Slovak Republic |
| Katarzyna Wize | Poznan University of Medical Sciences, Poland |
| Amalia Dolga | Groningen Research Institute of Pharmacy, The Netherlands |
| Katarzyna Kamińska | Institute of Pharmacology PAS, Poland |
| Jana Jachova | Institute of Neurobiology, Slovak Republic |
| Goutham K. Ganjam | Philipps University of Marburg Germany |
| Susanne Michels | Philipps University of Marburg, Germany |
| Anja Jelinek | Philipps University of Marburg, Germany |
| Andreas Grabrucker | University of Limerick, Ireland |
| Phanindra Babu Kasi | Szeged University, Hungary |
| Birgit Honrath | Groningen Research Institute of Pharmacy, The Netherlands |
| Stefanie Grabrucker | University of Limerick, Ireland |

Travel subsidies for Invited Speakers/Plenary Speakers

Travel for two invited speakers, David Q. Beversdorf (USA) and Walter J. Lukiw (USA): 6652,24 PLN

Sponsorship

1. Biogenet
2. BioKom
3. Eppendorf
4. Genos
5. LabJot

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

| | |
|--|--------------|
| Travel for young investigators (for 16 persons): | 14882,16 PLN |
| Registration fee for young investigators (for 16 persons): | 3200,00 PLN |
| Hotel for young investigators (for 16 persons): | 6000,00 PLN |
| Travel for invited speakers (2 persons): | 6652,24 PLN |
| Registration fee for invited speakers (10 persons): | 2000,00 PLN |
| Hotel for invited speakers (9 persons): | 5733,00 PLN |
| Transportation (Taxi) for invited speakers: | 543,60 PLN |

In total, 10 000 USD (39 011.00 PLN) was used to enable the attendance of young investigators and invited speakers at conference.

List of participants

- | | | |
|-----|------------------------|----------|
| 1. | Adamczyk Agata | Poland |
| 2. | Augustyniak Justyna | Poland |
| 3. | Bacova Maria | Slovakia |
| 4. | Barcikowska Maria | Poland |
| 5. | Beręsewicz Małgorzata | Poland |
| 6. | Beversdorf David | USA |
| 7. | Bialuk Izabela | Poland |
| 8. | Bimbova Katarina | Slovakia |
| 9. | Bratek Ewelina | Poland |
| 10. | Bratek Ewelina | Poland |
| 11. | Car Halina | Poland |
| 12. | Chalimoniuk Małgorzata | Poland |
| 13. | Cieślik Magdalena | Poland |
| 14. | Culmsee Carsten | Germany |
| 15. | Czapski Grzegorz | Poland |
| 16. | Czarnecka Anna | Poland |
| 17. | Czeredys Magdalena | Poland |
| 18. | Czubowicz Kinga | Poland |

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|-----|--------------------------------|-----------------|
| 19. | Diamandakis Dominik | Poland |
| 20. | Dolga Amalia | The Netherlands |
| 21. | Domańska-Janik Krystyna | Poland |
| 22. | Drela Katarzyna | Poland |
| 23. | Fedorova Jana | Slovakia |
| 24. | Figiel-Dąbrowska Anna | Poland |
| 25. | Fischer Urszula | Poland |
| 26. | Frontczak-Baniewicz Małgorzata | Poland |
| 27. | Ganjam Goutham | Germany |
| 28. | Gaweł Kinga | Poland |
| 29. | Gądek-Węsierski Józefa | Austria |
| 30. | Górka Magdalena | Poland |
| 31. | Grabruker Andreas | Ireland |
| 32. | Grabruker Stefanie | Ireland |
| 33. | Honrath Birgit | The Netherlands |
| 34. | Jachova Jana | Slovakia |
| 35. | Jelinek Anja | Germany |
| 36. | Jęsko Henryk | Poland |
| 37. | Kaczor Przemysław | Poland |
| 38. | Kamińska Katarzyna | Poland |
| 39. | Kasi Phanindra Babu | Hungary |
| 40. | Kochański Andrzej | Poland |
| 41. | Kolenkiewicz Malgorzata | Poland |
| 42. | Kozłowska Anna | Poland |
| 43. | Koźniewska Ewa | Poland |
| 44. | Kwiatkowska-Patzer Barbara | Poland |
| 45. | Lech Wioletta | Poland |
| 46. | Lenkiewicz Anna | Poland |
| 47. | Lewczuk Piotr | Germany |
| 48. | Lukacova Nadezda | Slovakia |
| 49. | Lukiw Walter | USA |
| 50. | Łazarewicz Jerzy | Poland |
| 51. | Łuczyńska Beata | Poland |
| 52. | Łukaszewicz Zuzanna | Poland |
| 53. | Majewska Ewelina | Poland |
| 54. | Michels Susanne | Germany |
| 55. | Mikołaj Salek | Poland |
| 56. | Motyl Joanna | Poland |
| 57. | Murawska Emilia | Poland |
| 58. | Niedziałek Dorota | Poland |
| 59. | Pawlak Matthias | Germany |
| 60. | Piotrowicz Zofia | Poland |
| 61. | Popiołek-Barczyk Katarzyna | Poland |
| 62. | Prokopiuk Sławomir | Poland |
| 63. | Przestaszewska Bogna | Poland |

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| 64. | Rojewska Ewelina | Poland |
| 65. | Równiak Maciej | Poland |
| 66. | Smoliński Łukasz | Poland |
| 67. | Sokołowska Beata | Poland |
| 68. | Stanaszek Luiza | Poland |
| 69. | Stropkowska Andrea | Slovakia |
| 70. | Strosznajder Joanna | Poland |
| 71. | Strosznajder Robert | Poland |
| 72. | Strużyńska Lidia | Poland |
| 73. | Sulkowski Grzegorz | Poland |
| 74. | Sun Grace | USA |
| 75. | Synoradzki Kamil | Poland |
| 76. | Szeliga Monika | Poland |
| 77. | Szychowski Konrad | Poland |
| 78. | Tobiasz Jakub | Poland |
| 79. | Wencel Przemysław | Poland |
| 80. | Wielgat Przemysław | Poland |
| 81. | Wilkaniec Anna | Poland |
| 82. | Winnicka Maria | Poland |
| 83. | Wize Katarzyna | Poland |
| 84. | Wojciechowski Piotr | Poland |
| 85. | Wojciechowski Piotr | Poland |
| 86. | Wojtas Adam | Poland |
| 87. | Wójtowicz Sylwia | Poland |
| 88. | Wszolek Elżbieta | USA |
| 89. | Wszolek Zbigniew | USA |
| 90. | Zabłocka Barbara | Poland |
| 91. | Zalewska Teresa | Poland |
| 92. | Ziemba Andrzej | Poland |
| 93. | Ziemińska Elżbieta | Poland |

Photos

Photos submitted in separate document

A collection of other photos from the Neurochemical Conference 2017 can be found on the website:

<http://neuroconf2017.com.pl/photo-gallery>

Comments of at least 3 attendants about the Meeting

Foldery
Ostatnie odświeżenie:
Wt, 3:35 pm
(Sprawdź pocztę)

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speakers

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Temat: Re: ----> Neurochemical Conference 2017
Od: "Lukiw, Walter" <WLukiw@lsuhsc.edu>
Data: 29 Października 2017, 11:41 am, N
Do: "Neurochemical Conference 2017" <neuro.conf@imdik.pan.pl>
Priorytet: Normalny
Opcje: [Pokaż cały nagłówek](#) | [Podgląd wersji do wydruku](#) | [Pobierz jako plik](#)

Dear Professor Adamczyk - Thank you very much for hosting such an exciting and wonderful Neurochemical Conference 2017 in Warsaw!

As always, I really enjoyed this conference and it was great to see all of my friends, colleagues and collaborators at your institute in Warsaw - it was a truly inspiring and motivating scientific experience and am looking forward to visiting Warsaw again - it is one of my most favorite cities in the world!

I must also say that I am sincerely happy that we are actively collaborating and writing papers together, and am looking forward to continuing a productive long-term collaboration in neurochemistry and neuroscience!

Best wishes - cheers!

Walter J. Lukiw BS, MS, PhD
Professor of Neurology, Neuroscience and Ophthalmology
Bollinger Professor of Alzheimer's disease (AD)
LSU Neuroscience Center
Louisiana State University Health Sciences Center
2020 Gravier Street, Room 904
New Orleans LA 70112-2272 USA
TEL 504-599-0842
EMAIL wlukiw@lsuhsc.edu<<mailto:wlukiw@lsuhsc.edu>>

Foldery
Ostatnie odświeżenie:
Wt, 3:35 pm
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Temat: Re: Neurochemical Conference 2017
Od: "RNDr. Nadezda Lukacova, DrSc" <lukacova@saske.sk>
Data: 30 Października 2017, 10:46 am, Pn
Do: "Neurochemical Conference 2017" <neuro.conf@imdik.pan.pl>
Priorytet: Normalny
Opcje: [Pokaż cały nagłówek](#) | [Podgląd wersji do wydruku](#) | [Pobierz jako plik](#)

Dear Professor Adamczyk,

Congratulations to a very successful Neurochemical Conference 2017!
The scientific program of the Conference, the lectures and discussions were very inspiring and excellent! I hope we will discuss very soon the possibility of our common cooperation.

Thank you very much for your invitation to this very interesting Conference and for excellent hospitality!

I attach some fotos from social events.

Looking forward seeing You again.

Sincerely Yours,
N. Lukacova

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Temat: RE: Neurochemical Conference 2017
Od: "Lewczuk, Piotr" <Piotr.Lewczuk@uk-erlangen.de>
Data: 27 Października 2017, 3:54 pm, Pt
Do: "Neurochemical Conference 2017" <neuro.conf@imdik.pan.pl>
Priorytet: Normalny
Opcje: [Pokaż cały nagłówek](#) | [Podgląd wejści do wydruku](#) | [Pobierz jako plik](#)

Dear Prof. Adamczyk,
 Thank you once again for invitation and perfect organization of the Conference. I really enjoyed the meeting, the lectures, and the dinner.
 Have a great weekend and let's stay in touch!
 P. Lewczuk

Prof. Dr. med. Piotr Lewczuk

 Head,
 Lab for Clinical Neurochemistry
 and Neurochemical Dementia Diagnostics,
 Universitätsklinikum Erlangen,
 Department of Psychiatry and Psychotherapy,
 Schwabachanlage 6,
 91054 Erlangen, GERMANY

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Temat: RE: Neurochemical Conference 2017
Od: "Wszolek, Zbigniew K., M.D." <Wszolek.Zbigniew@mayo.edu>
Data: 27 Października 2017, 12:48 pm, Pt
Do: "Neurochemical Conference 2017" <neuro.conf@imdik.pan.pl>
Priorytet: Normalny
Opcje: [Pokaż cały nagłówek](#) | [Podgląd wejści do wydruku](#) | [Pobierz jako plik](#)

Thank you very much! As stated in our earlier correspondence, the Conference was excellent. Thanks for your invitation and all the effort that you have made to feel us all welcome and appreciated. Your hospitality was excellent!
 Looking forward to our future interactions.
 Yours,
 Zbigniew Wszolek
 P.S.
 My next visit in Poland will be in March, CONy in Warsaw.

From: Neurochemical Conference 2017 [<mailto:neuro.conf@imdik.pan.pl>]
 Sent: Friday, October 27, 2017 7:40 AM
 To: Wszolek, Zbigniew K., M.D.
 Subject: Neurochemical Conference 2017

Foldery
 Ostatnie odświeżenie:
 Cz, 12:52 pm
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Temat: RE: Neurochemical Conference 2017
Od: "Beversdorf, David" <beversdorf@health.missouri.edu>
Data: 27 Października 2017, 2:08 pm, Pt
Do: "Neurochemical Conference 2017" <neuro.conf@imdik.pan.pl>
Priorytet: Normalny
Opcje: [Pokaż cały nagłówek](#) | [Podgląd wejści do wydruku](#) | [Pobierz jako plik](#)

Thank you for your hospitality! It was an excellent conference! Looking forward to working together!