

**50<sup>th</sup>**

# INTERNATIONAL DANUBE

## NEUROLOGY SYMPOSIUM



**8-9. JUNE, 2018**

**DEBRECEN, HUNGARY**

PROGRAMME & DANUBE NEUROLOGY  
NEWSLETTER – NO. 28.

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**50<sup>th</sup>**

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**DEBRECEN, HUNGARY**

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# THE HISTORY OF THE DANUBE SYMPOSIUM



*by Professor Franz Gerstenbrand and Professor H.A.F. Schulze  
translated and compiled by: Erika Grossmann*

The roots for the foundation of the Danube Symposium (Donausymposium) can be traced back until 1956, when Prof. Dr. Hans Hoff, leader of the University Clinic of Psychiatry and Neurology Vienna was invited to neurological and psychiatric clinics in the former Tchechoslovakia, Yugoslavia and Hungary. In the following years, several lectures were held by Prof. Hoff and Prof. Dr. Gerstenbrand, on the other hand numerous Central and East-European scientists had the chance to travel to the strictly neutral Austria and to exchange scientific experience with the Austrian colleagues.

As a consequence of these mutual exchange activities it was finally agreed to organise and to hold an international Symposium called „Donausymposium“ in May 1962 in Vienna under the participation of neurological scientists from Austria, Western Germany, Switzerland and Central, East and South-European countries. After the successful conference it was decided to continue this kind of meeting. The next Donausymposium took place in 1964 again in Vienna, organised by the University Clinic of Psychiatry and Neurology Vienna, chairman of the Organising Committee was the initiator of the Symposium, Prof. Dr. Hans Hoff. From this year on, the Meeting was to take place every year and the scientific fields of neurology and psychiatry were separated.





The overall goal of the Donausymposium was the mutual exchange of new scientific developments, topics in the field of neurology; member countries of the Danube Group were: Austria, former Western and Eastern Germany, all Central and East-European countries including the former Soviet Union; not participating were: Greece, Turkey and Albania.

In the following years, a legal body, the Danube Symposium Curatorium was organised, headed by Prof. Hans Hoff, later on by Prof. Herbert Reisner, and after his death, Prof. Dr. Franz Gerstenbrand was elected for General Secretary. Prof. Dr. G. Ransmayr was and still is responsible for scientific affairs, he was elected for Scientific Secretary. Instead of Vienna, the Danube Symposia were held in Innsbruck, alternately to one of the member countries. In 1994, Prof. M. Brainin took over the responsibilities of General Secretary, due to the appointment of Prof. Dr. Gerstenbrand to President. In 1999 Prof. Dr. László Vécsei was elected for General Secretary, therefore the Head Office and Secretariat of the Danube Symposium was transferred to the Department of Neurology, University of Szeged, Hungary. Prof. Ransmayr is the Scientific Secretary, Prof. Gerstenbrand was nominated for Honorary President.

Since 1994 the Curatorium and the Managing Board are responsible for the decisions concerning the venues of the meetings; moreover it is of outstanding importance to follow up the new tendencies and developments in neurology, therefore every Danube Symposium consists of a special scientific block called „Continuing Education” with free topics. This fact is also reflected in the name of the Danube Group, which is officially called „Danube Symposium for Neurological Sciences and Continuing Education”. Due to historical reasons, the Danube Group also bears the title „Central and East-European Association for Neurology”.



## HEAD OFFICE

**Prof. Dr. L. Vécsei**

*General Secretary  
Department of Neurology  
University of Szeged*

Semmelweis str. 6.,  
6725 Szeged, Hungary  
Phone: + 36/62/545 - 351  
Fax: + 36/62/545 - 597  
e-mail: vecsei.laszlo@med.u-szeged.hu

**Prof. Dr. L. Csiba**

*Local Organizer  
Department of Neurology  
Universtiy of Debrecen*

Móricz Zs. boulevard 22.  
4032 Debrecen, Hungary  
Phone: + 36/52/415 - 176  
Fax: + 36/52/453 - 590  
e-mail: csiba@med.unideb.hu

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## WELCOME TO DEBRECEN

Dear Colleagues,

On behalf of the Organizing and Scientific Committee, it is our privilege and honour to invite you to the 50<sup>th</sup> International Danube Symposium in Debrecen.

In 2018 the Symposium will be organized together with the XXXVII. Congress of the Hungarian Society of Neurology.

The Organizers are planning an outstanding scientific program which will cover all the up-to-date results relating to research and clinical practice in the field of neurology. We have made great efforts to prepare an interesting program, discussing the diagnostics and pathomechanisms of neurological diseases, and outline the modes of treatment and therapeutic strategies based on their latest research.

As you may see, this is a very tight programme, but we hope that the heavy science can be compensated by enjoyable and relaxing social programmes.

Debrecen is Hungary's second largest city. Thanks to its religious, political, and economic power, historic Debrecen got to assume a quasi-city-state status and it has served twice as the nation's capital. The modern city is Eastern Hungary's most important commercial and administrative center, which has displayed an unbroken path of spectacular development in all walks of life.

We are convinced that the scientific program in combination with the traditionally warm Hungarian hospitality will make this Symposium an unforgettable experience for all participants.

We look forward to meeting you in Debrecen, Hungary!



**László Vécsei**  
*General Secretary  
of the International Danube  
Symposium*



**László Csiba**  
*Local Organizer  
of the Conference of the  
Hungarian Neurological Society*

## PRELIMINARY PROGRAMME OF THE SYMPOSIUM – SCIENTIFIC PROGRAMME

**8<sup>TH</sup> JUNE 2018. (FRIDAY)**

### **50<sup>th</sup> International Danube Neurology Symposium**

**08:45 – 09:00    Opening ceremony**

Vécsei, László; General Secretary of the International Danube Symposium  
Riederer, Peter; In Memoriam: Prof. József Knoll and Prof. Kálmán Magyar  
Csiba, László; Local Organizer of the Conference of the Hungarian Neurological Society

**09:00 – 11:00    Danube Session I.: Frontiers in neurology**

Chairs: Kostic, Vladimir; Pirtosek, Zvezdan; Vécsei, László

09:00 – 09:30    **Reichmann, Heinz** (Dresden)

Does PD start in the gut? (30')

09:30 – 10:00    **Ziemssen, Tjalf** (Dresden)

Recent development in the treatment of multiple sclerosis. (30')

10:00 – 10:30    **Riederer, Peter** (Würzburg)

Diabetes and cognition. (30')

10:30 – 11:00    **Brainin, Michael** (Krems)

Research and therapy options for post-stroke cognitive decline. (30')

11:00 – 11:30    Coffee break (30')

**11:30 – 12:30    Danube Session II.: Extrapyrarnidal symposium**

Chairs: Brainin, Michael; Riederer, Peter

11:30 – 12:00    **Kostic, Vladimir** (Belgrade)

Impulse control disorders in Parkinson's disease. (30')

12:00 – 12:30    **Pirtosek, Zvezdan** (Ljubljana)

Many faces of Parkinson's disease. (30')

12:30 – 13:30    Lunch (60')

**13:30 – 15:00    Danube Session III.: Recent development in neurology I.**

Chairs: Muresanu, Dafin; Relja, Maja; Halász, Péter

13:30 – 14:00    **Tiu, Cristina** (Bucurest)

Benefits and limits of intravenous thrombolysis in large vessel occlusion. (30')

14:00 – 14:30    **Muresanu, Dafin** (Cluj Napolca)

Anticorrelated processes in neurobiology- possible consequences for neurorehabilitation strategies. (30')

14:30 – 15:00    **Relja, Maja** (Zagreb)

Botulinum toxin in neurology: 2018. (30')

15:00 – 15:30    Coffee break (30')



- 15:30 – 16:30**    **Sponsored Symposium: MEDIS** (in Hungarian language) (60')
- 16:30 – 16:50**    **Sponsored Symposium: Angels Initiative Consultant Hungary**  
**Erdélyi, Péter and a guest presenter**  
"Impact of quality monitoring on stroke care improvement" (20')
- 16:50 – 17:00    Break (10')
- 17:00 – 17:20**    **Sponsored Symposium: Pfizer** (in Hungarian language) (20')
- 17:20 – 17:40**    **Sponsored Symposium: Medtronic Hungary** (in Hungarian language) (20')
- 20:00 – 24:00    Evening program: Danube Welcome Reception and HNS Banquet Dinner

## 9<sup>TH</sup> JUNE 2018. (SATURDAY)

### Joint Conference of 50<sup>th</sup> International Danube Neurology Symposium and Hungarian Neurological Society

- 08:30 – 09:30**    **Danube Session IV.: Recent development in neurology II.**  
Chairs: Tiu, Cristina; Korczyn, Amos; Vécsei, László
- 08:30 – 09:00    **Rejdak, Konrad** (Lublin)  
Predictive factors for disease activity in patients with clinically isolated syndrome. (30')
- 09:00 – 09:30    **Special Lecture: Korczyn, Amos** (Tel Aviv)  
Functional neurological disorders (30')
- 09:30 – 09:50**    **Sponsored Symposium: Medtronic Hungary** (in Hungarian language) (20')
- 09:50 – 10:10    Break (10')
- 10:10 – 11:40**    **Joint stroke meeting of 50th International Danube Neurology Symposium and Hungarian Neurological Society I.**  
Chairs: Hossmann, Konstantin- A.; Csiba, László; Nagy, Zoltán
- 10:10 – 10:35    **Hossmann, Konstantin-A.** (Köln)  
Experimental stroke research: the bumpy road to clinical translation (25')
- 10:35 – 11:05    **Brainin, Michael** (Krems)  
Primary stroke prevention (30')
- 11:05 – 11:30    **Ringelstein, Bernd** (Münster)  
Quality control in stroke unit care (25')
- 11:30 – 11:40    Discussion (10')
- 11:40 – 12:00    Coffee break (30')

- 12:00 – 12:45**    **Sponsored Symposium: Merck Symposium**  
Chair: Illés, Zsolt  
**Sellebjerg, Finn** (Copenhagen)  
Selective immune reconstitution therapy: a new era in the clinical management of MS (45')
- 12.45 – 13.30    Lunch (60')
- 13:30 – 15:05**    **Joint stroke meeting of 50th International Danube Neurology Symposium and Hungarian Neurological Society II.**  
Chairs: Diener, Hans-Christoph; Bereczki, Dániel
- 13:30 – 14:00    **Bornstein, Natan M.** (Jerusalem)  
Asymptomatic carotid stenosis-touch or don't touch? (30')
- 14:00 – 14:35    **Diener, Hans - Christoph** (Essen)  
Secondary stroke prevention. State of art 2018. (35')
- 14:35 – 15:05    **Hacke, Werner** (Heidelberg)  
Acute stroke care. (35')
- 15:05 – 15:25    Coffee break (25')
- 15:25 – 15:55**    **Sponsored Symposium: Boehringer Ingelheim** (in Hungarian language) (30')
- 15:55 – 17:15**    **Hungarian Stroke Society: „Stroke: Past, Present, Future ...”**  
Joint Conference of 50th International Danube Neurology Symposium and Hungarian Neurological Society  
Chairs: Csanádi, Zoltán; Fekete, István
- 15:55 – 16:15    **Baracchini, Claudio** (Padova)  
New dimension of neurosonology. (20')
- 16:15 – 16:30    **Csiba, László** (Debrecen)  
Remembrance of things lost. (20')
- 16:30 – 16:45    **Bereczki, Dániel** (Budapest)  
Translational stroke research: from the „kergüb” model of focal cerebral ischemia to multicenter trials in stroke (20')
- 16:45 – 17:00    **Szapáry, László** (Pécs)  
Stroke Management in Hungary in 2017 (15')
- 17:00 – 17:15    **Fekete, István** (Debrecen)  
Is the guideline always helpful? (15')
- 17:20 – 18:20**    **Sponsored Symposium: Bayer** (in Hungarian language) (60')
- 18:20 – 19:20**    **Sponsored Symposium: Pfizer** (in Hungarian language) (60')
- 20.00 – 22:30    Reception in the Museum of Modern Arts

## CURRICULUM VITAE

### Michael Brainin, MD PhD Dr(hons) FESO FAHA FEAN

*Professor of Neurology at the Danube University Krems, Austria and Chair of the Department of Clinical Neurosciences and Preventive Medicine since 2000. From 1994-2016 he was head of the Department of Neurology at the University Clinic Tulln, Austria.*



He was co-founder of the national stroke unit network and founding president of the Austrian Society of Stroke Research in 2003. Together with Professor Heiss he co-chairs the ESO European Master's Program in Stroke Medicine since 2007. Currently this course is attended by 35 doctors from 23 countries around the world. He was chairman of the Scientific Committee of the EFNS until 2014. He was Chairman of the WSO Education Committee 2008-2017 and currently chairs the World Stroke Academy, the webbased learning platform of the World Stroke Organisation.

He was President of the European Stroke Organisation (2012-2014).

He is President elect of the World Stroke Organisation (2018-2020).

He is co-president of the ESO-WSO 2020 Congress.

He is an individual Board Member of the European Academy of Neurology. His scientific interest is in stroke treatment, recovery, and cognition. He received numerous awards, honorary doctorates and honorary memberships from scientific societies. He has published more than 200 peer-reviewed papers and has given more than 1.000 invited lectures. His scopus h-index is 46 and scopus citations are 12692.

He is senior editorial consultant for 'Stroke' and Associate Editor of the European Journal of Neurology.

He is member of editorial boards of Neuroepidemiology, International Journal of Stroke, and The Journal of Neurological Sciences. He is ad-hoc reviewer for the Lancet, Lancet Neurology, and Neurology. (05/18)



## CURRICULUM VITAE

### Prof. Dr. Baracchini

---

*is a neurologist and neurosonologist, and serves as Director of the Stroke Center and Neurovascular Ultrasound Laboratory at the University of Padua School of Medicine.*



He started his training at the University of Toronto (Canada) where he also completed a specialist program in Neuroscience. He received his medical degree and specialized in neurology at the University of Padua.

He continued his training in Neurosonology at the University of Zurich and at the University of Giessen. He was the recipient of the Young Investigators Award at the first Meeting of the European Society of Neurosonology and Cerebral Hemodynamics (ESNCH) held in Munich in 1996. He has authored and co-authored more than 200 publications (original papers, editorials, invited publications and book chapters), mainly in the fields of vascular neurology and neurosonology. He is a reviewer for many international journals among which Stroke, Neurology, The Lancet, Journal of Neuroimaging. He has organized several national and international congresses, teaching courses and tutorials and received more than 200 invitations as a speaker in National and International Conferences. He has been the Secretary General of the ESNCH for 10 years, until May 2017 when he was elected President of the ESNCH. He is also a Member of the International Certification Commission for Neurosonology, a Member of the Executive Committee of the Italian Stroke Organization and Former President of the Italian Society of Neurosonology and Cerebral Hemodynamics.

## CURRICULUM VITAE

### Natan M Bornstein, MD

---

Affiliation: Professor of Neurology at the Tel-Aviv University, Sackler Faculty of Medicine.

Director of the Brain Division at the Shaare-Zedek Medical Center (since 2016)

Head of Stroke Unit at the Tel-Aviv Medical Center (1989-2016)

Chairman of the ESNCH (2013-2017)

Chairman of the Israeli Neurological Association (since 2008-2017)

Vice President of the World Stroke Organization (WSO) (since 2008).

Chairman of Neurology Department, Tel-Aviv Medical Center (2002-2007)

Consulting Editor of Stroke

Editorial Board of CVD, EjoN, Acta Neurologica Scandinavica, International Journal of Stroke, Neurosonology, Frontiers in Stroke, Journal of Annals of Medical Science.

Fellowship program in vascular neurology (stroke) in Toronto, Canada with Prof. John Norris (1984-87)

Main research interests are: Epidemiology of stroke, Stroke prevention, Vascular dementia, Inflammation and stroke, Neurosonology.



## CURRICULUM VITAE

### Hans-Christoph Diener, MD, PhD

*is Professor of Clinical Neurosciences at the Medical Faculty of the University Duisburg-Essen. He was Chairman of the Department of Neurology at the University of Essen from 1989 to April 2016. He was President of the German Neurological Society (2003-2004), the European Headache Federation (2006-2008) and the International Headache Society (2009-2011).*



Dr. Diener received his medical degree at the Albrecht-Ludwigs-Universität in Freiburg, and continued his training there in the Departments of Neurology, Psychiatry, Internal Medicine and Surgery. Prior to joining the University of Essen, he was an Associate Professor of Neurology at the Department of Neurology at the University of Tübingen. He worked at the Neurological Sciences Institute in Portland, Oregon in 1984 and 1985 and at the Department of Neurology, University of New South Wales in Sydney in 1987 and 1988.

Dr. Diener's special research interests focus on stroke, headache and cerebellar physiology. He has set up the first acute stroke unit in Germany in 1995. He was and is the principal investigator of major trials in the acute therapy and prevention of stroke (ESPS2, MATCH, PROFESS, SWIFT-PRIME, RESPECT-ESUS) and participated in the recent trials on NOACs in stroke prevention in atrial fibrillation. Dr. Diener is responsible for several multi-centre stroke registries.

Prof. Diener has authored or co-authored 916 articles in peer reviewed journals (182 as first author, 19 in the NEJM), 333 invited reviews, and 355 book chapters, and served as the editor or author of 82 books. His h index is 102. He is the editor of Aktuelle Neurologie and Arzneimitteltherapie, Deputy Editor of Cephalalgia, Stroke Section Editor of Current Neurology and Neuroscience Reports and serves on the editorial boards of Lancet Neurology, Cerebrovascular Diseases, and Future Neurology.

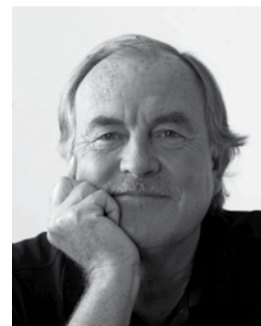


## CURRICULUM VITAE

### Werner Hacke, M.D., Ph.D. D.Sc. (hon. mult.) FAHA FESC

*(Prof. Dr. med. Dr. h.c. (mult) Dipl.-Psych. Werner Hacke)*

*Werner Hacke was Professor and Chairman of the Department of Neurology at the University of Heidelberg in Germany for 27 years from October 1987 until September 2014 and is now Senior Professor of Neurology.*



His main scientific and clinical interest is in stroke and critical care neurology. He has pioneered the field of thrombolysis for acute stroke and initiated several new management options for large infarctions including hypothermia and decompressive surgery. He is also a specialist in stroke prevention.

He was the Founding President of the European Stroke Organization (ESO), was Vice President of the World Federation of Neurology (WFN) and is currently the President of the World Stroke Organization (WSO).

Prof. Hacke is honorary member of several national societies of Neurology including the American Neurological Association (ANA), the French Neurological Society (SFN) and the Russian Neurological Society.

He holds honorary doctorates from the Georgia State University and from the University of Debrecen, Hungary

He has chaired the steering committees of many international acute stroke and stroke prevention trials including ECASS 1-4, DESTINY 1-2, Space 1-2 and others.

Prof. Hacke has published more than 500 original articles listed in the Science Citation Index. His h-index is 103 (SCI) and 124 (google Scholar) With more than 50.000 citations he is still the vascular Neurologist with the highest number of publications and citations worldwide.

## CURRICULUM VITAE

### Konstantin-Alexander Hossmann

*Max Planck Institute for Neurological Research  
Cologne, Germany  
Born March 31, 1937 in Breslau*



#### Education:

- 1956-1962 Study of Physics and Medicine in Göttingen, Paris, Hamburg, Munich and Berlin
- 1963 M.D. - University of Berlin
- 1968 Ph.D. - University of Paris
- 1972 Habilitation - University of Cologne
- 1976 Professor of Experimental Neurology - University of Cologne

#### Professional career:

- 1963-1965 Research Assistant at the Max-Planck-Institute of Brain Research, Cologne
- 1965-1966 Fellow at the Faculty of Science, University of Paris
- 1968-1969 Visiting Scientist, National Institute of Neurological Diseases, Bethesda, MD
- 1969-1978 Research Associate at the Max-Planck-Institute of Brain Research, Cologne
- 1978-1982 Head of Cerebrovascular Research Unit, Max-Planck-Institute for Brain Research, Cologne
- 1982-2003 Director of Max-Planck-Institute for Neurological Research, Department of Experimental Neurology, Cologne

#### Academic offices:

- 1980-1981 President, German Society of Clinical Neurophysiology
- 1988-1991 Editor-in-Chief, Journal of Cerebral Blood Flow and Metabolism
- 1993-1995 President, International Society of Cerebral Blood Flow and Metabolism
- 1993-1996 Vice-Chairman, Biomedical Section of Max Planck Society
- 1994-1995 Co-Chairman, International Symposium of Cerebral Blood Flow and Metabolism (Brain 95)
- 1996-1999 Chairman, Biomedical Section of Max Planck Society
- 2005-2012 Scientific Secretary, Gertrud Reemtsma Foundation for the Promotion of Basic Neurological Research

## **Honors and Awards:**

- 1975 Hugo-Spatz-Prize of the Association of German Neurologists
- 1979 Hans-Berger-Prize of the German EEG Society
- 1980 Honorary Fellow, American Heart Association, Stroke Council
- 1984 Fogarty Scholar, National Institutes of Health, Bethesda
- 1994 Hellmut-Weese-Medal of the German Society of Anesthesiology
- 1996 K.J. Zülch-Prize of the Max-Planck-Society
- 2006 Vladimir Negovsky-Medal of the European Academy of Natural Sciences
- 2007 Lifetime Achievement Award of the International Society for Cerebral Blood Flow and Metabolism

## **Academies:**

- Österreichische Akademie der Wissenschaften
- Nordrhein-Westfälische Akademie der Wissenschaften

## CURRICULUM VITAE

### Professor Amos D. Korczyn

*Professor Korczyn graduated from the Hebrew University–Hadassah Medical School in Jerusalem in 1966 (MD), where he also received an MSc degree in pharmacology (cum laude) in 1966.*

*He trained in neurology at Beilinson Hospital and at the National Hospital for Nervous Diseases, Queen Square, London. He was the Chairman of the Department of Neurology at the Tel-Aviv Medical Center from 1981 until 2002, and the incumbent of the Sieratzki Chair of Neurology at Tel-Aviv University, 1995-2010. Professor Korczyn has a particular interest in neurodegenerative diseases.*



He has authored or co-authored over 600 articles in peer-reviewed journals, as well as many chapters in books. He edited several books and Special Issues in Journals, and is Regional Editor of the Journal of Alzheimer's Disease. He is or has been an Editorial Board member of 20 international journals, and organized several neurological conferences, mainly in the field of dementia, Parkinson's disease and other degenerative brain disorders, as well as CONy – the International Congress on Controversies in Neurology, and has organized the Mental Dysfunction in Parkinson's disease congresses since 1993. Professor Korczyn served on advisory boards in several drug discovery programs.

Professor Korczyn is the Chairman of the Scientific Medical Board of the Israeli Alzheimer's disease association (EMDA), member of the SAB of Alzheimer Disease International (ADI), and has been the chairman of the WFN Research Committee for Clinical Neuropharmacology.

Professor Korczyn is an honorary member of the neurological societies of Israel, Serbia, Poland, Russia, and Romania.

Professor Korczyn's H-index is 73.



## CURRICULUM VITAE

### Vladimir S. Kostić

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*full professor of neurology at the School of Medicine University of Belgrade (SMUB), visiting professor at the Universities of Novi Sad and Skopje.*

In addition to SMUB over several years he worked and studied in London (1987) and at the Institute of Neurology Columbia University in New York (1989/1990 and 1995/1996). He was the head of the Institute of Neurology of the CCS for 15 years, was a dean of SMUB, chaired the Committee for Biomedical Sciences of the Ministry of Science and Technology of the Republic of Serbia, was a member of the National Science Council, etc. Currently is the Honorary President of the Serbian Neurological Society. Scientifically, he is focused neuro-degenerative diseases of the central nervous system. He is an author and co-author in >280 papers cited at the JCR list.



## CURRICULUM VITAE

### Dafin F. Muresanu, MD, PhD, MBA, FANA

*Professor of Neurology, Senior Neurologist, Chairman of the Neurosciences Department, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca, Past President of the Romanian Society of Neurology, President of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), member of the Academy of Medical Sciences, Romania, secretary of its Cluj Branch.*



He is member of 16 scientific international societies (being member of the American Neurological Association (ANA) - Fellow of ANA (FANA) since 2012) and 10 national ones, being part of the executive board of most of these societies. Professor Dafin F. Muresanu is a specialist in Leadership and Management of Research and Health Care Systems (specialization in Management and Leadership, Arthur Anderson Institute, Illinois, USA, 1998 and several international courses and training stages in Neurology, research, management and leadership). Professor Dafin F. Muresanu is coordinator in international educational programs of European Master (i.e. European Master in Stroke Medicine, University of Krems), organizer and co-organizer of many educational projects: European and international schools and courses (International School of Neurology, European Stroke Organisation summer School, Danubian Neurological Society Teaching Courses, Seminars - Department of Neurosciences, European Teaching Courses on Neurorehabilitation) and scientific events: congresses, conferences, symposia (International Congresses of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), International Association of Neurorestoratology (IANR) & Global College for Neuroprotection and Neuroregeneration (GCNN) Conferences, Vascular Dementia Congresses (VaD), World Congresses on Controversies in Neurology (CONy), Danube Society Neurology Congresses, World Academy for Multidisciplinary Neurotraumatology (AMN) Congresses, Congresses of European Society for Clinical Neuropharmacology, European Congresses of Neurorehabilitation). His activity includes involvement in many national and international clinical studies and research projects, over 400 scientific participations as "invited speaker" in national and international scientific events, a significant portfolio of scientific articles (166 papers indexed on Web of Science-ISI, H-index: 18) as well as contributions in monographs and books published by prestigious international publishing houses. Prof. Dr. Dafin F. Muresanu has been honoured with the: Ana Aslan Award 2018 - „Performance in the study of active aging and neuroscience”, for the contribution to the development of Romanian medicine, National Order "Faithful Service" awarded by the President of Romania in 2017; "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca, Faculty of Medicine, the "Iuliu Hatieganu Great Award 2016" for the best educational project in the last five years; the Academy of Romanian Scientists, "Carol Davila Award for Medical Sciences / 2011", for the contribution to the Neurosurgery book "Tratat de Neurochirurgie" (vol.2), Editura Medicala, Bucuresti, 2011; the Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca "Octavian Fodor Award" for the best scientific activity of the year 2010 and the 2009 Romanian Academy "Gheorghe Marinescu Award" for advanced contributions in Neuroprotection and Neuroplasticity.

## CURRICULUM VITAE

### Professor Zvezdan Pirtošek, MD, PhD

*is a consultant neurologist, Head of Chair of Neurology, Faculty of Medicine University of Ljubljana (UL), Professor of Neurology & Neuroscience and co-founder of the interdisciplinary international postgraduate study of cognitive sciences MEI:CogSci at University of Ljubljana.*



He serves as the president of Slovenian Brain Council and as a representative of Slovenia in Managing Board of JPND (EU joint programme on research and treatment of neurodegenerative disorders).

He serves as a reviewer for several scientific journals, among them: Annals of Neurology, Movement Disorders, Wiener Klinische Wochenschrift, Journal Neural Transm, Eur Journal Neurology, Psychological Reports: Perceptual and Motor Skills, and others.

His main research interests include neurodegenerative diseases, particularly Parkinson's disease and Alzheimer's disease, and cognitive neuroscience.

## CURRICULUM VITAE

### Prof. Dr. med. Heinz Reichmann

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*Department of Neurology, Technische Universität Dresden  
Fetscherstrasse 74, 01307 Dresden  
Germany  
Heinz.Reichmann@uniklinikum-dresden.de*



Heinz Reichmann MD PhD graduated from the University of Freiburg, Germany in 1979. He spent the following four years as a research fellow at the Institute for Biochemistry, University of Konstanz, Germany and the Institute of Neurology, Columbia University, USA. This was paid for by honorary grants for excellency to Dr. Reichmann. He returned to Germany where he held a number of positions at the University of Würzburg, becoming Professor of Neurology in 1990. In 1996, he was appointed Chairmann of the Department of Neurology at the University of Dresden, where he is now also Dean of the Medical Faculty.

Heinz Reichmann is a member of numerous scientific societies including the German Neurological Society, the European Neurological Society, the American Academy of Neurology, the Royal Society of Medicine and the Movement Disorder Society. In addition, Dr Reichmann serves on the editorial boards for a number of prestigious neurology journals. His major research interests are energy metabolism, neuroprotection, premotor symptoms in Parkinson's disease, etiopathogenesis and treatment in PD. Prof. Reichmann is a Fellow of the Royal College of Physicians and of the American Academy of Neurology. He serves on many Neurological Boards and was President of the German Parkinson Society and the German Muscle Society. In 2009 Professor Reichmann started his 2-year term as President of the German Neurological Society. He is Past-President of the European Neurological Society and has helped to initiate the new European Academy of Neurology, starting from 2014.



## CURRICULUM VITAE

### Prof. Konrad Rejdak

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*MD, PhD graduated from the Medical University of Lublin (Poland). His research and clinical interests include multiple sclerosis and neurodegenerative diseases. Other interests include biomarker discovery, for studying pathogenesis of MS and other inflammatory diseases.*



He was trained in clinical biochemistry at the Department of Neuroinflammation, Institute of Neurology, UCL in London (UK) during his Marie Curie Fellowship awarded from EU.

He performed several projects relating to the markers of inflammatory and neurodegenerative processes in the course of neurological diseases, publishing the results in international peer-reviewed journals. Currently, prof. Konrad Rejdak is a consultant neurologists and head of the Department of Neurology, Medical University of Lublin and professor at the Department of Experimental Pharmacology, Medical Research Center, Polish Academy of Sciences in Warsaw (Poland).

## CURRICULUM VITAE

### Maja Relja MD, PhD

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*Head Referral Center for Movement Disorders and Neurodegeneration  
Department of Neurology, University Hospital Center Zagreb  
University of Zagreb, School of Medicine  
10 000 Zagreb, Croatia*



*Professor of Neurology at the Medical School, University of Zagreb (Croatia)  
and Head of the Referral Center for Movement Disorders and  
Neurodegeneration Ministry of Health, Republic of Croatia, Department of Neurology, University  
Hospital Center, Medical School, University of Zagreb.*

Born in Split, Croatia, she graduated in medicine from Medical Faculty of Zagreb where she also received an MSc degree in Biomedical Sciences and Doctorship of Sciences from the University of Zagreb. She was a Research Fellow at NIMH (St Elizabeth's Hospital, Washington D.C., USA) 1980-81. She obtained the Board Specialization in Neurology in 1981. She has been Professor of Neurology at the Medical School, University of Zagreb since 1990. Other posts include: 1995 Visiting Professor, Department of Neurology, Medical School, Turku University, Finland.

Professor Relja's primary research interests today are in movement disorders (Parkinson's disease, dystonia) and in the development of novel clinical applications of botulinum toxin. She has been a pioneer in the introduction of botulinum toxin for the treatment of painful conditions, primarily headache. Prof Relja has considerable teaching experience and lectures postgraduate courses in Neurology and Clinical Neuropharmacology. She has organized several international meetings for Movement Disorders. Professor Relja is President of Croatian Association for Movement Disorders vice-president of Dystonia

## CURRICULUM VITAE

Prof. Dr. Dr. hc. Peter Riederer

**Name:** Peter Franz Riederer  
**Born:** 21.03.1942  
**Family Status:** Married



### Academic and Professional Career

since 2010 Senior Professor at the University of Würzburg, Medical School, Germany  
1986 – 2010 University-Professor (University Würzburg); Head, Clinical Neurochemistry, Department of Psychiatry, Psychosomatics and Psychotherapy at the University of Würzburg, Medical School, Germany  
1983 titl. a. o. University-Professor (TU Vienna), Austria  
1979 Associate Professor (University-Dozent) TU Vienna, Austria  
1971 – 1986 Head, Clinical Neurochemistry, Ludwig Boltzmann Institute (LBI) for Neurochemistry (1971 - 1975) and LBI Clinical Neurobiology (1976 - 1986), Lainz-Hospital, Vienna, Austria  
1970 Doctor techn. Degree  
1969 - 1971 Assistant Professor  
1968 - 1970 Scientific studies at the Nuclear Research Center, Seibersdorf, Austria  
1968 Dipl.-Ing.  
1960 – 1968 Studies on Technical Chemistry at the Technical University (TU) Vienna, Austria

### Honours and Awarded Memberships (Selection)

2014 Honorary Member of the AGNP Arbeitsgruppe Therapeutisches Drug Monitoring  
2013 Honorary Member of the Austrian Parkinson's Disease Society  
2012 since July, International Association of Neurorestoration (IANR) Edit. Board Member  
2011 WFN - Association of Parkinson Disease Related Disorder- Lifetime Award  
2008 Honorary Dr. degree International University Catalunya, Barcelona, Spain  
2007 Honorary Member of the Hungarian Academy of Sciences  
2007 Member of the Deutsche Akademie der Naturforscher Leopoldina  
2007 Honorary President of the German Society for Parkinson's Disease  
2006 Honorary Membership of the German Society of Biological Psychiatry  
2005 Honorary Membership of the Austrian Alzheimer Society  
2004 Most cited chemist in the field of medicine  
2000 Honorary Membership of the Hungarian Society of Pharmacology and Clinical Pharmacology  
1991 AGNP-Award, Preis für Psychopharmakologische Forschung

- 1986 Senator Dr. Franz Burda-Award  
1984 Parkinson-Frosst-Award of the German Society of Neurology

## Functions in Scientific Societies and Committees (Selection)

- Since 2016 President of the World Association for Stress Related and Anxiety Disorders e.V. (WASAD)
- 2013 – 2015 Visiting Researcher, Institute of Cognitive Brain Sciences, NCGG, Aichi, Japan since 2010  
Board Member of the Edda-Neele Association
- since 2007 Chairman of the research grant evaluation board of the Hirnliga e.V.
- since 2006 Member of the American Society Exp. Neurotherapeutics (ASENT)
- since 2005 President of the Association for the Performance of Neuroscientific Symposia since 2005  
President of the German Society of Clinical and Experimental Neurotherapeutics (GESENT)
- 2005 President International Congress of Parkinson's Disease and Related Disorders (APRD), Berlin
- since 2004 WFSBP Chairman: Task Force on Biol Markers
- 2001 – 2004 President of the Deutsche Parkinson-Gesellschaft (DPG)
- 1999 – 2012 Head of the Brain Bank Center (BBC) Würzburg of the national Brain-Net, Germany
- 1997 – 2012 Board member of the Österreichische Parkinson Gesellschaft (ÖPG) (Founding member; Vice President until 1997)
- 1997 - 2005 Vice President of the Österreichische Alzheimer-Gesellschaft
- 1995 – 1996 President of the European Society for Clinical Neuropharmacology
- 1995 – 2007 Member of the Board of Hirnliga e.V.; Vice President (1998 - 2007)
- since 1995 International Basal Ganglia Society, IBAGS
- 1994 – 1998 President of the German Society of Biological Psychiatry (DGBP)
- since 1994 Deputy Member of the Danube Symposia for Neurological Sciences
- 1988 – 2012 Collegium Internationale Neuro-Psychopharmacologicum, C.I.N.P and Member of the Nominating Committee (2008 - 2010)
- since 1975 Member of the British Pharmacological Society
- since 1975 Board Member of the Research Committee on Parkinsonism and Related Disorders of the World Federation of Neurology
- since 1975 Arbeitsgemeinschaft für Neuropsychopharmakologie und Pharmakopsychiatrie (AGNP)

## Project coordination, Membership in collaborative research projects (Selection)

- current International joint project in the field of clinical and experimental studies on Parkinson's disease and dementia of Alzheimer type with:  
M.B.H. Youdim (Haifa), T. Nagatsu (Aichi), M. Naoi (Gifu), W. Maruyama (Aichi), Z. Lackovic and M. Salkovic (Zagreb), E. Grünblatt (Zürich)
- 2004 – 2011 DAAD-Stability Pact Project : establishing the role of diabetes type II as risk factor for Alzheimer's disease (with S. Hoyer, M. Salkovic, E. Sofic, E. Grünblatt)



- 2002 – 2012 Brain Net Europe II: standardization of human post-mortem brain studies at an European level (European FP 7 project)
- 2002 – 2008 BMBF Kompetenznetz HIV/AIDS
- 2002 – 2008 DFG-project „Benzodiazepines“
- 2000 – 2012 VITA - Project (Vienna Transdanube Aging Study): a prospective longitudinal aging study to elaborate risk factors for AD
- since 1999 Head: The National Parkinson Foundation Center of Excellence Research Laboratories, Miami, Florida, U.S.A. at the Clinic and Policlinic of Psychiatry, Psychosomatics and Psychotherapy of the University of Würzburg
- 1999 – 2012 Head of the Brain Bank Center (BBC) Würzburg of the National Brain-Net
- 1997 – 2001 Chairman BIOMED II EU-framework on schizophrenia
- 1995 – 2001 BMBF-Projekt „Neurobiology of alcoholism“
- 1991 – 1998 BMBF Schwerpunkt „Parkinson“
- More than 1.100 publications in the field of Neuroscience

## CURRICULUM VITAE

### Prof. Dr. med. Dr. h. c. E. Bernd Ringelstein

Münster, Germany

*Prof. Dr. med. Dr. h. c. E. Bernd Ringelstein was born on Jan 9, 1948. He studied medicine at the University of Mainz, Germany. He passed residencies in Neuropathology, Psychiatry, Neurology and Neuroradiology at the University Hospitals in Mainz and Aachen. He was boarded Neurologist and Psychiatrist in 1983 in Düsseldorf. In the eighties, he became Vice-Chairman and Associate Professor of Neurology at the Department of Neurology, University Hospital, in Aachen.*



In 1987-1989 he passed fellowships and sabbaticals in Stroke Neurology and Hematology at Scripps Clinic and Research Foundation, La Jolla, in Neurosonology at Bowman Gray School of Medicine, Winston-Salem, NC and in Epileptology at the University Hospital of Bonn.

By 1992, he was appointed Chairman and Head of the Department of Neurology at the University Hospital in Münster, where he also became Head of the Department of Neurovascular Research at the Leibniz-Institute for Research on Arteriosclerosis by 2002.

He has been President of the European Society of Neurosonology and Cerebral Hemodynamics 2001 – 2005, and is still member of the Executive Committee of this society, President of the German Stroke Society 2004 – 2005 and Chairman of the Scientific Advisory Board of the German Stroke Foundation (SDSH), Gütersloh 2002-2013. His scientific and clinical focus is on stroke and cerebrovascular research. He has been Principal Investigator and member of Steering Committees of national and multinational trials. He is, or has been Editorial Board Member of "Stroke", "Cerebrovascular Diseases", "Journal of Neuroimaging", "Stroke Review" and "Neuroradiology".

Prof. Ringelstein has been awarded the Hugo Spatz Price of the German Neurological Society (1992), was nominated twice Best Lecturer of the Medical Faculty in Münster ("Teacher of the Year"), has been nominated "Leading Scientist" in Germany 2003 by Science Impact Index, has been nominated Honorary Member of the Austrian Stroke Society (2003) and "Doctor honoris causa" (honorary doctorate) by the University of Debrecen, Hungary, for transnational research on cerebro-vascular disorders (2006). He is Fellow of the American Heart Association (by 2001) and of the European Stroke Council (by 2005). During the last years, he was very active in organizing and qualifying the German Stroke Unit system all over the country (honoured by the German Neurological Society with the Erb Becher in 2008). He is a well know specialist in stroke prevention as well.

Since April 2013 he is Emeritus Professor of the Medical Faculty of the University in Münster. Since then he is active in private practice as a neurologist and psychiatrist and as a Senior Consultant in Neurology at the German Neuroscience Center in Dubai. He is a member of the Stroke Unit Committee of the German Stroke Society which he chaired for 16 years, and he is further engaged in stroke unit certification both nationally and internationally.

## CURRICULUM VITAE

### Prof. Cristina Tiu

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*has graduated the Faculty of Medicine from University of Medicine and Pharmacy „Carol Davila” from Bucharest, Romania, in 1987.*



She obtained her PhD degree in 2000 with a thesis about Chronic ischemic changes in cerebral microangiopathies. She became European Master of Stroke in 2012 after graduating the Master Programme in Stroke from Danube University in Krems, Austria. Her expertise in the field of Neurosonology is gathered in a book, published in 2006, describing the techniques of examination and the main pathological changes of the cervical and cerebral arteries. Since 2003 she is organizing yearly a teaching course of Neurosonology of three weeks duration gathering along the years more than 200 students who graduated the course.

Currently she is the head of stroke unit from the University Hospital Bucharest. She is currently the national coordinator of the ESO –EAST project in Romania, and the national coordinator of the Priority Action for the Acute Stroke in Romania, established in 2015. She is the delegate of the Romanian Society of Neurology for the Stroke panel in the European academy of Neurology, and she is responsible for the good functioning of the Romanian registry of the Interventional treatment of stroke, which was established in 2014, and has more than 1300 patients with IVT (and some also with EVT) registered in this period of time.

The other field of interest is Multiple sclerosis. From 2000 she was involved in the implementation of the immunomodulatory treatment of MS patients, under the coordination of Prof. Ovidiu Bajenaru. In present she is also coordinating the MS center, was involved in creating the MS Registry and has participated in the main clinical trials for MS therapies who took place in Romania in the last 10 years.

## CURRICULUM VITAE

### Tjalf Ziemssen

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*Professor Tjalf Ziemssen is Director of the Center of Clinical Neuroscience with its Multiple Sclerosis Centre (MSC), neuroimmunological lab (NIL) and autonomic lab (ANF) at the Carl Gustav Carus University Hospital, in Dresden, Germany.*



He obtained his medical degree from the University of Bochum, Germany, in 1998 and completed his doctoral thesis in 1999 at the Institute of Clinical Chemistry, University of Bochum, Germany. He then underwent training as a Fellow of Neurology at the Carl Gustav Carus University Hospital in Dresden and as a Research Fellow at the Max-Planck Institute of Neurobiology in Martinsried, Germany. He became Director of the MSC Dresden in 2007 and, in 2011 he became Professor of Clinical Neurosciences and Head of the Centre for Clinical Neuroscience at the Carl Gustav Carus University Hospital. He is also Head of the Autonomic and Neuroendocrine Function laboratories (ANF) and the Neuroimmunological Laboratories (NIL).

Professor Ziemssen's research interests include collecting real word data in neurology and the development of new eHealth tools. In addition, he is interested in the autonomic nervous system in health and disease. He is involved in clinical studies and has published over 230 papers and has received several awards, including awards from the European Charcot foundation and the German Ophthalmological Society.

He is an active member of several neurological societies, including the German Neurological Society, the European Academy of Neurology, the American Academy of Neurology and the European Federation of Autonomic Societies.



## HISTORY OF PD EXHIBITION IN DANUBE 2018 BY CHRISTIAN RIEDERER

The medical historical exhibition “Selegiline in Parkinson’s disease – A tribute to the Hungarian pharmacologists József Knoll and Kálmán Magyar” highlights the main developments that led to the development of selegiline as a drug to treat Parkinson’s disease and honours the respective contributions of Kalman Magyar as well as his life as a pharmacologist.

The exhibition consists of 10 posters and is open to visitors in the Kölcsey Congress Lobby.

### Exhibition opening days:

7 June – 10 June 2018.



Prof. József Knoll



Prof. Kálmán Magyar

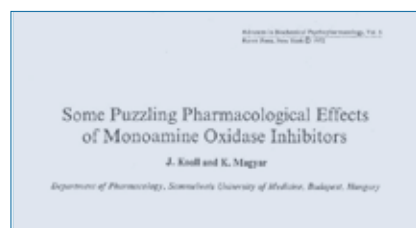
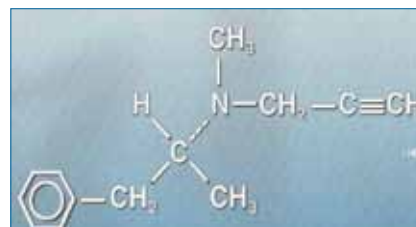
# A medical historical exhibition

## Selegiline in Parkinson's disease

A tribute to the Hungarian pharmacologists

József Knoll (1925-2018) and

Kálmán Magyar (1933-2017)



The historical material presented here is part of the Parkinson History Project initiated by Christian Riederer (Würzburg, Germany) in 2003 and includes texts from Peter Riederer (Würzburg, Germany), Paul Foley (Sydney, Australia) and contributions from Kálmán Magyar (Budapest, Hungary). We thank László Vécsei (Szeged, Hungary) for the opportunity to present this exhibition at the occasion of this congress and hope you enjoy visiting it.

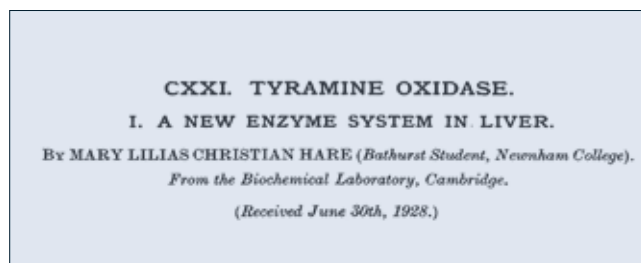


Concept and idea:  
Christian Riederer

# Some historical perspectives

In 1883, Minkowsky showed the *in vivo* conversion of benzylamine to benzoic acid. In 1928, Mary Hare reported the presence of a new enzyme system in liver that she called tyramine oxidase. Her discovery explained the observations by Schmiedeberg (1877) that administered benzylamine was converted to hippuric acid in dogs, thus involving an oxidative deamination process.

Ten years later Zeller (1938) coined the term “monoamine oxidase” to distinguish that enzyme from diamine oxidase and one year before that Blaschko (1937) had shown the enzyme to be responsible for the oxidation of adrenaline, tryptamine and a variety of other amines.



## 104. Über den enzymatischen Abbau von Histamin und Diaminen 2. Mitteilung von E. Albert Zeller. (3. VI. 38.)

*„Es wird gezeigt, dass die von Best entdeckte Histaminase ausser Histamin auch die Diamine Athylendiamin, Putrescin, Cadaverin und Agmatin oxydativ desaminiert. Es wird deshalb für sie der Name Diaminoxydase vorgeschlagen. Sie lässt sich mit Sicherheit von der (Mono-) Aminoxydase und der d- Aminosäure-oxydase abgrenzen.“*

*E. Albert Zeller, 1938*

# József Knoll

József Knoll was born in 1925 in Kassa, Hungary (now Kosice, Slovakia). He became Professor of Pharmacology at the Semmelweis University in 1963 and held this position until his retirement. He was a founding member of the Hungarian Pharmacological Society in 1962 and its president from 1967-1983.

Apart from his landmark contributions to deprenyl, his major achievements relate to the pharmacological analysis of tranquillizers, psychostimulants and psychotomimetics, the analysis in the 60s of the physiological basis of drive-motivated behavior, the development of a new analgesic-antiinflammatory family, the pyrido-(1,2a)-pyrimidines as well as of the azidomorphines, a new family of opioid analgesics, the discovery of satietins and angiohypotensin and his works on the enhancer regulation in the brain.

He received a number of prestigious awards, among them the Széchenyi Prize (renamed National Prize of Hungary), 2003, the Hungarian Award for Achievements in Drug Research, 2008 and the Hungarian Republic's Middlecross Order with the Star in 2010.

*"It is now open to medical science to devise an appropriate long-term treatment strategy at preventing or at least partially countering the problems caused by DA deficiency in the aging brain. Thus, our work with deprenyl may possibly be regarded as the first exploration step towards the objective of improving the quality of life in senescence."*

*József Knoll, 1983*



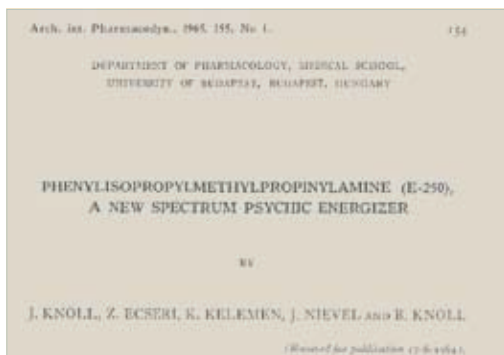
*The history of the Semmelweis University's in Budapest dates back to 1769, when Queen Maria Theresa added a medical faculty to the University of Nagyszombat. Afterwards, the university moved first to Buda and later to Pest and soon became one of the most renowned universities in Europe.*



# Compound E-250

The MAO-B inhibitor L-Deprenyl was synthesized in 1962 by Zoltan Ecseri of the Hungarian pharmaceutical company Chino and József Knoll (1925-2018) as compound E-250. It was found to be antidepressant in animal models of depression and was therefore first developed as an agent with antidepressive effects in humans and as a "psychic energizer". Animal experiments showed that E-250 is a potent psychic energizer, lowers blood pressure and did not show adverse reactions like the „cheese-effect". Pharmacological findings came primarily from József Knoll and his co-workers in Hungary.

The first paper showing that racemic E-250 is an efficient prompt acting antidepressant was published in 1967 (Varga and Tringer 1967) and the first clinical trial with (-)-E-250 (later named selegiline) in depressed patients showing its significant antidepressant effect was published in 1971 (Tringer et al. 1971).



Zoltan Ecseri (middle) and József Knoll (right)

*"We investigated the possibilities of synthesizing compounds which, while they retained their psychostimulant activity, would have a psychoenergizing effect but none of the characteristic vegetative effects of amphetamine that manifest themselves in an increased metabolic rate, enhanced motility, and in the elevation of blood pressure. These investigations resulted in the synthesis of our compound denoted E-250."*

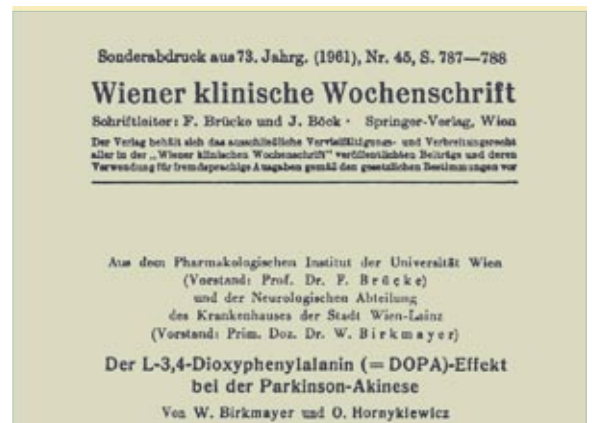
*József Knoll, 1983*

Knoll J, Ecseri Z, Kelemen K, Nieve J, Knoll B. Phenylisopropylmethyl-propinylamine HCL (E-250) egy új hatásspektrumú pszichoenergetikum. MTA V. Osztály Közleményei 1964; 15: 231-8 (in Hungarian)  
Knoll J, Ecseri Z, Kelemen K, Nieve J, Knoll B. (1965). Phenylisopropylmethylpropinylamine (E-250), a new spectrum psychic energizer. Arch Int Pharmacodyn Ther 155(1):154-64  
Knoll J. (1983). Deprenyl (selegiline): the history of its development and pharmacological action. Acta Neurol Scand Suppl. 95:57-80.  
Sandler M, Glover V, Ashford A, Stern GM. Absence of „cheese effect" during deprenyl therapy: some recent studies. Journal Neural Transmission 1978; 43:209-15  
Varga E, Tringer L. Clinical trial of a new type of promptly acting psychoenergetic agent (phenyl-isopropylmethyl-propinylamine HCL, E-250). Acta Medica Hungarica 1967; 23:289-95

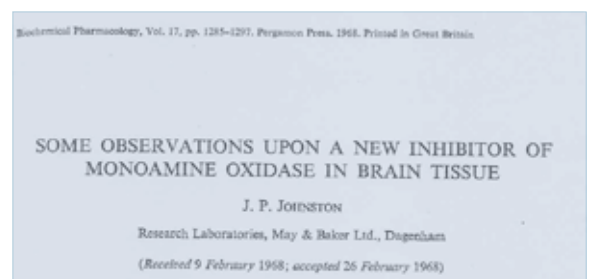
# MAO-B Inhibitors and Parkinson's disease

MAO inhibitors were examined in the early 1960s in parkinsonian patients when clinicians searched for adjuvants with a levodopa-sparing effect to potentiate and prolong its beneficial effects. The MAO inhibitors used in the 1960s inhibited both MAO-A and -B, so that they not only had the desired effect of elevating central nervous system catecholamine levels, but also potentiated the sympathomimetic action of indirectly acting amines in the periphery; hypertensive crises, particularly following the consumption of tyramine-containing foods, especially cheese, but also broad beans, certain red wines and yeast products, were thus a dangerous side-effect (the "cheese effect").

The investigation of specific MAO-B inhibitors in the late 1960s and the discovery that the enzyme occurs in two forms, MAO-A and MAO-B (Johnston, 1968), allowed to revive this concept. The R-enantiomer of deprenyl (phenyl-isopropyl-methylpropargylamine; selegiline) is a potent selective, irreversible inhibitor of the B-form of monoamine oxidase (MAO-B) enzyme and in 1971, József Knoll showed that selegiline selectively inhibits the B-isoform of monoamine oxidase (MAO-B) and proposed that it is unlikely to cause the infamous „cheese effect“, as proofed in 1978 by Elsworth and co-workers.



Pavillion 11 at Lainz-Hospital, Vienna, Austria, where groundbreaking clinical trials with parkinson patients took place. In 1961, the first L-Dopa trials was conducted and in the early 1970s, the trials with selegiline took place.

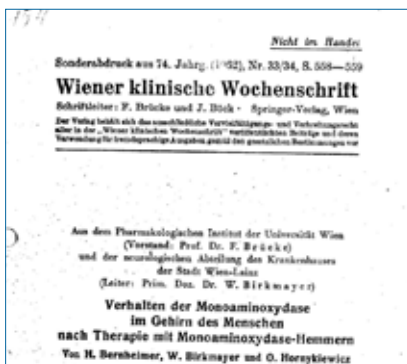


Elsworth JD, Glover V, Reynolds GP, Sandler M, Lees AJ, Phuapradit P, Shaw KM, Stern GM, Kumar P. (1978). Deprenyl administration in man: a selective monoamine oxidase B inhibitor without the 'cheese effect'. *Psychopharmacology (Berl)*. 57(1):33-8  
Johnston JP. (1968). Some observations upon a new inhibitor of monoamine oxidase in brain tissue. *Biochem Pharmacol*. 17(7):1285-97  
Reynolds GP, Elsworth JD, Blau K, Sandler M, Lees AJ, Stern GM. (1978). Deprenyl is metabolized to methamphetamine and amphetamine in man. *Br J Clin Pharmacol*. 6(6):542-4

# JB-516



Isamu Sano (1924-1975)



Monoamine oxidase inhibitors belong to the earliest drugs tried in Parkinson's disease and have been used with or without levodopa. In the early 1960s, various MAO-inhibitors were used in the treatment of Parkinson's disease by André Barbeau, Walther Birkmayer, H. Bernheimer and Oleh Hornykiewicz.

A very interesting contribution came from the Japanese physician Isamu Sano. He presented a concept regarding the role of dopamine in the basal ganglia in August 1959 and described dopamine concentration in a post mortem brain of a patient with parkinsonism in October 1960. In this study, he identified the reduction of dopamine levels in the substantia nigra plus red nucleus and striatum in PD. Equally important, Sano reported of PD patients treatment with DL-DOPA and the MAO-inhibitor JB 516 and their combined administration in this landmark paper as well. He observed "the disappearance of marked rigidity and tremor" at a dosage of 200 mg DL-DOPA but also saw this beneficial effect quickly fading.

*"We treated Parkinson's disease patients with 200 mg of dopa (dl-dopa) intravenously; we observed the disappearance of marked rigidity and tremor, 15-30 minutes after the injection of dopa, but this effect was transient and the patients returned to their pretreatment status within a few minutes. We concluded that treatment with dopa had no practical therapeutic value. On the other hand, some patients showed improvement particularly in tremor following treatment with JB 516 (a MAO inhibitor), however, other patients showed no improvement. We concluded that JB 516 was no better than trihexyphenidyl. But some patients asked to use dopa and JB 516 together; some of them claimed that this combination was very effective."*

Isamu Sano, 1960

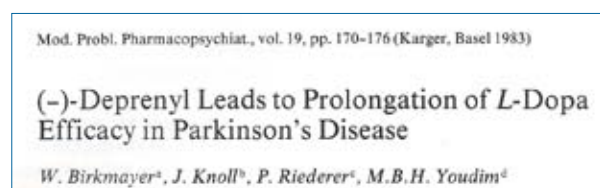
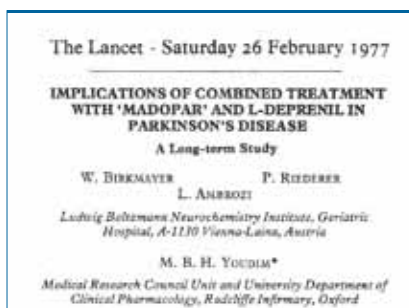
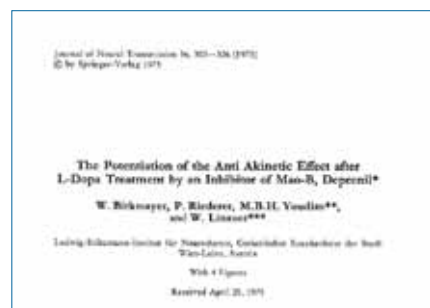
Sano I, Gamo T, Kakimoto Y, Taniguchi K, Takesada M, Nishinuma K. (1959). Distribution of catechol compounds in human brain. *Biochim Biophys Acta* 32:586-7

Sano I, Taniguchi K, Gamo T, Takesada M, Kakimoto Y. (1960). Die Katechinamine im Zentralnervensystem. *Klin Wochenschr* 15; 38, 57-62. ([The catecholamines in the central nervous system]. 1960 Jan 15. German)

# Selegiline for Parkinson's disease

In November 1973, at a research visit at Merton Sandler's laboratory at Queen Charlottes Maternity Hospital in London, Peter Riederer (Lainz Hospital, Vienna, Austria) confronted him and also Moussa B.H. Youdim (Oxford, UK) with the idea to treat On-Off phases of PD patients with an inhibitor of MAO which would not show adverse reactions like blood pressure crisis and/or liver toxicity. The reasons for this idea was based on own findings of diurnal fluctuations of MAO activity and the experiments of Bernheimer, Birkmayer and Hornykiewicz in Vienna.

In October 1974, Moussa Youdim provided 3 grams of selegiline for the first patients trials in Vienna and the beneficial effects of this combined L-DOPA/selegiline treatment were published in 1975 by Birkmayer and co-workers. From a biological and molecular pharmacological point of view, there is clear evidence of a neuroprotective action of selegiline. Investigations on selegiline have influenced both, research in the pathology of Parkinson's disease and development of therapeutic strategies and the concepts of "neuroprotection" and "disease modification" have their foundations in those efforts.



Scientific papers on the beneficial effects of selegiline in Parkinson's disease



Original phials from 1974/1975 containing L-Deprenyl from Chinoin, Budapest. The smaller one was one of three phials provided by M.B.H. Youdim and J. Knoll in October 1974 © Peter Riederer

Birkmayer W, Riederer P, Youdim MB, Linauer W. (1975). The potentiation of the anti akinetic effect after L-dopa treatment by an inhibitor of MAO-B, Deprenil. *J Neural Transm* 36(3-4):303-26  
 Birkmayer W, Riederer P, Ambrozi L, Youdim MB. (1977). Implications of combined treatment with 'Madopar' and L-deprenil in Parkinson's disease. A long-term study. *Lancet* 26;1(8009):439-43  
 Szelényi I (Ed). (1993). *Inhibitors of monoamine oxidase B. Pharmacology and Clinical Use in Neurodegenerative Disorders*. Basel/ Switzerland: Birkhäuser Verlag

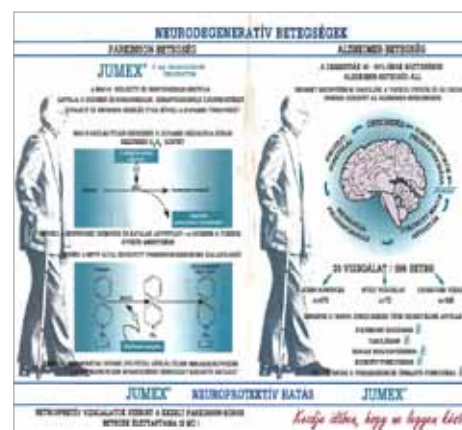


# Jumex and Movergan

Chinoin received a patent on the drug in 1962 and deprenyl was launched commercially as "Jumex" in Hungary in 1977, the same year in which Sandler's group reported that in human brain dopamine was a MAO-B substrate. Its licensed production by foreign pharmaceutical firms quickly followed. Its status as a major addition to the therapy of Parkinson's disease was confirmed in May 1983 at a symposium in Finland ("A new approach to the treatment of Parkinson's disease"), where groups from all over Europe reported their experiences with L-deprenyl.

By 1987 it was available in Germany as "Movergan" and in Britain as "Eldepryl". The United States long remained indifferent to the new agent. In 1987, Somerset Pharmaceuticals, which had acquired the US rights to develop selegiline, filed an application with the FDA and selegiline was approved for Parkinson's disease in 1989. Movergan received the Claudius Galenus Award in 1991.

Whatever the uncertainty regarding its mechanism of action, laboratory findings have provided an experimental support for the suspicion that selegiline provides a certain degree of neuroprotection in Parkinson's disease, thus slowing its progression.



*The photos presented here were a gift of Kálmán Magyar at the occasion of the IAPRD congress in Berlin, Germany, 2005*



# Kálmán Magyar

Kálmán Magyar (M.D., Ph.D., D.Sc.) was born in 1933 in Szentlőrinc, Hungary. He completed his studies at the Semmelweis University of Budapest, Faculty of Medicine. After graduation, he was offered a job by the same University and in 1979 he became the Head of the Department of Pharmacodynamics at the Faculty of Pharmacy. Pro-Rector of the Semmelweis University (1987-1990), Vice-President of the Hungarian Federation of Medical Societies (1978-1987), and Vice-President of the Medical Section of the Hungarian Academy of Sciences (1996-2016).



Kálmán Magyar



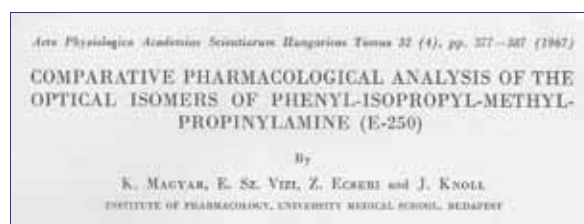
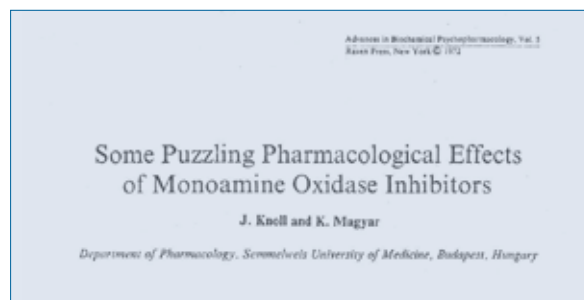
Kálmán Magyar's main field of interest was biochemical pharmacology, pharmacokinetics and pharmacodynamics. As an expert in the field of monoamine oxidase, more than 10 promising original Hungarian compounds were analysed in his laboratory in respect of their pharmacokinetic properties.

His scientific achievements were honoured with prestigious awards, among them the Széchenyi Prize (2004), the Issekutz Prize, the Senator Dr. Franz Burda Foundation Life Achievement Award (2013), the Academy award (1980), the Szent Györgyi Albert award (2003), the Governmenter life achievement award (2013) and the Life achievement awards for helping the Hungarian drug research (2009).



# Kálmán Magyar and selegiline

In 1961 and 1962, Kálmán Magyar received an international Riker fellowship and spent a year in England at the Medical Research Council Laboratories in Carshalton, Surrey, where he was studying the methods of biochemical pharmacology. After coming back from England he took part in the development of (-)-deprenyl. His remarkable achievements relate to the elucidation of the pharmacological spectrum of selegiline, its pharmacokinetic effects and its neuroprotective properties.



## This Week's Citation Classic

CC/NUMBER 28  
JULY 12, 1982

**Knoll J & Magyar K.** Some puzzling pharmacological effects of monoamine oxidase inhibitors. *Advan. Biochem. Psychopharmacol.* 5:393-408, 1972.  
[Dept. Pharmacology, Semmelweis University of Medicine, Budapest, Hungary]

*"Deprenil and clorgyline became and are still indispensable tools for the mapping of the two forms of MAO in the brain and other tissues and were used in hundreds of papers during the last six to eight years. Our paper is regularly quoted because it introduced (-) Deprenil as the first, and still the best, highly selective inhibitor of MAO-B."*

*József Knoll in 1982 on the success of the paper by Knoll and Magyar, 1972*

Ekstedt B, Magyar K, Knoll J. (1979). Does the B form selective monoamine oxidase inhibitor lose selectivity by long term treatment? *Biochem Pharmacol.* 15:28(6):919-23

Knoll J, Magyar K. (1972). Some puzzling pharmacological effects of monoamine oxidase inhibitors. *Adv Biochem Psychopharmacol* 5:393-408

Knoll J, Ecsery Z, Magyar K, Satory E. (1978). Novel (-)-deprenyl-derived selective inhibitors of B-type monoamine oxidase. The relation of structure to their action. *Biochem Pharmacol.* 27(13):1739-47

Magyar K, Szende B. (2004). (-)-Deprenyl, a selective MAO-B inhibitor, with apoptotic and anti-apoptotic properties. *Neurotoxicology* 25(1-2):233-42

Magyar K, Vizi ES, Ecsery Z, Knoll J. (1967). Comparative pharmacological analysis of the optical isomers of phenyl-isopropyl-methyl-propinylamine (E-250). *Acta Physiol Acad Sci Hung.* 32(4):377-87

Magyar K. (2011). The pharmacology of selegiline. *Int Rev Neurobiol* 100: 65-84

Szőkö É, Tábi T, Riederer P, Vécsei L, Magyar K. (2018). Pharmacological aspects of the neuroprotective effects of irreversible MAO-B inhibitors, selegiline and rasagiline, in Parkinson's disease. *J Neural Transm Feb 7.* doi: 10.1007/s00702-018-1853-9

## THE „DEZSŐ MISKOLCZY MEMORIAL LECTURE” WAS HELD BY:

1994.	Gallyas Ferenc	Pécs
1995.	Papp Mátyás	Budapest
1996.	Cervós-Navarro, J.	Berlin
1997.	Lantos Péter	London
1998.	Bódis-Wollner Iván	New York
1999.	Gosztonyi Georg	Berlin
2000.	Vizi E. Szilveszter	Budapest
2001.	Robert Schwarcz	Baltimore
2002.	Peter Riederer	Würzburg
2003.	Magyar Kálmán	Budapest
2004.	Pásztor Emil	Budapest
2005.	Telegdy Gyula	Szeged
2006.	Lars Edvinsson	Lund
2007.	M. Flint Beal	New York
2008.	Amos D. Korczyn	Tel Aviv
2009.	Szolcsányi János	Pécs
2010.	Heinz Reichmann	Drezda
2011.	Jes Olesen	Koppenhága
2012.	Jonas Bergquist	Uppsala
2013.	Palkovits Miklós	Budapest
2014.	Dóczy Tamás	Pécs
2015.	Jean Schoenen	Liege
2016.	Komoly Sámuel	Pécs
2017.	Csiba László	Debrecen
2018.	Jancsó Gábor	Szeged

## VENUE

### **The Kölcsey Centre Debrecen**

Address: H - 4026 Debrecen, Hunyadi str. 1-3.

Web: <http://eng.kolcseykozpont.hu/the-kolcsey-centre-cikk>

## DATE

8 - 9 June 2018

## SYMPOSIUM HOME PAGE

[www.congress-service.hu/2018/danube](http://www.congress-service.hu/2018/danube)

**You can download the Book of Abstracts from the following link:**

<http://www.congress-service.hu/2018/danube/ea.html>

## SYMPOSIUM LANGUAGE

The official symposium language is English.

## REGISTRATION OFFICE OPENING HOURS AT THE VENUE

8<sup>th</sup> June 07:00 AM - 07:30 PM

9<sup>th</sup> June 07:00 AM - 07:00 PM

**Registration phone** (only available on 8 and 9 June): +36-30/977-4007

## ON-SITE REGISTRATION FEES

Participants 250 €

In accordance with the Hungarian tax regulations, invoices will show the full registration fees (excluding day ticket) divided into registration costs and catering costs (40 €).

### **Registration fees for participants includes:**

- Admission to all scientific sessions
- Admission to the trade exhibition
- Congress material (final program etc.)
- Coffee breaks
- Admission to the Welcome Reception on 8<sup>th</sup> June 2018
- Lunches on 8<sup>th</sup> and 9<sup>th</sup> June 2018

## SOCIAL EVENTS

### **BANKETT DINNER**

All Danube Symposium Participants are invited to attend.

**08.00 PM (Friday) 8<sup>th</sup> June 2018, Kölcsey Centre**

The registration fee for Danube Symposium participants covers the Bankett Dinner.

## OPTIONAL SOCIAL PROGRAM

Reception in the Museum of Modern Arts: 08.00 PM • 9<sup>th</sup> June • 25.- €

## PAYMENT

When registering for the 50<sup>th</sup> International Danube Neurology Symposium please arrange payment of the registration fee. All payments should be made in euro (€).

Any bank charges will be charged to the payer.

In case of bank transfer by your sponsor / workplace please make sure that your name is forwarded together with the money. If your sponsor uses a block transfer for several participants it is necessary to include all relevant names.

## CERTIFICATE OF ATTENDANCE

A certificate of attendance will be available for all registered participants at the registration desk.

## POSTER SESSION

Best paper posters will be awarded at the Conference. The awarded presenters can also share their results via a short oral presentation (8 minutes) with slides.

## INFORMATION FOR CHAIRS AND SPEAKERS

Depending on the length of sessions, the invited speakers have 30' minutes to share their results. All presenters are kindly requested to check and hand in their presentation - in case they haven't sent it to the Organizers before the Congress - at the Technicians' desks at least 1 hour prior to the lecture sessions.

Chairs of the sessions are kindly asked to introduce the invited speakers to the audience at the beginning of each sessions and also to devote attention not to exceed the time frame of the sessions. Chairs are asked to initiate discussion/debate at the end of the sessions.

## CANCELLATION OF CONGRESS PARTICIPATION

In the case that you cancel your participation at the congress by 01 May 2018, the registration fee minus a processing fee of 50 EUR will be refunded. No refund will be made if cancellation is made at a later date. Please notify the conference office of your cancellation in writing.

## MODIFICATION OF CONGRESS PARTICIPATION

In the case of cancellation or modification of any of the data of your invoice, it will mean a handling charge of 15 EUR.

Please notify the congress office of your modification in writing.

## PASSPORTS AND VISAS

Currently valid passport or identity card is required for foreign visitors travelling to Hungary.

Although visa requirements may vary from country to country, no visa is needed from almost all European Countries.

## LIABILITY - INSURANCE

The participants take part in all excursions at their own risk. The registration fees does not include any kind of insurance. The Organizing Committee and the Congress Bureau can not accept liability for personal accidents, loss or damage. Health, baggage or accident insurance is recommended and must be taken out in your own country.



## ACCOMMODATION

**We would like to offer you the following hotels with the special prize for the Symposium:**

**Room rate includes:** Buffet breakfast, VAT, City Tax, free WIFI.

### **HOTEL DIVINUS\*\*\*\*\***

**4032 Debrecen, Nagyerdei krt. 1.**

[www.hoteldivinus.hu](http://www.hoteldivinus.hu)

### **AQUATICUM HOTEL\*\*\*\***

**4032 Debrecen, Nagyerdei park 1.**

[www.aquaticum.hu](http://www.aquaticum.hu)

### **HOTEL LYCIUM\*\*\*\***

**4026 Debrecen, Hunyadi u. 1-3.**

<http://www.hotellycium.hu/>

### **HOTEL ÓBESTER\*\*\*\***

**4026 Debrecen, Péterfia u. 49.**

<http://hotelobester.hu/>

### **HOTEL PLATÁN\*\*\*\***

**4030 Debrecen, Somlyai u. 10.**

[www.platanhotel.eu](http://www.platanhotel.eu)

### **CENTRUM HOTEL\*\*\***

**4026 Debrecen, Kálvin tér 4-8.**

[www.centrumhotel.hu](http://www.centrumhotel.hu)

## ACCOMODATION FEE

**Room rate includes:** Buffet breakfast, VAT, City Tax, usage of Fitness & free WIFI.

	1 person	2 persons
<b>Hotel Divinus***** superior</b>	97 €	110 €
<b>Hotel Divinus***** deluxe</b>	125 €	138 €
<b>Hotel Aquaticum****</b>	88 €	102 €
<b>Hotel Lycium****</b>	77 €	90 €
<b>Hotel Óbester****</b>	77 €	94 €
<b>Platán Hotel****</b>	49 €	78 €
<b>Hotel Centrum*** superior</b>	70 €	82 €

## PARKING

For the guests of the Symposium, the use of 50 parking places equipped with a barrier and separated for the Lycium hotel in the underground parking garage of the Kölcsey Centre is ensured.

The underground parking garage can be reached from the direction of the Bethlen utca and the Fűvészkert utca. Driving to the entrance of the underground parking garage, after pressing the button, a parking ticket is given to the guest. With this parking ticket, the separate barrier of the Hotel Lycium\*\*\*\* can be opened. We request our Dear Guests to give their parking tickets at the reception for validation.

Parking: 2300 HUF/day

## TAXI

We recommend the participants three taxi-companies in Debrecen:

Főnix Taxi: +36/52/444 444

City Taxi: +36/52/555 555

## PUBLIC TRANSPORTATION

If you want use public transportation, we can offer you to visit the following websites:

<http://www.dkv.hu/fooldal>

## PHONE CALLS

The country code for international calls to Hungary is +36.

## CLIMATE OF DEBRECEN

Debrecen's climate is classified as warm and temperate. The rainfall in Debrecen is significant, with precipitation even during the driest month. The climate here is classified as Cfb by the Köppen-Geiger system. The average temperature in Debrecen is 10.1 °C. Precipitation here averages 581 mm.

## ABOUT THE SYMPOSIUM VENUE'S LOCATION

**Debrecen** (pr. deb-reh-tsen) is Hungary's second largest city with a population of 210,000. The original meaning of its name ("let it live and move") is testament to the city's dynamic present-day development.

Thanks to its religious, political, and economic power, historic Debrecen got to assume a quasi-city-state status and it has served twice as the nation's capital.

The modern city is Eastern Hungary's most important commercial and administrative center, which has displayed an unbroken path of spectacular development in all walks of life. Debrecen's international airport provides direct links to several major European destinations and it is a mere two-hour drive from the capital, Budapest.

The cultural riches of Debrecen and Hortobágy are unique and iconic in their own right. The streets of the civic town and its buildings representing a medley of architectural styles set up a pleasant atmosphere. Leisurely walks in museums and galleries will lead to close encounters with artistic treasure troves of past and present. Get to know the centuries-old artistic and folklore traditions of Debrecen and Hortobágy that live on today.

Woods and hills – you are forgiven if you don't expect to come across these geographical features on Alföld [the Great Plain]. Interestingly, it may still be worth your while to look, given that the „shack of the vákáncsos” (poor abode dug in the ground), „Devil's Trench,” the hills of the puszta as well as „Lake Balaton Minor” (affectionately dubbed ma-chee bal-chee by locals) are all found in the regions of Hajdúság and Debrecen's Erdőspuszta. Explore the lush woodland surrounding the city by following the National Blue Trail on foot, bike, or horseback. The less adventurous might choose chugging along aboard one of the trains of „Zsuzsi” [Susie], the 130-year-old narrow-gauge train.

**Kölcsey Centre** with its 13000m<sup>2</sup> has no peers in Eastern Hungary concerning its size and quality. The designer's dream was to create a “multifunctional” house, which can worthily host professional conferences as well as cultural events, where spaces can be joined or separated as preferred while the halls meet the highest technological demands.

The dream came true in February 2006: Kölcsey Centre was completed in the vicinity of the long ago demolished house of the poet of the Hungarian National Anthem: Ferenc Kölcsey. Entering the building you are touched by the Scandinavian atmosphere created by the plentiful glass, wood and stone. Light pours in through the enormous windows. The coverings of wood – birch, maple and okume -, reflect cleanness, warmth and friendliness.

## Function and sight in harmony

The Great Hall, the session rooms, the elegant Ballroom, the Exhibition room, the light lounge and the foyer can excellently house any type of performances, balls, receptions, exhibitions or fairs.

The audience of the Great Hall could already enjoy performances of such world stars like: András Schiff, Jan Garbarek, Chick Corea, Andrea Rost or Cesaria Evora.

Large-scale exhibitions of noted artists have already been staged in the Exhibition hall, among others: János Lestyán Goda, Sándor Győrfi, János Kass, Endre Szász, Árpád Bényi.

It was a great honour for us to host the travelling exhibition of the 100-year-old Museum of Fine Arts: “Hidden Beauties”, the Hunderwasser and Hasegawa exhibition, the MTI photo exhibition, the (M)érték – world famous photographers as well as the World Press Photo exhibition.

Hardly could you find a better venue for a conference – airy spaces convertible at your choice, technical infrastructure meeting the demands of the 21st century, high quality catering, restaurant, café, and drink bar are the proof for the best choice ever...

A glass-walled panorama lift flies you to the roof – terrace, where you can sip your finest coffee in a green environment enjoying the stunning view of the city's church towers.

The centre was named after the Hungarian poet, Ferenc Kölcsey.

For more information on getting to Debrecen, please visit the website:  
<https://www.debrecen.hu/en/tourist/explore-debrecen/>

For more information on getting to Kölcsey Centre please visit the website:  
<http://eng.kolcseykozpont.hu/the-kolcsey-centre-cikk>

## MARK YOUR CALENDAR!

**Joint Meeting with the Annual Congress of the  
Romanian Society of Neurology**

**May 7 – 11, 2019**

### Topics:

- **Stroke and cerebrovascular diseases**
- **Parkinson's disease and Movement Disorders**
  - **Peripheral neuropathies**
- **Multiple sclerosis and other chronic inflammatory disorders of the CNS**
  - **Epilepsy**







# DANUBE NEUROLOGY NEWSLETTER

Newsletter No. 28. July, 2017

## INTERNATIONAL DANUBE NEUROLOGY SYMPOSIUM FOR NEUROLOGICAL SCIENCES AND CONTINUING EDUCATION

**Honorary President:** † Prof. Dr. Dr.h.c. Franz Gerstenbrand (*Vienna*); **Secretary General:** Prof. Dr. László Vecsei (*Szeged*)  
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**International Danube Symposium for Neurological Sciences and  
Continuing Education:**

**<http://danubeneurology.eu>**

**Head Office:** University of Szeged, Department of Neurology ☒ H-6725 Szeged, Semmelweis u. 6., Hungary \* **Tel.:** + 36 62 545-348 \* **Fax:** + 36 62 545-597 \* **E-mail:** [vecsei.laszlo@med.u-szeged.hu](mailto:vecsei.laszlo@med.u-szeged.hu) \* International Danube Symposium for Neurological Sciences and Continuing Education: **<http://danubeneurology.eu>**



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Prof. N.V. Vereshchagin (Moscow)  
Prof. M. Wender (Poznan)

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Maja Relja (Zagreb)  
*Representative of the  
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Z. Mubrin (Zagreb)  
J. Opara (Wroclaw)  
M. Piradov (Moscow)  
I. Szirmai (Budapest)  
I. Velcheva (Sofia)  
B. Volk (Freiburg)

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L. Battistin (Padova)  
G. Boysen (Copenhagen)  
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R. Regli (Lausanne)  
D. Russell (Oslo)  
H. Staunton (Dublin)  
G. Stern (London)  
A. Twijnstra (Maastricht)

## **Honorary Members**

H. Krejcwowa (Praha)  
J. Tichy (Praha)



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## **1. In memoriam Professor Franz Gerstenbrand** (by Professor László Vécsei)



*Univ.-Prof. Dr. h.c. mult. Dr. Franz Gerstenbrand (1924-2017)*

Professor Franz Gerstenbrand, Honorary President of the International Danube Neurology Symposium, died on the 30<sup>th</sup> June, 2017 in Vienna. His leaving is a great loss to our association and we deeply miss our enthusiastic and active Honorary President, but first of all, our great friend. Franz Gerstenbrand finished his studies in Vienna in 1950 and started to work at the University Clinic for Neurology and Psychiatry, Vienna, first as a young assistant, later as a specialist and professor. In 1967, he completed his thesis for habilitation, its subject was the traumatic apallic syndrome. From 1976 on, he had been the Chairman and Professor of the Department of Neurology at the University of Innsbruck and had worked there for over 18 years. His main interests included long-term coma after injuries to the brain and spinal cord, extrapyramidal diseases, neuroimaging, neurorehabilitation and neuroethics. Professor Gerstenbrand's outstanding scientific work is proved by his 786 publications and 12 book chapters.



He recognized early the importance of scientific cooperation between Austrian and Central/East-European neurologists. In collaboration with Professor Hans Hoff, he organized a successful international symposium named „Donau Symposium“ in Vienna, 1962. It was later followed by further 48 symposiums in different countries of the region and this initiative of him is active up to the present. The essential merit of Professor Gerstenbrand's activity lays in having built connections between neurologists at a time of political hostilities. First, he was the General Secretary and later the President and Honorary President of the association. The organization of symposia had a special place in his heart. He was an active participant at all of the Danube Symposia as a chair of the meeting, a participant at the roundtable discussions or as a lecturer. He held unforgettable presentations on the themes of his interests also evoking other participant's attention to these special fields of neurology, for example to neuroethics or neurotraumatology. But he was also open to new topics. At the 44<sup>th</sup> Symposium in Szeged, 2012, he gave a lecture on „Hyperbaric oxygen treatment in neurological disorders“. Besides, Professor Gerstenbrand was a regular and enthusiastic member of the association's Management Committee meetings and wrote several reviews and commentaries to the Danube Neurology Newsletter. Only the worsening of the state of his health this year could keep him from the activities related to the association.

First I met Franz in 1991, when together with Professor Csanda, we attended a Danube Curatorial meeting in Innsbruck. He was very friendly and supportive to me and gradually, a close friendship developed between us. In 2004, we celebrated his 80<sup>th</sup> birthday together with 300 neurologists, participants at the Danube Symposium in Szeged. He also visited Szeged on the occasion of the 85<sup>th</sup> birthday celebration of Professor Csanda.

During the last couple of years, we had attended with Franz and his wonderful wife, Gudrun the Danube Teaching Course in Kazimierz, Poland and visited Professors Stemasiak, Rejdak and our Polish friends on several occasions. At the 33<sup>rd</sup> Danube Symposium (Lublin, Poland, 2001), Professor Gerstenbrand received the Golden Medal of the Medical School, University of Lublin.

This year, the state of his health hindered him to participate at the Symposium in Budapest though he had been keen to come. But his life-long, prominent interest to the Danube community was shown by the long phone calls which kept us in touch all the time during the meeting. We referred to him about the events and he helped us with his advices as usual.

A few days ago I attended the Neurology Teaching Course in Eforie Nord (Constanta) and yesterday I took part at the Committee Meeting of the European Brain Council (EBC) in Brussels and with all the colleagues there, we remembered Professor Gerstenbrand. Franz mentioned me several times that „EFNS was born at the Danube Symposium“.

His successful contribution to the neurological science was recognized by honorary doctorates and several scientific prizes. We recognize the merits of our lost Honorary President and supportive, good friend by keeping the bridge between neurologists at the Danube Association as strong and active as it was intended by him.



Peace to his remains.

Dom Zu St. Stephan, Vienna, 14<sup>th</sup> July, 2017

László Vécsei



## 2. Condolences of Professor Konrad Rejdak and Professor Zbigniew Stelmasiak

We are very sad that Prof. dr h.c. mult. Franz Gerstenbrand died on 1<sup>th</sup> of July 2017.

Prof. Franz Gerstenbrand will remain in our memory as:

- a GREAT man, dedicated to people in generally,
- an excellent teacher especially of young neurologists from Central South and East Europe,
- the creator, President and organizer of International Danube Symposium Association,
- a good friend of neurologists from Poland and from all over the world.

Polish neurologists will keep the memory of prof. Franz Gerstenbrand in our hearts forever.

Please, pass our condolences to Prof. Gerstenbrand's Family, especially to His Wife.

Prof. Konrad Rejdak      Prof. Krystyna Mitosek-Szewczyk      Prof. Zbigniew Stelmasiak

## 3. Topics of the Danube Management Committee Meeting (by Professor László Vécsei)

**Venue:** Park Inn by Radisson Budapest, **Date:** April 21 (lunch time) 14.10-15.00

### AGENDA:

- 1) Introduction (Prof. F. Gerstenbrand, Prof. L. Vécsei)
- 2) Report of the present activities of the International Danube Symposium (Prof. L. Vécsei)
- 2.1 Danube Neurology Newsletter (No 27) (April, 2017) is posted by e-mail (members of International Danube Neurology Association, participants at former Danube Symposia and at the Danube Clinical Neurology Training Courses)
- 2.2 Web-site of the DS, with all Danube Newsletters, other important information, e.g.: future meetings, symposia, etc (<http://danubeneurology.eu>)
- 3) Report of 48<sup>th</sup> Danube Neurology Symposium 5-6 October, 2016, Ljubljana (by Prof. Z. Pirtosek and Prof. L. Vécsei)
- 4) 12<sup>th</sup> Danube Neurology Teaching Conference (Kazimierz Dolny, June, 2016 Poland) (Prof. Z. Stelmasiak and Prof. K. Rejdak)
- 5) Report of the 11<sup>th</sup> World Congress on Controversies in Neurology (CONy-2017, Athens, March 23-26) (Prof. A. Korczyn)
- 6) Future Meetings, Teaching and Training Courses, Exchange Programmes under the auspices of the International Danube Neurology Association: (Danube Neurology Symposia: 13<sup>th</sup> Danube Neurology Teaching Conference (Kazimierz Dolny, June 21.-23, 2017, Poland) (Prof. Z. Stelmasiak and Prof. K. Rejdak), **2018** 50<sup>th</sup> Danube Symposium (Prof. L. Csiba, Prof. L. Vécsei, Debrecen), **2019**: 51<sup>st</sup> Danube Symposium (Prof. O. Bajenaru, Bucharest), **2020**: 52<sup>nd</sup> Danube Symposium (Prof. Konrad Rejdak and Prof. Zbigniew Stelmasiak))
- 7) European Board of Neurology Examination (Prof. L. Vécsei)
- 8) EAN Dept-Dept. and Educational Grants 2017 (Prof. L. Vécsei)
- 9) Common scientific activities in different fields of neurology (Prof. L. Vécsei)
- 10) Harmonisation of Ph.D. Programmes in Europe (scientiometric data: impacts, Q-values, citation, Hirsch index (Prof. L. Vécsei)
- 11) 12<sup>th</sup> NMDPD (Sevilla, Spain, October 4-7, 2018), 11<sup>th</sup> CONY (Warsaw, March 22-25, 2018) (Prof. A. Korczyn)
- 12) European Academy of Neurology (June 24-27, 2017 Amsterdam), (EAN Educational Grants, Clinical Fellowship, Research Fellowship, Spring School, 2017) (Prof. F. Gerstenbrand, Prof. L. Vécsei)
- 13) Neurorehabilitation Program in the Danube Countries (Prof. F. Gerstenbrand)
- 14) Finances of the Danube Neurology Symposia, Training and Teaching Courses: 70:30 between the local organizers and the permanent International Danube Neurology Association Secretariat or to transfer the amount of min. EUR 2,500 to the Secretariat
- 15) Discussion of the collaboration with EAN, WFN, EPDA, EBC and other neurological organizations (Prof. F. Gerstenbrand)
- 16) Varia and Closing remarks (Prof. F. Gerstenbrand)

Yours sincerely,

László Vécsei (Secretary General)

Anett Járdánházy MD PhD (Head of Office)



#### 4. Summary of the 49<sup>th</sup> International Danube Neurology Symposium (2017) (by Professor László Vécsei)

The 49<sup>th</sup> International Danube Neurology Symposium was organized in April 21-22<sup>th</sup>, 2017, in the capital city of Hungary. Budapest is a great place on the banks of the river Danube, with full of architectural and cultural interests (Buda Castle, Parliament, St. Stephen's Basilica, Vajdahunyad Castle and City Park, 'Várkert Bazár', etc.).

More than 190 participants was registered from at about 10 countries. After the opening ceremony, the conference started with the first session (Danube Lectures) which was about mild cognitive impairment (by Professor Korczyn), ALS and FTD (by Professor Ludolph) and stroke prevention (by Professor Brainin). The topic of the second session was movement disorders (progressive supranuclear palsy, Parkinson's disease) presented by also excellent speakers (Professors Kostic, Relja, Ransmayr, Bajenaru, Rektorova). The poster session was in Friday afternoon (21<sup>th</sup> April) with more than 10 interesting posters. The first poster prize was given to Szabolcs Dvorácskó, who presented the synthesis and pharmacological characterization of opioid- cannabinoid hybrid ligands. There were two sessions for young neurologists also in Friday afternoon: all 18 short lectures were presented by colleagues from Szeged, Pécs, Debrecen, Budapest, Salzburg and Szekszárd. Enjoyable welcome reception was organized in Park Inn by Radisson Budapest, where the participants were able to develop new connections and care for their friendships.

In Saturday (22<sup>th</sup> April) two main sections were presented: one is about epilepsy and severe brain damage (by Professor Rektor and Priv. Doz. Golaszewski), and another one is about stroke (by Professors Muresanu and Brainin). There were 5 Sponsored Symposiums during the two days.

Summary, we hope, that it was a useful and interesting conference for the participants. We would like to say thank to the companies supported the symposium, and to Congress & Hobby Service for the technical organization. We also thank to all of the speakers and delegates for participating in this event.

See you again in Debrecen (Hungary) in April, 2018 in the next Danube Neurology Symposium!



Chairs of the closing ceremony  
(Professor Csiba, Professor Komoly, Professor Vécsei)



Poster discussion (chair: Professor Bajenaru)





Audience of the Danube Symposium

### **5. Summary of the 13<sup>th</sup> International Danube Teaching Course on Neurological Sciences and Continuing of Education in Central South and East Europe in Kazimierz Dolny, Poland** (by Professor Konrad Rejdak)

13<sup>th</sup> International Danube Teaching Course on Neurological Sciences and Continuing of Education in Central South and East Europe was organized by Department of Neurology (Prof. Konrad Rejdak) under the auspices of Rector of Medical University in Lublin (Prof. Andrzej Drop) and International Danube Symposium, in Kazimierz Dolny, 21-23 June 2017. The scientific programme focused on the newest aspects of multiple sclerosis, epilepsy and headache but also included special sessions on child neurology and ultrasonography. The highest educative and scientific level of this conference was guaranteed by the attendance of many internationally recognised experts and scientists from Poland and abroad including prof. Ilan Blatt (Israel). During the first day there was the OPENING CEREMONY chaired by prof. Z. Stelmasiak and prof. K. Rejdak. There were 3 DANUBE LECTURES by P. Nowacki: Diagnostic strategies in new classification of CNS neoplasms – WHO 2016, by K. Rejdak– Unmet needs in MS and Monitoring of treatment and progression in MS. There was also RRMS TREATMENT ALGORITHMS SESSION by Z. Maciejek and K. Rejdak. Besides of it there was MS SESSION with lectures by J. Losy – Primary progressive MS-immunopathology and new perspectives of therapy and by H. Bartosik-Psujek – Induction or escalation in treatment of MS. There was DEBATE: FROM LABORATORY TO PRACTICE IN MS TREATMENT by K. Rejdak and M. Mycko. In the SESSION dealing with STROKE there were lectures by H. Sienkiewicz-Jarosz – Stroke in young patients - diagnostic and therapeutic challenges, by G. Kozera – Stroke – diagnostics in new guidelines and by A. Szczepańska-Szerej – Stroke - prophylaxis in new guidelines. In CHILD NEUROLOGY SESSION there were lectures: by B. Steinborn – Myoclonic epilepsy - do we know everything about it, by K. Mitosek-Szewczyk – Progress in MS therapy in children, by M. Mazurkiewicz-Beldzińska – Progress in treatment of epilepsy in children and the youth, by T. Kmiec – Deep brain stimulation in children with PKAM. During the first day there was also a parallel session ADVANCES IN NEUROSONOLOGY - Session of Neurosonological Section of Polish Neurological Society in cooperation with Polish Stroke Society with lectures by L. Rzepecka-Wejs – Ultrasound examination of peripheral nervous system, by M. Skowrońska - Transcranial Sonography in neurodegenerative diseases, by T. Tomczyk – Bilateral occlusion of vertebral arteries in ultrasound and clinical follow-up and by J. Wojczal – Reversible cerebral vasospasm syndrome - ultrasound and clinical picture. During the second day there was NEUROREHABILITATION SESSION with lectures by B. Tarnacka – Robotics and neuroplasticity in rehabilitation of walking, and by E. Stelmasiak – Applications of wellness coaching in medical practice and education. There were also EPILEPSY SESSIONS. In EPILEPSY SESSION I there were 2 lectures: by I. Blatt (Israel) – Epilepsy treatment - when to start, when to stop and by K. Rejdak – Update on epilepsy treatment. In EPILEPSY SESSION II there were lectures by J. Jędrzejczak – Up-to-date classification of epileptic fits and syndromes, by J. Czuczwar, K. Borowicz – Basic drug interactions in treatment of epilepsy. In session HOT TOPICS there were lectures B. Błaszczuk – Life risk factors in



epileptology and by P. Dziemidok – Patient with controlled glycaemia - risk of neuropathy? The final session was dealing with EPILEPSY CASE STUDIES by A. Rysz, I. Halczuk, B. Chmielewska. The symposium was very successful. There were more than 300 participants and each session was proceeded by hot discussions.



From the left: prof. P. Nowacki, prof. K. Mitosek-Szewczyk, prof. B. Błaszczyk, dr hab. T. Kmiec, prof. Z. Maciejek, prof. J. Losy, prof. K. Rejdak, prof. Z. Stelmasiak, prof. T. Domżał and others.

**6. First announcement of the 50<sup>th</sup> International Danube Neurology Symposium** (by Professor László Csiba and Professor László Vécsei)

## 50<sup>th</sup> INTERNATIONAL DANUBE NEUROLOGY SYMPOSIUM



8-9 JUNE, 2018 • DEBRECEN, HUNGARY  
FIRST ANNOUNCEMENT

**Scientific Information**

Prof. Dr. L. Vécsei  
General Secretary  
Department of Neurology  
University of Szeged  
Sемmelweis str. 6,  
H-6725 Szeged, Hungary  
Phone: +36 (62) 545-351  
Fax: +36 (62) 545-597  
e-mail: vecsei.laszlo@med.u-szeged.hu

**MARK YOUR CALENDAR!**

Prof. Dr. L. Csiba  
Local Organizer  
Department of Neurology  
University of Debrecen  
Mónicz Zs. boulevard 22,  
H-4032, Debrecen, Hungary  
Phone: +36 (52) 415-176  
Fax: +36 (52) 453-590  
e-mail: csiba@med.unideb.hu

**Symposium Secretariat**

Congress & Hobby Service  
P.O.B. 1022  
H-6701 Szeged,  
Hungary  
Phone: +36-62-484-531  
Fax: +36-62-450-014  
e-mail: info@congress-service.hu

**Symposium home page**

[www.congress-service.hu/2018/danube](http://www.congress-service.hu/2018/danube)

INTERNATIONAL  
DANUBE NEUROLOGY SYMPOSIUM  
IS CELEBRATING THE  
50<sup>th</sup> ANNIVERSARY IN 2018!

8-9 JUNE, 2018

**PRELIMINARY LECTURES:**

- Danube Neurology Symposium
- Symposium of hungarian & foreign invited speakers
- Young Neurologists Session - case reports

**MAIN TOPICS:**

- Stroke
- Multiple sclerosis
- Headache
- Extrapyramidal disorders
- Epilepsy
- Neuromuscular disorders

In 2018 the International Danube Neurology Symposium will be organized together with the Congress of the Hungarian Society of Neurology.

If you are interested in, follow us on the congress website:  
[www.congress-service.hu/2018/mane](http://www.congress-service.hu/2018/mane)



## 7. Future Conferences, Meetings, Courses and Symposia of the International Danube Symposium for Neurological Sciences and Continuing Education

### 7.1. The 51<sup>st</sup> International Danube Neurology Symposium

**Date:** May, 2019

Professor Ovidiu Bajenaru (Bucharest, Romania)

### 7.2. The 52<sup>nd</sup> International Danube Neurology Symposium

**Date:** 2020

Professor Konrad Rejdak and Professor Zbigniew Stelmasiak (Lublin, Poland)

### 7.3. The 53<sup>rd</sup> International Danube Neurology Symposium

**Date:** 2021

Applicant: Professor Gerhard Ransmayr (Linz, Austria)

## 8. Historical events and pictures of the International Danube Symposia (1999-2017)

(by Professor László Vécsei)

31 <sup>th</sup>	Danube Neurology Symposium	1999	Szeged	L. Vécsei
32 <sup>th</sup>	Danube Neurology Symposium	2000	Baja	J. Czopf
33 <sup>th</sup>	Danube Neurology Symposium	2001	Lublin	Z. Stelmasiak
34 <sup>th</sup>	Danube Neurology Symposium	2002	Bratislava	P. Traubner
35 <sup>th</sup>	Danube Neurology Symposium	2003	Beograde	V. Kostic
36 <sup>th</sup>	Danube Neurology Symposium	2004	Sofia	S. Yanceva
37 <sup>th</sup>	Danube Neurology Symposium	2005	Ljubljana	Z. Pirtosek
38 <sup>th</sup>	Danube Neurology Symposium	2006	Brno	I. Rektor
39 <sup>th</sup>	Danube Neurology Symposium	2007	Wuerzburg	P. Riederer
40 <sup>th</sup>	Danube Neurology Symposium	2008	Bucharest	O. Bajenaru
41 <sup>th</sup>	Danube Neurology Symposium	2009	Linz	G. Ransmayr
42 <sup>th</sup>	Danube Neurology Symposium	2010	Zagreb	V. Demarin and M. Relja
43 <sup>th</sup>	Danube Neurology Symposium	2011	Dresden	H. Reichmann
44 <sup>th</sup>	Danube Neurology Symposium	2012	Szeged	L. Vécsei
45 <sup>th</sup>	Danube Neurology Symposium	2013	Prague	E. Ruzicka
46 <sup>th</sup>	Danube Neurology Symposium	2014	Montenegro	V. Kostic and R. Raicevic
47 <sup>th</sup>	Danube Neurology Symposium	2015	Dusseldorf	H.P. Hartung
48 <sup>th</sup>	Danube Neurology Symposium	2016	Ljubljana	Z. Pirtosek
49 <sup>th</sup>	Danube Neurology Symposium	2017	Budapest	S. Komoly and L. Vécsei

Pictures of the 35<sup>th</sup> International Danube Symposium for Neurological Sciences and Continuing Education (Beograde, 2003):



Vladimir Kostic, Johan Aarli, Franz Gerstenbrand †, László Vécsei, Slobodan Apostolski



László Vécsei, Vladimir Kostic, Franz Gerstenbrand †, Slobodan Apostolski



## 9. Invitation to the 12<sup>th</sup> World Congress on Controversies in Neurology (CONy) (2018)

**Dates:** March 22-25, 2018

**Venue:** Double Tree by Hilton Hotel & Conference Centre Warsaw, Skalnica 21, 04-797 Warsaw, Poland

Dear Friends and Colleagues, We are proud to announce that the 12<sup>th</sup> World Congress in Neurology (CONy) will take place in Warsaw, Poland on March 22-25, 2018. In recent years the field of neurology has witnessed enormous growth in clinical and basic data. Conferences are more informative but there is often only limited time for thorough discussions. Consequently a gap appears between the expansion of knowledge and its dissemination and use. CONy provides a platform for international experts to discuss and compare experiences. The core of the CONy Congress are the debates which enable participants to discuss unresolved issues with leading world experts. The Congress aims at providing the most recent data arming the clinician with reliable, up-to-date scientific information, helping in everyday patient care.

We cordially invite you to join us in the beautiful city of Warsaw!

Sincerely, Amos Korczyn (Israel), Jaroslaw Slawek (Poland)

CONy 2018 Co-Chairpersons

**Main Topics:** Alzheimer's diseases and dementia, Epilepsy, Headache, History of neurology in Poland, Multiple sclerosis, Neuroimmunology, Parkinson's diseases and other movement disorders, Rehabilitation, Sleep, Stroke, Wilson's disease

## 10. Invitation to the 4<sup>th</sup> Congress of the European Academy of Neurology (EAN) (2018)

**Dates:** June 16-19, 2018

**Venue:** Lisboa Congress Centre, Praça das Indústrias, 1300-307 Lisboa, Portugal

Dear Colleagues and Friends, On behalf of the European Academy of Neurology and the Portuguese Society of Neurology, we are pleased to invite you to the 4<sup>th</sup> Congress of the European Academy of Neurology (EAN) taking place in Lisbon, Portugal from June 16-19, 2018. The overarching theme for the Lisbon congress will be 'Neurogenetics'. Diagnosis and treatment are increasingly using genetic methods and one purpose of the congress is to highlight clinically useful aspects of genetic medicine in Neurology. But as always, progress in all fields of neurology will be presented and participants will be updated about recent developments and news in clinical neurology. The selection of the educational programme is meanwhile organised within a newly adapted 5-year EAN educational curriculum. This curriculum is covering all important aspects a neurologist should learn and update in this period. Lisbon is a modern town, easily accessible from almost everywhere, where you can enjoy the hospitality of its people, walking around town exploring culture, arts and food. The charming capital of Portugal is located by the wide estuary of Tagus River where you will find scenic views from almost every corner. Here, you can absorb the unique scent of the near Mediterranean, mild and pleasant climate of early summer and the peculiar luminosity of a blue sky reflected on its white ancient houses in historic areas. Lisbon is dominated by its castle, more than one thousand years old, with a unique view. This is a city full of history where you may feel the ambiance of the old arab neighborhood of Alfama and Mouraria, where Fado, the national sentimental song, was born. Needless to say that it was from Lisbon, that the navigators left to discover the world and you can meet history at several museums and monuments. EAN and the Portuguese Society of Neurology are looking forward to welcome the European neurological community to celebrate the strength and beauty of our field and to get inspired by meeting with colleagues and friends.

Paul Boon

Günther Deuschl

Joaquim Ferreira

**Topics: Symposia:** Tauopathies: Pathophysiology, clinical features and experimental therapies, ILAE-CEA/EAN: Diagnosing genetic epilepsies, ESO/EAN: Cerebral small vessel disease - recent advances and clinical implications, EAPC/EAN: Palliative care and neurology, The spectrum of dementias, Coma: Neuromodulation, imaging and neurobiology, A new look in neuropathogenesis of multiple sclerosis, Advances in molecular characterisation and personalised therapies in brain tumors



**Focused Workshops:** Brain health in multiple sclerosis: a catalyst for a new approach to management, Biomarkers of neuromuscular disorders, The importance of brain network re-organisation in old age and for successful rehabilitation after stroke, Ability to drive in neurological disorders, Overarching Theme, MDS-ES/EAN: Management of Parkinson's disease in non-routine circumstances, ILAE-CEA/EAN: Epilepsy surgery in 2018: has anything changed in the last decades?, Impact of technology in neuro-rehabilitation, Overarching Theme, Lost in space - clinical and neurobiological aspects of topographagnosia, Blocking CGRP for the treatment and prevention of migraine and cluster headache attacks, Neurogenetic avenues in dementia, Autoimmune encephalitis in the Intensive Care Unit (ICU), MDS-ES/EAN: Evidence-based medicine and beyond in neuropsychiatric complications of Parkinson's diseases, Guillain-Barré Syndrome: New developments in immunology, electrophysiology and treatment, ESO/EAN: Precision medicine in stroke

**Special Sessions:** MDS-ES: European Basal Ganglia Club, Guideline production, EFAS/EAN: Autonomic dysfunction as early markers in rare and neurodegenerative diseases, Rare neurological diseases, Neurological disorders of famous composers, RRFS Mediterranean Session, History session, EBC/EAN: The economic Value of Treatment (VoT) of brain disorders, EFNA, Population, migration and neurological disorders

**Teaching courses:** MDS-ES/EAN: Dystonia - how to recognise and treat – Level 1, How to proceed with a suspected myopathy? – Level 1, The diagnoses of ALS – old and new approaches – Level 2, Neuroimaging and early detection of neurological diseases – Level 2, Acute emergencies in neuromuscular disease – Level 2, Update on MS treatment – Level 1-2, Clinical neurophysiology in neuro-rehabilitation – Level 2, Tips and tricks in diagnosing headache disorders – Level 1, ESO/EAN: New insights in the management of patients with ischaemic stroke or TIA – Level 2, Current treatments in neurology – Level 1, MDS-ES/EAN: Evidence-based medicine in the treatment disabling motor and non-motor trouble in Parkinson's disease – Level 2, ILAE-CEA/EAN: How to approach EEG and avoid over-reading in epilepsy – Level 1 (12), New concepts in critical care of stroke patients – Level 3, How to approach a patient with neuropathy: from symptoms to diagnosis – Level 2 (14), The "difficult to treat" headache patient – Level 3, Autoantibodies in neurological disorders – Level 2, Advanced neuro-sonology – Level 3, Basics of sleep medicine – Level 1, The neurological bedside examination – a practical guide based on the EAN e-book – Level 1

**Case-based workshops:** End-of-life care for neurological patients, Cases of drophead, camptocormia and axial weakness and related treatment, The process of multiple sclerosis diagnosis, Difficult decisions in treatment of myasthenia gravis, Neurogenetics goes therapy, ILAE-CEA/EAN: Antibodies causing epilepsy, Rare headache syndromes: idiopathic or symptomatic?, Challenging cases of infections of the nervous system, Imaging selection of stroke patients for specific treatment interventions

**Career development sessions:** Etiological investigation of disease: case-control studies, European Journal of Neurology session: How to write and publish academic papers, Abstract, poster and presentation tips for success at international meetings, Drug development in neurology

**Controversies:** Controversies in steroids in neuroinfections & in epilepsy, Controversies in the diagnosis of Alzheimer's disease & in multiple sclerosis

**Hands-on courses:** Motor Unit Number Index (MUNIX) and phrenic nerve conduction studies – Level 3, Nerve conduction studies and nerve echography – Level 1, Tilt-table testing in neurology and clinical neurophysiology – Level 2, Ultrasound in vascular diagnosis – Level 1, Interpreting MRI in practice – Level 2, Neuro-otology – Level 2, Basic EMG - needle EMG and transcranial magnetic stimulation as an electrodiagnostic tool – Level 2

**Interactive sessions:** ILAE-CEA/EAN: New ILAE classification of the epilepsies: applicability of new concepts and terminology in clinical practice, Update in chronic headache disorders, Treatment decisions in some difficult scenarios of acute ischemic stroke, How to diagnose acute vertigo and acute double vision, Diagnostic pitfalls in neuromuscular disease, Not every twitch or movement is a seizure in the neurological ICU, MDS-ES/EAN: Mixed movement disorders: what do we see and how do we approach, Is it a vasculitis or not?



## **11. Invitation to the 12<sup>th</sup> International Congress on Non-Motor Dysfunctions in Parkinson's Disease and Related Disorders (2018)**

**Dates:** October 4-6, 2018

**Venue:** Meliá Sevilla Calle Dr. Pedro de Castro, 1, 41004 Sevilla, Spain

Following the successful NMDPD Congresses in Ljubljana, Slovenia we are delighted to invite you to join us for the 12<sup>th</sup> International Congress on Non-Motor Dysfunctions in Parkinson's Disease and Related Disorders, taking place in Seville, Spain on October 4-7, 2018. We hope that our congress in this vibrant and charming city will be as much a success as previous congresses. NMDPD's aim is to discuss the new developments in the understanding of the non-motor aspects of Parkinson's disease and other movement disorders and their management. During this exciting congress, we shall have an opportunity to deliberate on brain diseases and how they contribute to cognition and behavior. We shall discuss the psychological markers of Parkinson's dementia and of dementia with Lewy bodies, and also the biochemical and genetic factors involved. The identification in recent years of widespread alpha-synuclein deposits, from the periphery and up to the cortex, has contributed to our understanding but at the same time raised new and still unanswered questions as well as exciting new therapeutic possibilities. The overlap with Alzheimer's disease and with fronto-temporal dementia will be two other central issues. Delirium, dementia, anxiety, psychosis and impulse control disorders frequently affect the lives of patients and caregivers even more than motor disturbances, and they therefore deserve special attention. Besides cognitive impairment, patients with movement disorders frequently complain of disturbances of the autonomic nervous system, REM sleep behavior disorder, and hyposmia, to name just a few. All these aspects will be discussed in detail. We encourage you to not only attend the congress but to also submit an abstract, thereby contributing to what we are confident will be a splendid scientific program in an amazing environment. Seville, a picturesque city, will provide a wonderful opportunity to exchange ideas and present new research findings.

We look forward to hosting you in beautiful Seville!

Yours Sincerely, Amos Korczyn (Israel), Ray Chaudhuri (UK), Jaime Kulisevsky (Spain)

**Main Topics:** Autonomic dysfunction, Biomarkers, Deep brain stimulation (DBS), Dementia with Lewy bodies, Dystonia, Fatigue and sleep, Frontotemporal demetias, Genetics, Impulse control disorders, Lifestyle modifications, Management, Neuroimaging, New drugs, Olfaction, Pain, Psychosis, Sex problems, Sleep, Speech disorders, Vascular Parkinsonism

## **12. Present and Future Activities of the International Danube Symposium for Neurological Sciences and Continuing Education**

- The **International Danube Symposium for Neurological Sciences and Continuing Education** fosters and coordinates fellowship programs for young neurologists from Danube Countries
- Coordination of future **Danube Neurology Symposia**
- The **Danube Neurology Newsletter** is available free of charge (also downloadable) on Internet in electronic version
- Information about future events (**Calendar of events**)
- We also consider as our task to help with the activity of the **EAN** in the Danube-countries.

## **13. Finances of the International Danube Symposium for Neurological Sciences and Continuing Education**

According to previous decision of the Danube Neurology Curatorium Meeting, the financial sources of the International Danube Symposium for Neurological Sciences and Continuing Education from all kinds of symposia, conferences, meetings, teaching/training or other kinds of courses under the roof and auspices of our organization, are as follows:

According to a final report of the meetings, symposia, etc. to be handed in electronically to the Head Office in Szeged, Hungary, the financial surplus of all meetings should be divided 70:30 between the Local Organizers and the permanent International Danube Neurology Symposium Head Office in Szeged, Hungary. Or the amount of min. EUR 2,500 is to be transferred – together with the financial report – to the Head Office according to our invoice.

## **14. Web-site of the International Danube Symposium for Neurological Sciences and Continuing Education**

The home-page of the International Danube Symposium for Neurological Sciences and Continuing Education consists of:

- the contents of all Newsletter (Nr.1-28)
- Managing and Executive Board Members of the International Danube Symposium for Neurological Sciences and Continuing Education
- Past and future Symposia, Conferences, Meetings
- Other further important information.

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## Scientific Information

### **Prof. Dr. L. Vécsei**

Department of Neurology  
University of Szeged  
Semmelweis str. 6.,  
6725 Szeged, Hungary  
Phone: +36-62-545-351  
Fax: +36-62-545-597  
e-mail: vecsei.laszlo@med.u-szeged.hu

## Symposium Secretariat

### **Congress & Hobby Service**

P.O.B. 1022.  
H-6701 Szeged,  
Hungary  
Phone: +36-62-484-531, +36-62-484-532  
Fax: +36-62-450-014  
e-mail: info@congress-service.hu



## Symposium home page

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