63 Role of Immunity and Inflammation in the Pathophysiology of Neurodegenerative Diseases
Fakhoury, M. (Montreal, Que.)

70 Genetic Variation of MT-ND Genes in Frontotemporal Lobar Degeneration: Biochemical Phenotype-Genotype Correlation

81 Is There a Role for DAT-SPECT Imaging in a Specialty Movement Disorders Practice?
Bega, D.; Gonzalez-Latapi, P.; Zadikoff, C.; Spies, W.; Simuni, T. (Chicago, Ill.)

87 Natural History of Parkinson’s Disease in the Province of Segovia: Disability in a 20 Years Longitudinal Study
Duarte, J. (Segovia); García Olmos, L.M. (Madrid); Mendoza, A.; Martínez Pueyo, Á.; Clavería, L.E. (Segovia)

93 Dysfunctional Dopaminergic Neurones in Mouse Models of Huntington’s Disease: A Role for SK3 Channels
Dallérac, G.M. (Milton Keynes); Levasseur, G. (Orsay); Vatsavayai, S.C.; Milnerwood, A.J.; Cummings, D.M.; Kraev, I. (Milton Keynes); Huetz, C. (Orsay); Evans, K.A.; Walters, S.W.; Rezaie, P. (Milton Keynes); Cho, Y. (Talence); Hirst, M.C.; Murphy, K.P.S.J. (Milton Keynes)
Brief Communications

109 Antecedent Disease Is Less Prevalent in Amyotrophic Lateral Sclerosis

114 Abnormal Cochlear Potentials in Friedreich's Ataxia Point to Disordered Synchrony
   of Auditory Nerve Fiber Activity
   Santarelli, R. (Padova); Cama, E. (Padova/Treviso); Pegoraro, E. (Padova); Scimemi, P.
   (Padova/Treviso)

121 Histological Bulbar Manifestations in the ALS Rat
   Sakowski, S.A.; Feldman, E.L. (Ann Arbor, Mich.)
Neuro-degenerative Diseases

Editor-in-Chief
R.M. Nitsch, Zürich

Associate Editors
C. Hock, Zürich
P.G. Unschuld, Zürich

Editorial Board

Neurobiology
Molecular Biology
K. Beyreuther, Heidelberg

Cell Biology
M. Goedert, Cambridge
T. Iwatsubo, Tokyo
E.H. Koo, San Diego, Calif.
N.K. Robakis, New York, N.Y.
G. Thinakaran, Chicago, Ill.

Animal Models
J. Shen, Boston, Mass.

Structural Biology
B. Solomon, Tel Aviv

Clinical Research
Genetics
A. Brice, Paris
L. Lannfelt, Uppsala
W. Le, Shanghai
C. Van Broeckhoven, Antwerpen

Neuropathology
B. Ghetti, Indianapolis, Ind.
C.L. Masters, Melbourne, Vic.

Imaging
A. Villringer, Berlin

Biological Markers
K. Blennow, Mölndal
J.H. Growdon, Boston, Mass.

Therapy
S.T. DeKosky, Charlottesville, Va.

Drug Discovery
Pharmaceuticals
A. Fisher, Ness Ziona
B. Schmidt, Darmstadt
H. Soreq, Jerusalem
M. Takeda, Osaka
Neurodegenerative Diseases

Neurodegenerative Diseases is a multidisciplinary journal for the publication of advances in the understanding of Neurodegenerative Diseases, including Alzheimer disease, Parkinson's disease, amyotrophic lateral sclerosis, Huntington disease and related neurological and psychiatric disorders. Neurodegenerative Diseases publishes results from basic and clinical scientific research programs designed to better understand the normal functions of genes and proteins involved in Neurodegenerative Diseases, to characterize their role in pathogenic disease mechanisms, to model their functions in animals and to explore their roles in the diagnosis, treatment and prevention of Neurodegenerative Diseases. It is the belief that successful strategies for novel treatments of Neurodegenerative Diseases will emerge from the intelligent integration of basic neurobiology with clinical sciences. Therefore, Neurodegenerative Diseases will accept high-quality papers from a broad spectrum of scientific research areas ranging from molecular and cellular biology to neuroscience, pharmacology, genetics and the clinical sciences.

Neurodegenerative Diseases is a peer-reviewed journal that publishes original research in the form of Articles and Brief Communications to Neurodegenerative Diseases as well as Review Articles, Mini Reviews and Commentaries.

Submission

Only original papers written in English are considered and should be submitted online:

www.karger.com/ndd

Should you experience any problems with your submission, please contact:

ndd@karger.ch

Editorial Office ‘Neurodegenerative Diseases’
S. Karger AG
P.O. Box
CH–4009 Basel (Switzerland)
Tel. +41 61 306 1358
Fax +41 61 306 1434

Names, postal and e-mail addresses of four experts in the appropriate area of research should accompany each manuscript. Selected scientist(s) will be invited to act as referee(s). Referees suggested should not be from the same institution as the author and should have expert knowledge of the subject.

Articles should be fully documented reports of original research. They must describe significant and original observations to be critically evaluated and, if necessary, repeated. They do not normally exceed 6 printed pages including all figures, tables and references. Brief Communications to Neurodegenerative Diseases are short reports of original research and are intended to provide a rapid means of reporting new findings of sufficient importance. They do not normally exceed 2 printed pages including an abstract, essential references and not more than 3 tables or figures. Review Articles, Mini Reviews and Commentaries are either invited by the Editors or may be submitted for consideration. Authors who wish to contribute a manuscript to one of these categories should contact the Editor-in-Chief.

Review Articles describe new developments of interdisciplinary significance and highlight unresolved questions and future directions. They do not generally occupy more than 9 printed pages. Mini Reviews should focus on topics of current interest and not exceed 5 printed pages.

Commentaries should offer a more personalized perspective on a topic that will be of interest to the general readership and fill an integral number of printed pages, generally one or two, including one or two small figures. All contributions to these categories will be subjected to editorial review.

Reports should comprise title page, Key Words, Abstract, Introduction, Results and Discussion, References, tables, figure legends, and figures – in this order.

Conditions

Only manuscripts that conform to the Guidelines for Authors will be considered and are subject to editorial review.

The manuscript must be accompanied by a cover letter stating that all authors have seen and given their approval for submission of the manuscript to be considered for publication in Neurodegenerative Diseases. Manuscripts are accepted for review with the understanding that persons cited in unpublished work have approved such citations. Authors are required to identify a minimum of four preferred reviewers.

Manuscripts are received with the explicit understanding that they are not under simultaneous consideration by any other publication or have not already been published elsewhere. Submission of an article for publication implies transfer of the copyright from the author to the publisher upon acceptance. Accepted papers become the permanent property of Neurodegenerative Diseases and may not be reproduced by any means, in whole or in part, without the written consent of the publisher. It is the author’s responsibility to obtain permission to reproduce illustrations, tables, etc. from other publications.

The authors agree that their articles will be accompanied, if necessary, by a simplified version written by a scientific writer.

Manuscripts that do not comply with the ethical standards recommended by the Helsinki Declaration will not be accepted.

Arrangement

Title page: The first page of each paper should include the title, the authors’ names, the institute where the work was conducted, and a short title for use as running head.

Full address: The exact postal address of the corresponding author complete with postal code must be given at the bottom of the title page. Please also supply phone/fax numbers and e-mail address.

Key words: Please supply 3–10 key words in English that reflect the content of the paper.

Abstract: Each paper needs an abstract of about 200 words, and should be structured as follows:

Background: What prompted the study?

Objectives: What was the purpose of the study?

Methods: How was the study carried out?

Results: What are the most important findings?

Conclusion: What is the most important conclusion? The abstract should not exceed 250 words, and any abbreviations must be explained.

Footnotes: Avoid footnotes. When essential, they should be numbered consecutively and typed at the foot of the appropriate page.

Tables and illustrations: Tables and illustrations (both numbered in Arabic numerals) should be prepared on separate sheets. Tables require a heading and figure legends should be supplied on a separate sheet. For the reproduction of illustrations, only good drawings and original photographs will be accepted; negatives or photocopies cannot be used. Due to technical reasons, figures with a screen background should not be submitted. When possible, group several illustrations in one block for reproduction (max. size 180 × 223 mm) or provide crop marks. Electronically submitted b/w halftone and color illustrations must have a final resolution of 300 dpi after scaling, and line drawings one of 800–1,200 dpi.

Color illustrations

Online edition: Color illustrations are reproduced free of charge. In the print version, the illustrations are reproduced in black and white. Please avoid referring to the colors in the text and figure legends.

Print edition: Up to 6 color illustrations per page can be integrated within the text at CHF 960.00 per page.

References: Identify references in the text with Arabic numerals [in square brackets]. Material submitted for publication but not yet accepted should be noted as [unpublished data] and not be included in the reference list. The list of references should include only those publications cited in the text. Do not alphabetize; number references in the order in which they are first mentioned in the text. The surnames of the authors followed by their initials should be given. There should be no punctuation other than a comma to separate the authors. Preferably, please cite all authors. Abbreviate journal names according to the Index Medicus system. Also see International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals (www.icmje.org).

Examples


(b) Papers published only with DOI numbers: Theocharides TC, Boucher W, Spear K: Serum interleukin-6 reflects disease severity and osteoporosis in mastocytosis patients. Int Arch Allergy Immunol DOI: 10.1159/000063858.
Papers that have been submitted but are not yet accepted should not be listed in the bibliography, but can be referred to in the text as unpublished observations. If details of methods are only available in papers that are ‘in press’, copies of the papers should be included with the manuscript submitted to Neurodegenerative Diseases so that the editorial referees can have adequate information to judge the manuscript.

Reference Management Software: Use of EndNote is recommended for easy management and formatting of citations and reference lists.

Digital Object Identifier (DOI)
S. Karger Publishers supports DOIs as unique identifiers for articles. A DOI number will be printed on the title page of each article. DOIs can be useful in the future for identifying and citing articles published online without volume or issue information. More information can be found at www.doi.org.

Supplementary Material
Supplementary material is restricted to additional data that are not necessary for the scientific integrity and conclusions of the paper. Please note that all supplementary files will undergo editorial review and should be submitted together with the original manuscript. The Editors reserve the right to limit the scope and length of the supplementary material. Supplementary material must meet production quality standards for Web publication without the need for any modification or editing. In general, supplementary files should not exceed 10 Mb in size. All figures and tables should have titles and legends and all files should be supplied separately and named clearly. Acceptable files and formats are: Word or PDF files, Excel spreadsheets (only if the data cannot be converted properly to a PDF file), and video files (.mov, .avi, .mpeg).

Drugs
Generic names should be used in text, tables, and figures. Trade names in upper case may be mentioned in parentheses in the first text reference to the drug but should not appear in titles, figures or tables. The chemical nature of new drugs must be given when known.

Abbreviations
When an abbreviation is used in the manuscript, it should be defined in the text the first time it is used. Abbreviations for commonly used substances should be those recommended by the Journal of Biological Chemistry. Abbreviations for drugs/chemicals may be used if properly defined with the chemical or generic name when the abbreviation is first used. Excessive use of abbreviations in the text, however, is strongly discouraged. Most abbreviations are used without punctuation, with no distinction between singular and plural forms.

Author’s Choice™
With this option the author can choose to make his article freely available online against a one-time fee of CHF 3,000.00. This fee is independent of any standard charges for supplementary pages, color images etc. which may apply. More information can be found at www.karger.com/authors_choice.

NIH-Funded Research
The U.S. National Institutes of Health (NIH) mandates under the NIH Public Access Policy that final, peer-reviewed manuscripts appear in its digital database within 12 months of the official publication date. As a service to authors, Karger submits the final version of your article on your behalf to PubMed Central (PMC) immediately upon publishing. It usually receives a PMID within approximately a month and will appear in PMC after 12 months. For those selecting our premium Author’s Choice™ service, the usual embargo will be overridden, accelerating the accessibility of your work. More details on NIH’s Public Access Policy are available at http://publicaccess.nih.gov/policy.htm

Self-Archiving
Karger permits authors to archive their pre-prints (i.e. pre-refereeing) or post-prints (i.e. final draft post-refereeing) on their personal or institution’s servers, provided the following conditions are met: Articles may not be used for commercial purposes, must be linked to the publisher’s version, and must acknowledge the publisher’s copyright. Authors selecting Karger’s Author’s Choice™ feature, however, are also permitted to archive the final, published version of their article, which includes copyediting and design improvements as well as citation links.

Page Charges
There is no page charge for papers of 3 or fewer printed pages (including tables, illustrations and references). Each additional complete or partial page is charged to the author at CHF 325.00. The allotted size of a paper is equal to approx. 11 manuscript pages (including tables, illustrations and references).

E-pub First
All articles are published electronically ahead of print with a DOI number and are supplemented later with the definite reference of the printed version. The articles become available immediately after the authors’ approval to publication, with the added advantage of being citable much earlier than previously. Authors can influence the time of appearance by promptly returning the proofs.

Proofs
Unless otherwise indicated, proofs are sent to the corresponding author and should be returned with the least possible delay. Alterations other than the correction of printer’s errors are charged to the author.

Reprints
Order forms and a price list will be sent with the proofs. Orders submitted after the issue is printed are subject to considerably higher prices.
Contents

See the journal website for contents
2015 EUGMS CONGRESS
OSLO
BREAKING THE ICE
16-18TH SEPTEMBER 2015

www.eugms.org/2015
On behalf of the International Association of Gerontology and Geriatrics Society, we cordially invite you to the 10th IAGG Asia/Oceania Regional Congress (IAGG Asia/Oceania 2015 Congress) to be held from 19 - 22 October 2015 at the International Convention and Exhibition Center Commemorating His Majesty’s 7th Cycle Birthday Anniversary (CMICE) in Chiang Mai, Thailand.

Themed "Healthy Aging Beyond Frontiers", IAGG Asia/Oceania 2015 Congress will tackle some of the most controversial issues facing today’s leading health professionals from across region and around the world.

KEYNOTE & PLENARY SPEAKERS

- Dr. Thep Himathongkam
- Dr. Helen Feist
- Prof. Kaarin Anstey
- Prof. Hiroko Akiyama
- Prof. Piyarat Govitrarapong
- Prof. Shogo Endo
- Prof. Hyunsook Yoon
- Prof. Du Peng


PROGRAM HIGHLIGHTS:

- Value of the Aged and Their Contributions
- Biological Science Approach Leading to Healthy Aging
- Promoting/Maintaining Maximum Functioning into Old Age
- Empowering Active and Productive Ageing: Research Evidence

KEYNOTE & PLENARY LECTURES TOPICS:

- Melatonin in the Brain Aging Process
- Health Cognitive and Brain Ageing
- Diabetic Foot Care in Thailand: A Model of Public and Private Partnership
- Climate Changes and Aged Society

SUBMIT YOUR ABSTRACT

IAGG Asia/Oceania 2015 Congress is now accepting abstracts under the four main themes:

- Clinical Sciences
- Biological Sciences
- Behavioural and Social Sciences
- Policy, Planning and Practice


IMPORTANT DATES

- Abstract Submission Deadline: 30 April 2015
- Early Bird Deadline: 26 May 2015

CONGRESS SECRETARIAT

PICO Building,
10 Soi Lasalle 56, Sukhumvit, Bangna,
Bangkok 10260 Thailand

Tel: +662 7487881
Fax: +662 7487880
Email: info@iaggchiangmai2015.com

Co-hosted by:  

Supported by:  

www.iaggchiangmai2015.com
9th World Congress of the International Society of Physical and Rehabilitation Medicine

19–23 June 2015  Maritim Hotel Berlin (Germany)

Main Topics

- Best Practice Models in Musculoskeletal Pain
- Biomolecular Research in Physical and Rehabilitation Medicine
- "Culture Matters" in Rehabilitation (in Collaboration with the European Academy for Rehabilitation Medicine)
- Genetic, Molecular and Neuronal Mechanism in Pain Rehabilitation
- Goal Setting in Rehabilitation: State of the Art
- Joining Efforts Towards the Implementation of the WHO Disability Action Plan 2014–2021
- Neuronal Reorganisation
- Post-Stroke Spasticity Management
- Rehabilitation as a Comprehensive Health Strategy
- Return-to-Work, Vocational Rehabilitation
- Sport Rehabilitation
- Technology Enhanced Functioning
The 2nd World Congress on NeuroTherapeutics: Dilemmas, Debates, Discussions

Prague, Czech Republic
September 3-6, 2015

Abstract Submission Deadline: June 8, 2015

Preliminary Program

Symposia
- Gene therapy in neurology
  - Viral and non-viral vectors
  - Gene therapy for brain tumors
- Metabolic disease
- The promise and obstacles of gene therapy in muscular dystrophies
- Gene therapy for neuropathies

Future Neurotherapeutics
- Multiple sclerosis
- Stroke
- Parkinson’s disease/Movement disorders
- Infections
- Alzheimer’s disease
- Paraneoplastic conditions
- Neuropathic pain
- Cerebellar ataxias

Scientific sessions
- Animal models as a vehicle to evaluate therapeutic effect in neurological diseases
- MS
- Stroke
- Parkinson’s disease
- Paraneoplastic conditions
- Muscle disease
- Alzheimer’s disease
- ALS

CNS Infections
- Therapy of Lyme and post Lyme disease syndrome
- PML: Prevention, diagnosis and therapy
- When to use steroid therapy in the various VZV clinical presentations
- Therapy of NeuroAIDS

Alzheimer’s and other dementing conditions

Movement Disorders
- Vaccination against synuclein
- The treatment of extra nigral involvement in PD
- Focal stem cell therapy for PP
- Focused ultrasound therapy for movement disorders

Management dilemmas in neuroimmunological conditions
- MS in pregnancy
- The patient with advanced MS
- Acute myelitis and NMO: What is the right treatment?
- CNS vasculitis: What to treat and how to follow?
- Steroids in myasthenia: When and how?

Round table discussions between academia-pharma industry-ethics and regulators
- Therapy development for orphan neurological diseases
- Length of MS pivotal studies
- Therapy of dementia

www.congressmed.com/neurology
Call for Abstracts

As of April 13 to June 14, 2015
JOIN MORE THAN 6000 COLLEAGUES AT THE FIRST CONGRESS OF THE EUROPEAN ACADEMY OF NEUROLOGY!

www.eaneurology.org/berlin2015
The rapidly expanding area of research known as neuroimmunomodulation explores the way in which the nervous system interacts with the immune system via neural, hormonal, and paracrine actions. Encompassing both basic and clinical research, Neuroimmunomodulation reports on all aspects of these interactions. Basic investigations consider all neural and humoral networks from molecular genetics through cell regulation to integrative systems of the body. The journal also aims to clarify the basic mechanisms involved in the pathogenesis of the CNS pathology in AIDS patients and in various neurodegenerative diseases. Although primarily devoted to research articles, timely reviews are published on a regular basis.

Selected contributions
- Toll-Like Receptor 9 Is Required for Chronic Stress-Induced Immune Suppression: Li, H. (Johnson City, Tenn.); Zhao, J. (Johnson City, Tenn./Jinan); Chen, M.; Tan, Y.; Yang, X.; Caudle, Y.; Yin, D. (Johnson City, Tenn.)
- Prospective Relationship between Hemispheric Lateralisation and CD4+ T Cells in Human Immunodeficiency Virus Type 1: Sumner, R.C.; Nowicky, A.V.; Parton, A.; Wylock, C.; Cserjesi, R.; Fischler, B.; Lacor, P.; Gidron, Y. (Brussels)
- Severe Disability in Patients with Relapsing-Remitting Multiple Sclerosis Is Associated with Profound Changes in the Regulation of Leptin Secretion: Rotondi, M. (Pavia); Baticchi, A.P.; Coperchini, F. (Pavia); Caggioni, M.; Zerbini, F.; Sideri, R.; Leporati, P.; Nociti, V. (Milan); Frisullo, G.; Mirabella, M.; Magri, F.; Oliviero, A.; Chiovato, L. (Pavia)
- The Impact of Exposure to a Novel Female on Symptoms of Infection and on the Reproductive Axis: Lopes, R.C.; Chan, H.; Demathieu, S.; González-Gómez, P.L.; Wingfield, J.C. (Davis, Calif.); Bentley, G.E. (Berkeley, Calif.)

More information at www.karger.com/nim
Gain new insights into the mechanisms of normal and abnormal brain development

Developmental Neuroscience is a multidisciplinary journal publishing papers covering all stages of invertebrate, vertebrate and human brain development. Emphasis is placed on publishing fundamental as well as translational studies that contribute to our understanding of mechanisms of normal development as well as genetic and environmental causes of abnormal brain development. The journal thus provides valuable information for both physicians and biologists. To meet the rapidly expanding information needs of its readers, the journal combines original papers that report on progress and advances in developmental neuroscience with concise mini-reviews that provide a timely overview of key topics, new insights and ongoing controversies.

Developmental Neuroscience
Founded: 1978
Category: Basic Research
Fields of Interest: Neurobiology/Neurology
Listed in bibliographic services, including Current Contents®/Life Sciences, PubMed/MEDLINE, Biological Abstracts
2015: Volume 37
6 issues per volume
Language: English
ISSN 0378–5866
e-ISSN 1421–9859

Impact Factor: 2.453
5-Year Impact Factor: 2.995

Selected contributions
- Developmental and Adult GAP-43 Deficiency in Mice Dynamically Alters Hippocampal Neurogenesis and Mossy Fiber Volume: Latchney, S.E.; Masulis, I. (Dallas, Tex.); Zaccaria, K.J. (Syracuse, N.Y.); Lagace, D.C.; Powell, C.M. (Dallas, Tex.); McCasland, J.S. (Syracuse, N.Y.); Eisrich, A.J. (Dallas, Tex.)
- Nox4-Generated Superoxide Drives Angiotensin II-Induced Neural Stem Cell Proliferation: Topchiy, E.; Panzhinskiy, E.; Griffin, W.S.T.; Barger, S.W.; Das, M.; Zawada, W.M. (Little Rock, Ark.)
- Neonatal Systemic Exposure to Lippopolysaccharide Enhances Susceptibility of Nesfatin 1-84 to Rotenone Neurotoxicity in Mice: Cai, Z.; Fan, L.-W. (Jackson, Miss.); Kaizaki, A. (Tokyo); Tien, L.-T. (New Taipei City); Ma, T.; Pang, Y.; Lin, S.; Lin, R.C.S.; Simpson, K.L. (Jackson, Miss.)
- A Single Neonatal Injury Induces Life-Long Deficits in Response to Stress: Victoria, N.C.; Inoue, K.; Young, L.J.; Murphy, A.Z. (Atlanta, Ga.)
- Concurrent Erythropoietin and Hypothermia Treatment Improve Outcomes in a Term Nonhuman Primate Model of Perinatal Asphyxia: Traudt, C.M.; McPherson, R.J.; Bauer, L.A.; Richards, T.L.; Burcher, T.M.; McAdams, R.M.; Juul, S.E. (Seattle, Wash.)
- Oligodendroglial Alterations and the Role of Microglia in White Matter Injury: Relevance to Schizophrenia: Chew, L.-J. (Washington, D.C.); Fuss-Poli, P. (London); Schmitz, T. (Berlin)

More information at www.karger.com/dne
Karger Publishers – 125 Years of Experience in Medical and Scientific Publishing

**Festschrift**

*Karger – Connecting the World of Biomedical Science*

This richly illustrated Festschrift chronicles the company’s development and contributions in the service of medicine and science since 1890. It tells the history of Karger Publishers until the present day.

Please send an e-mail to 125years@karger.com to receive your free copy or discover it online.

[www.karger.com/festschrift](http://www.karger.com/festschrift)

**Publishing Highlights 1890–2015**

Take a guided tour through 125 years of medical and scientific publishing! Follow us on a leisurely walk through interesting times, fascinating topics and beautiful illustrations.

[www.karger.com/highlights](http://www.karger.com/highlights)

**Karger Gazette**

The Karger Gazette anniversary issue explores the STM publishing business in the digital age, offers short portraits of Karger’s journal and book series editors as well as interviews with three renowned scientists.

[www.karger.com/gazette](http://www.karger.com/gazette)
Karger Publishers – 125 Years of Experience in Medical and Scientific Publishing

Karger Publishers – independent, family-run and Swiss-based.

It is our goal to serve the global scientific community with innovative and outstanding publications in all fields of medical science. This means dedication to maintaining the highest standards of quality, as well as personalized service for authors, editors and readers.

www.karger.com

Please order a free copy of the Karger Festschrift ‘Connecting the World of Biomedical Science’ by sending your address to 125years@karger.com.