



## ERA-Net NEURON is summarizing 5 years of successful activity

January 2007- December 2011 | Final Meeting, Berlin, October 2011



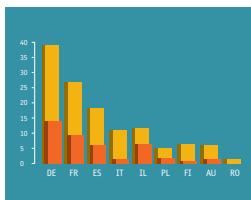
PG 2

ERA-Net NEURON FINAL MEETING OCTOBER 27-28, 2011, BERLIN, GERMANY



PG 3

FINAL SYMPOSIUM OF ERA-Net NEURON 1<sup>ST</sup> JTC (2008)



PG 4-5

STATISTICS OF ERA-Net JOINT CALLS

Apr 2008 Vienna	July 2008 Geneva	Oct 2009 Jerusalem
Jan 2011 Lake Como	May 2011 Montreal	

PG 6

WORKSHOPS ORGANIZED BY ERA-Net NEURON

Oct 2007 Paris	May 2009 Paris
Sep 2008 Warsaw	Sep 2010 Berlin

PG 7

SCIENTIFIC WORKSHOPS ORGANIZED BY ERA-Net NEURON



PG 8

EXCELLENT PAPER IN NEUROSCIENCE AWARD (EPNA)



More information can be found in our web page  
<http://www.neuron-eranet.eu/index.php>

**ERA-Net NEURON FINAL MEETING  
OCTOBER 27 - 28, 2011, BERLIN, GERMANY  
Final Symposium of ERA-Net NEURON  
1st JTC (2008)**

**"European research projects on  
neurodegenerative diseases of the  
central nervous system"**



ERA Net NEURON members representing 18 organizations from 13 countries

The final meeting of the ERA-Net NEURON, first funding phase, was attended by over 110 participants and was opened with a welcome note by the Parliamentary Secretary of State, Dr. Helge Braun, from the German Federal Ministry of Education and Research (BMBF). He stressed the importance of research into brain diseases and the previous and current commitment of the BMBF to support this research area on both the national and international level. "ERA-Nets are well-adapted to the needs of funding bodies and research communities alike. Many ERA-Nets were successful in creating trust and understanding - the glue required for joint research funding. We consider the ERA-Net NEURON a shining example for this." he explained.

The ERA-Net NEURON coordinator, PD Dr. Marlies Dorlöchter, from PT-DLR, Germany, gave an overview of the highlights and results of the NEURON project during 2007-2011. The main event of the 2 day meeting was the Final Symposium of ERA-Net NEURON 1st JTC (2008) "European research projects on neurodegenerative diseases of the central nervous system".

The coordinators and principal investigators of the 12 ERA-Net NEURON-funded projects presented the results of their works. Besides the scientific achievements, the added value of the collaboration and contributions of all project partners were stressed. Young investigators from the projects presented their results in two dedicated poster sessions.

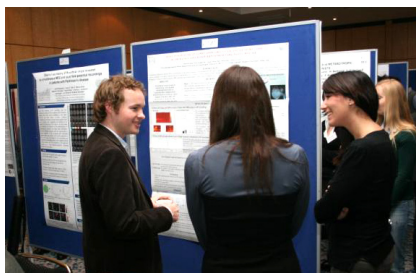
The symposium ended with a panel discussion in which project coordinators were asked for their opinion on the value of the ERA-Net NEURON. In general, the coordinators of the ERA-Net NEURON-funded projects were enthusiastic about the ERA-Net NEURON organization.

The main statements that were raised along the discussion were:

Research collaborations funded by the NEURON consortium produced a prosperous scientific output: Publications and patents resulting from the projects were numerous and of highest scientific quality. Furthermore, as a result of the ERA-Net NEURON JTC, collaborations were started that were not possible before the transnational effort of the ERA-Net scheme. The ERA-Net scheme thus fills an important gap in the European funding landscape. The small and intense transnational collaborations initiated through the NEURON call were considered a plus in European research funding, also as compared to funding opportunities in the US.



Parliamentary Secretary of State, Dr. Helge Braun shakes hands with ERA-Net NEURON coordinator, PD Dr. Marlies Dorlöchter



Young investigators from the projects presented their results in dedicated poster sessions



The meeting was attended by over 110 participants

## Final Symposium of ERA-Net NEURON 1st JTC- List of presentations



**PhysiolDBS:** Physiological mechanisms of Deep Brain Stimulation in Parkinson's disease

*Jens Volkmann*



**ADtest:** Role of proteases and their inhibitors in pathophysiology and diagnosis of Alzheimer Disease

*Holger Jahn*



**MIPROTRAN:** Transfer of misfolded protein as a Pathogenetic mechanism in neurodegenerative disease

*Jennifer Steiner*



**EPITHERAPY:** An epigenetic approach towards the recovery of neuronal network plasticity and cognitive function in neurodegenerative disease

*Andre Fischer*



**mGluRpatho:** Group III metabotropic glutamate receptors (mGluRs): from new molecules to therapeutic development for the treatment of Parkinson's disease

*Marianne Amalric*



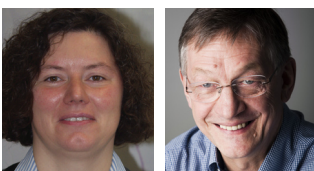
**nEUROsyn:** Molecular mechanisms underlying synaptic dysfunction in prototypic neurodegenerative diseases related to protein misfolding

*Fabrizio Tagliavini*



**FamPD:** Identification of new genes causing familial forms of PD

*Alexis Brice*



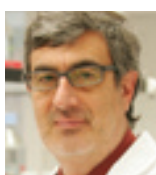
**PARKCDNF:** Development of an experimental therapeutic strategy using the newly identified growth factor CDFN for treatment of Parkinson's disease

*Kerstin Krieglstein, Mart Saarma*



**ERMCC-NDEG:** The activity-driven ER-mitochondria Calcium Cycle (ERMCC) and protein misfolding in neurodegenerative diseases: finding targets for therapy

*Julian Grosskreutz*



**HETEROPARK:** Synthesis and validation of antiparkinsonian drugs targeting GPCR heteromers

*Rafael Franco*



**iSoALS:** Modeling sporadic ALS in motor neurons by genetic reprogramming of patient skin fibroblasts

*Georg Haase*



**ProGen:** Protecting against neurodegeneration by somatic gene therapy

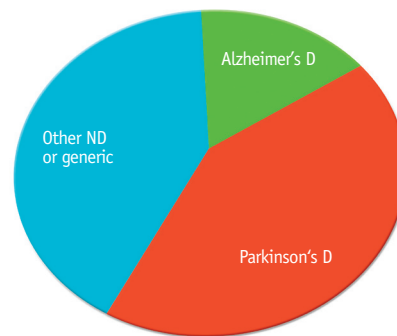
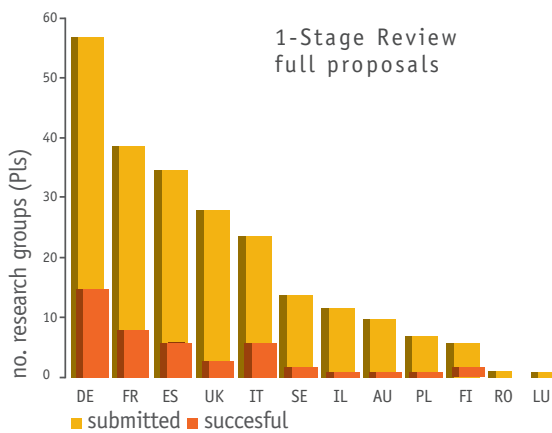
*Thomas Arendt*

## Joint Transnational Calls

Implementation of joint funding schemes is one of the most ambitious activities of ERA-Nets. In ERA Net NEURON the funded projects can be within the breadth of research from understanding basic mechanisms of brain function and disease through to clinical studies in man. The ERA-Net NEURON partners particularly wish to promote multi-disciplinary working and to encourage translational research proposals that combine basic and clinical approaches (from bench to bedside). The individual components of joint applications should be complementary and contain novel, ambitious ideas. There should be clear added value in funding the collaboration over the individual projects. ERA Net NEURON launched four joint calls:

### 2008 ■ “Neurodegenerative Diseases of the central Nervous System”

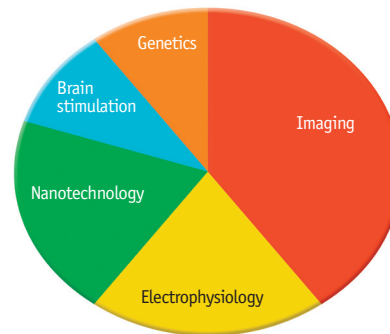
■ Call launched in January 2008 by 13 organisations from 12 countries ■ 59 proposals submitted involving 234 research groups, applying for 69 million € in total ■ Reviewed by 52 experts, 16 attended the PRP meeting ■ 12 funded projects involving 45 research groups, 10.2 million € committed



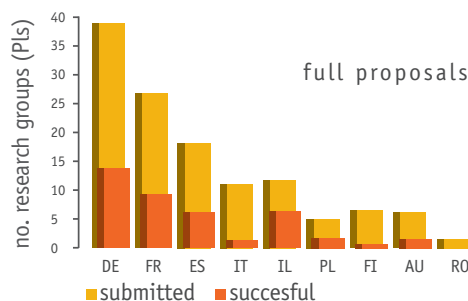
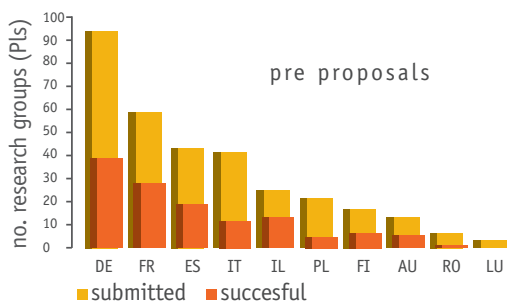
Distribution of research topics in the proposals selected for funding

### 2009 ■ “Development and Advancement in Methods and Technologies Towards the Understanding of Brain Diseases”

■ Call launched in January 2009 by 11 organisations from 10 countries ■ 81 pre-proposals submitted involving 323 research groups, applying for 80 million € in total ■ Reviewed by 30 experts ■ 29 projects were selected to submit full proposals ■ Reviewed by 11 experts attending the PRP meeting ■ 10 funded projects involving 43 research groups, 9.9 million € committed

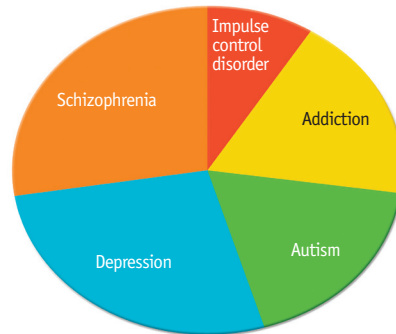


Distribution of research topics in the proposals selected for funding

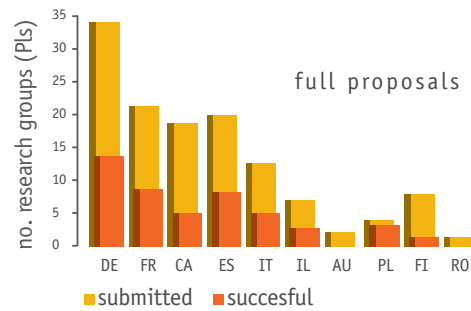
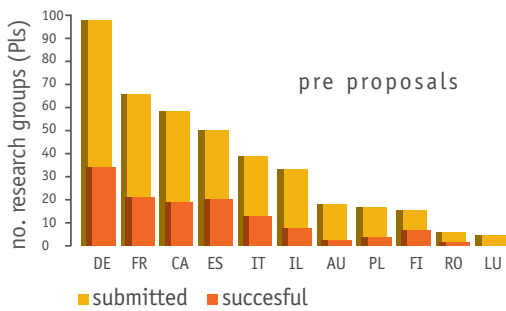


## 2010 ■ “Mental Disorders”

■ Call launched in January 2010 by 13 organisations from 11 countries ■ 103 pre-proposals submitted involving 402 research groups, applying for 80 million € in total ■ Reviewed by 35 experts ■ 32 projects were selected to submit full proposals ■ Reviewed by 11 experts attending the PRP meeting ■ 11 funded projects involving 47 research groups, 9.6 million € committed

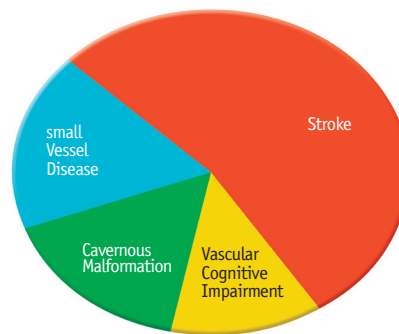


Distribution of research topics in the proposals selected for funding

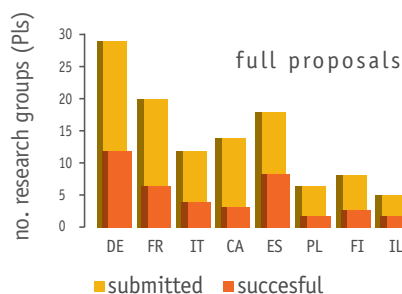
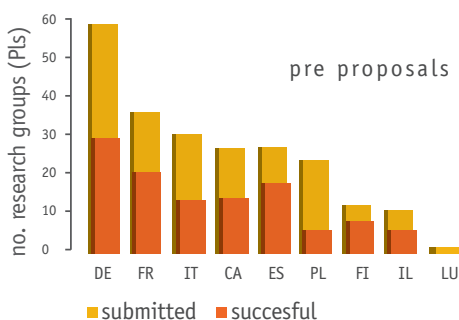


## 2011 ■ “Cerebrovascular Diseases”

■ Call launched in January 2011 by 14 organisations from 12 countries ■ 57 pre-proposals submitted involving 229 research groups, applying for 50 million € in total ■ Reviewed by 32 experts ■ 29 projects were selected to submit full proposals ■ Reviewed by 11 experts attending the PRP meeting ■ 10 funded projects involving 44 research groups, 10 million € committed



Distribution of research topics in the proposals selected for funding



## Workshops organized by ERA-Net NEURON

### Future perspectives, benefits and bottlenecks of Neuro-biobanks

Apr  
2008  
Vienna

- Dr. Thomas Pickardt *"BMB-EUCOOP - A LEGAL BASIS OF AN EU-WIDE BIOBANK-COOPERATION"*
- Prof. Kurt Zatloukal *"BBMRI - EUROPEAN RESEARCH INFRASTRUCTURE FOR BIOBANKS AND BIOMOLECULAR RESOURCES"* ■ Ms. Andrea Cook *"BIOBANKING HARMONISATION – ETHICAL AND LEGAL CHALLENGES"* ■ Prof. Martin Yuill *"UK NATIONAL NETWORK FOR DNA SAMPLE MANAGEMENT"* ■ Prof. Hans Kretzschmar *"BRAINNET EUROPE"* ■ Prof. James Ironside *"THE HUMAN TISSUE ACT - IMPLEMENTATION AND IMPACT ON RESEARCH"* ■ Prof. Juergen Goebel *"REGULATIONS AND GUIDELINES AROUND BIOBANKING"*

For more details: [http://www.neuron-eranet.org/\\_media/Biobank\\_workshop\\_Vienna\\_report.pdf](http://www.neuron-eranet.org/_media/Biobank_workshop_Vienna_report.pdf)

### Frontiers in Neuroscience and prospects for funding in Europe

July  
2008  
Geneva

- PD. Dr. Marlies Dörlichter (Germany) *"FUNDING OF NEUROSCIENCE IN EUROPE: THE ERA-NET NEURON"*
- Dr. Patrizia Tosetti (European Commission, DG Research) *"THE EC FUNDING POLICY FOR NEUROSCIENCE"*
- Prof. Joel Hasse Ferreira (Portugal-European Parliament) *"EC PARLIAMENT REPRESENTATIVE (SCIENTIFIC AND TECHNOLOGICAL OPTIONS ASSESSMENT: STOA)"* ■ Prof. Richard Nakamura (USA - NIH) *"THE FUNDING POLICY FOR NEUROSCIENCE IN NORTH AMERICA"* ■ Prof. Paola Bovolenta, (Spain) *"ADVANCES AND CHALLENGES IN NEUROSCIENCE"* ■ Prof. Mart Saarna (Finland) *"BIOLOGY AND THERAPEUTIC POTENTIAL OF NEUROTROPHIC FACTORS"* ■ Prof. Laurent Cohen (France) *"NEUROPSYCHOLOGY AND IMAGERY OF WORD READING: FOOTPRINTS OF CULTURE IN THE BRAIN"* ■ Prof. Dr. Patrik Brundin (Lund) ■ Prof. Niels Birbaumer (Germany) *"BRAIN COMPUTER INTERFACES: APPLICATIONS IN PARALYSIS AND EMOTIONAL DISORDERS"*

For more details: [http://www.neuron-eranet.org/\\_media/Geneva\\_110708\\_V30-04-09.pdf](http://www.neuron-eranet.org/_media/Geneva_110708_V30-04-09.pdf)

### Neuroethics

Oct  
2009  
Jerusalem

- Eric Racine (Canada) *"ETHICS AND THE PUBLIC UNDERSTANDING OF NEUROSCIENCE: PERSPECTIVES FROM THE MEDIA"* ■ Avraham Steinberg (Israel) *"STEM-CELL RESEARCH – SCIENTIFIC, ETHICAL AND JEWISH LEGAL ASPECTS"*
- Renana Eitan (Israel) *"EFFECTS OF DBS TREATMENT ON PERSONALITY OF PATIENTS"* ■ Elizabeth Peel (UK) *"ETHICAL ISSUES IN NEUROIMAGING RESEARCH: PARTICIPANTS' PERSPECTIVES"* ■ Hermona Soreq (Israel) *"THE NEUROETHICS OF BRAIN RESEARCH"* ■ Alan Rubinow (Israel) *"WHY AND HOW TO TEACH MEDICAL ETHICS"*

### Transferring Technology from Bench to Bedside: Practices, Barriers and Policies

Jan  
2011  
Lake Como

- Dr. Nora Tarcic (Israel) *"TECH TRANSFER AT TEVA"* ■ Dr. Morgan Meyer *"FINDINGS SO FAR AND FOOD FOR DISCUSSION"* ■ Dr. Djalil Coowar (Luxembourg) *"AXOGLIA THERAPEUTICS, THE FIRST BIOPHARMACEUTICAL COMPANY IN LUXEMBOURG: HYPE OR REALITY"* ■ Dr. Philip Barker (Canada) *"COMMERCIALIZATION RESEARCH AT THE MONTREAL NEUROLOGICAL INSTITUTE"* ■ Dr. Joyce Fung (Canada) *"INVENTION, RE-INVENTION, AND INNOVATIONS: FACILITATORS AND BARRIERS IN REHABILITATION TECHNOLOGY TRANSFER"* ■ Prof. Manfred Windisch (UK) *"DEVELOPMENT OF NANOPARTICLES TARGETING SPECIFIC BLOOD BRAIN BARRIER TRANSPORT SYSTEMS FOR IMPROVED DRUG DELIVERY OF ANTI-ALZHEIMER COMPOUNDS"*

For more details: [http://www.neuron-eranet.org/\\_media/report\\_techtransfer.pdf](http://www.neuron-eranet.org/_media/report_techtransfer.pdf)

### From Bench to Bedside – Investigator-driven Multinational Clinical Trials

May  
2011  
Montreal

- Jacques Demotes (France) *"NEED FOR SUPPORT AND FOR FUNDING TO MULTINATIONAL INVESTIGATOR-DRIVEN CLINICAL TRIALS: THE ROLE OF ECRIN"* ■ Christian Ohmann (Germany) *"INVESTIGATOR-DRIVEN MULTINATIONAL CLINICAL TRIALS: RATIONAL, DEFINITION AND NEEDS"* ■ René Kahn (The Netherlands) *"A PSYCHIATRIST'S PERSPECTIVE ON MULTINATIONAL CLINICAL TRIALS"* ■ Wolfgang Oertel (Germany) *"A NEUROLOGIST'S PERSPECTIVE ON MULTINATIONAL CLINICAL TRIALS"* ■ Sophie Koutouzov (France) *"THE POSITION OF E-RARE, THE ERA-NET FOR RESEARCH IN RARE DISEASES, ON FUNDING CLINICAL TRIALS"*

For more details: [http://www.neuron-eranet.org/\\_media/report\\_clinical\\_trials.pdf](http://www.neuron-eranet.org/_media/report_clinical_trials.pdf)

## Scientific Workshops organized by ERA-Net NEURON

### Neurodegeneration

Oct  
20  
07

Paris

- Prof. Ignacio Torres Alemán (Spain) *"LOSS OF IGF-I INPUT AS A COMMON CAUSE OF NEURODEGENERATION"*
- Prof. Shlomo Rotshenker (Israel) *"MICROGLIA ACTIVATION IN NEURODEGENERATION (INJURY AND DISEASE): SIGNALLING PHAGOCYTOSIS"*
- Prof. Charles Duyckaerts (France) *"ALZHEIMER'S DISEASE"*
- Prof. Giovanni Frisoni (Italy) *"KEEPING EUROPE IN THE MAINSTREAM OF THE FIGHT AGAINST ALZHEIMER'S: THE SEARCH FOR DISEASE MARKERS"*
- Prof. Thomas Gasser (Germany) *"PARKINSON'S DISEASE AND GENETICS"*
- Prof. Jörg Schulz (Germany) *"PARKINSON'S DISEASE: MODELS AND MECHANISMS FOR IDENTIFICATION OF TREATMENT TARGETS AND COMPOUNDS"*
- Prof. Wolfgang Oertel (Germany) *"PARKINSON SYNDROME AND OTHER MOVEMENT DISORDERS"*
- Prof. Jens Volkmann (Germany) *"DEEP BRAIN STIMULATION FOR MOVEMENT DISORDERS: STATE OF THE ART AND FUTURE NEEDS"*

For more details: [http://www.neuron-eranet.org/\\_media/Paris\\_Workshop\\_2007\\_Report.pdf](http://www.neuron-eranet.org/_media/Paris_Workshop_2007_Report.pdf)

### Mental Illness and Neuronal Dysfunction

May  
20  
09

Paris

- Andreas Meyer-Lindenberg (Germany) *"NEUROGENETIC MECHANISMS OF SCHIZOPHRENIA"*
- Celso Arango (Spain) *"SCHIZOPHRENIA, A NEURODEGENERATIVE DISORDER?"*
- Eduard Vieta (Spain) *"NEUROCOGNITION AND FUNCTIONAL OUTCOME IN BIPOLAR DISORDER"*
- Elizabeth Kuipers (UK) *"EVIDENCE BASED PSYCHOLOGICAL INTERVENTIONS FOR PSYCHOSIS: INDIVIDUAL COGNITIVE BEHAVIOURAL THERAPY AND FAMILY INTERVENTION"*
- Guy Goodwin (UK) *"BIPOLAR DISORDER: NEUROBIOLOGY, CHALLENGE OF EARLY DETECTION AND TREATMENT"*
- Véronique Deroche-Gamonet (France) *"QUESTIONS ABOUT ADDICTIONS THAT CAN OR SHOULD BE ADDRESSED BY EXPERIMENTAL RESEARCH. EXPERIMENTAL RESEARCH ON DRUG ADDICTION: A TURNING POINT"*
- Paul Bebbington (UK) *"EPIDEMIOLOGY OF MENTAL ILLNESSES"*
- Thomas Bourgeron (France) *"SYNAPTIC AND CLOCK GENES IN AUTISM SPECTRUM DISORDER"*

For more details: [http://www.neuron-eranet.org/\\_media/Paris\\_Workshop\\_Report\\_May\\_2009.pdf](http://www.neuron-eranet.org/_media/Paris_Workshop_Report_May_2009.pdf)

### New Technologies in Neurosciences

Sep  
20  
08

Warsaw

- Jean Livet (France) *"CURRENT APPROACHES TO VISUALIZE NEURONAL CIRCUITS: ENGINEERING TOOLS FOR CONNECTOMICS"*
- John Rothwell (UK) *"ADVANCES IN TRANSCRANIAL BRAIN STIMULATION"*
- Mohamed Jaber (France) *"CURRENT AIMS AND HOPES IN CELL BASED THERAPIES OF NEURODEGENERATIVE DISEASES"*
- Arthur Konnerth (Germany) *"HIGH-RESOLUTION OPTICAL IMAGING IN THE LIVING BRAIN"*
- Jacques Mallet (France) *"GENE THERAPY FOR DISEASES OF THE NERVOUS SYSTEM"*
- Bertram Müller-Myhsok (Germany) *"CONVERGENT-OMICS APPROACHES AS A MAJOR TOOL IN NEUROPSYCHIATRIC RESEARCH"*

For more details: [http://www.neuron-eranet.org/\\_media/Warsaw\\_Workshop\\_Report\\_2008-09-final.pdf](http://www.neuron-eranet.org/_media/Warsaw_Workshop_Report_2008-09-final.pdf)

### Future Development in Neuroscience

Sep  
20  
10

Berlin

- Jim Van Os *"GENE ENVIRONMENT INTERACTIONS IN PSYCHIATRIC DISEASES"*
- Alain Prochiantz *"NEURODEVELOPMENT AND CELL BIOLOGY"*
- Richard Frackowiak *"BRAIN NEUROIMAGING FOR DISEASE AND COGNITION"*
- Viktor Jirsa *"MULTISCALE BRAIN DYNAMICS IN THE COMPUTATIONAL NEUROSCIENCES"*
- Martin Dichgans *"STROKE: STATE OF THE ART"*

## EXCELLENT PAPER IN NEUROSCIENCE AWARD (EPNA)

### EPNA 2009

ERA-Net Neuron announced the winners of the Excellent Paper in Neuroscience award for young scientists for the year 2009. The award ceremony took place during the 7th Forum of European Neuroscience Societies (FENS) in Amsterdam (July 3-5).

The two winners, **Dr. Heidi Nousiainen** from Finland and **Dr. Asya Rolls** from Israel awarded each a prize of 3,000€.

#### *The winner papers:*

**Nousiainen et al.** (2008) Mutations in mRNA export mediator GLE1 result in a fetal motoneuron disease. *Nature Genetics* 2, 155-7

**Rolls A. et al.** (2008). Two Faces of Chondroitin Sulfate Proteoglycan in Spinal Cord Repair: A Role in Microglia/ Macrophage Activation. *PLoS Medicine*, 5:1262-1277



Professor Denise Manahan-Vaughan (Second from left), the Chair of the Network of European Neuroscience Schools (NENS) chaired the award ceremony. Dr. Rainer Girgenrath (Right) handed the award to Heidi Nousiainen (Left). Dr. Erkki Raulo (Second from right) was responsible for the management of the award in ERA-NET NEURON.

### EPNA 2010

In June 2010, ERA-Net NEURON published the second call for applications entitled "Awards for Excellent Paper in Neuroscience". The awardee for 2010

was **DR. Jens Schwamborn** from Germany won the 2010 award.

The award of 3.000€, was given in a ceremony during the European Neurodegenerative Diseases-2011 meeting on 'Biology to Drugs & Therapeutics', Rome, October 10, 2011.

#### *The winner paper:*

**Jens C. Schwamborn et al.** (2009) The TRIM-NHL protein

TRIM32 activates microRNAs and prevents self-renewal in mouse neural progenitors *Cell* 136, 913-25



(from right to left) ERA-Net NEURON coordinator, PD Dr. Marlies Dörlöchter and Dr. Erkki Raulo who is in charge of management of the award in ERA-Net NEURON handed the award to DR. Jens Schwamborn from Germany.

### EPNA 2011

The ERA-Net NEURON third call for "Excellent Paper in Neuroscience Award" received 14 excellent applications. These applications were evaluated by ERA-Net NEURON partner organizations and the final decision was made by NEURON in Berlin October 2011.

The winners are **Fanie Barnabé Heider** from Sweden and **Fernando Kusanetz** from France. They will receive an award of 3.000€ each, and will be invited as ERA-Net NEURON Young Investigator lecturers at the 8th FENS meeting in Barcelona, in July 2012.

#### *The winner papers:*

**Barnabé-Heider et al.** (2010) Origin of New Glial Cells in Intact and Injured Adult Spinal Cord.

*Cell Stem Cell* 7, 470-482

**Kusanetz et al.** (2010) Transition to Addiction Is Associated with a Persistent Impairment in Synaptic Plasticity. *SCIENCE* vol. 328 25