

## BEITRITTSERKLÄRUNG

Hiermit erkläre ich meinen Beitritt zur Neurowissenschaftlichen Gesellschaft e.V.

*Eintrag in das Mitgliederverzeichnis der Neurowissenschaftlichen Gesellschaft e.V.:*

Name	
Vorname	
Titel	
<b>Dienstadresse:</b>	
Universität/Institut/Firma	
Abteilung	
Straße	
Postleitzahl + Ort	
Telefon	
Telefax	
e-Mail	
<b>Privatadresse:</b>	
Straße	
Postleitzahl + Ort	
Telefon / Telefax	

Ich bin Student (Bescheinigung beifügen):

ja

nein

Ich bin

weiblich

männlich

**Jahresbeitrag:**

ordentliches Mitglied

70,-- EURO/Jahr

Studenten, Mitglieder im Ruhestand, Arbeitslose

30,-- EURO/Jahr

Rechte und Pflichten der Mitgliedschaft siehe Satzung (<http://nwg.glia.mdc-berlin.de/de/about/statut.php>). Mit meiner Unterschrift bestätige ich, dass ich die Satzung zur Kenntnis genommen habe und diese anerkenne.

Datum:

Unterschrift:

Ich unterstütze diesen Antrag auf Beitritt zur Neurowissenschaftlichen Gesellschaft e.V.

Name, Anschrift des Mitglieds

Name, Anschrift des Mitglieds

Datum/Unterschrift

Datum/Unterschrift

## BEITRITTSERKLÄRUNG

**Ich optiere für folgende z w e i Sektionen (zutreffende ankreuzen):**

- |   |  |
|---|--|
| <input type="checkbox"/> Kognitive Neurowissenschaften              | <input type="checkbox"/> Neuropharmakologie und -toxikologie |
| <input type="checkbox"/> Computational Neuroscience                 | <input type="checkbox"/> Systemneurobiologie                 |
| <input type="checkbox"/> Entwicklungsneurobiologie und Neurogenetik | <input type="checkbox"/> Verhaltensneurobiologie             |
| <input type="checkbox"/> Klinische Neurowissenschaften              | <input type="checkbox"/> Zelluläre Neurobiologie             |
| <input type="checkbox"/> Molekulare Neurobiologie                   |  |

**Mein Arbeitsgebiet umfaßt folgende Bereiche (bitte wählen Sie aus der beigefügten Liste maximal 5 Gebiete aus und übertragen Sie die Kennziffern in die Kästchen):**

- |   |   |                   |
|---|---|-------------------|
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| 3. <input type="text"/> <input type="text"/> <input type="text"/> | 4. <input type="text"/> <input type="text"/> <input type="text"/> | _____             |
| 5. <input type="text"/> <input type="text"/> <input type="text"/> |   | _____             |

**Mein Methodenspektrum umfaßt folgende Methoden (bitte wählen Sie aus der beigefügten Liste maximal 5 Gebiete aus und übertragen Sie die Kennziffern in die Kästchen):**

- |   |   |                   |
|---|---|-------------------|
| 1. <input type="text"/> <input type="text"/> <input type="text"/> | 2. <input type="text"/> <input type="text"/> <input type="text"/> | Weitere:<br>_____ |
| 3. <input type="text"/> <input type="text"/> <input type="text"/> | 4. <input type="text"/> <input type="text"/> <input type="text"/> | _____             |
| 5. <input type="text"/> <input type="text"/> <input type="text"/> |   | _____             |

- Ich bin **nicht** damit einverstanden, dass meine Daten zum Zwecke wissenschaftlicher Informationsvermittlung weitergegeben werden.

Bitte zurücksenden an:

Neurowissenschaftliche Gesellschaft e.V.  
Meino Alexandra Gibson  
Zelluläre Neurowissenschaften  
Max-Delbrück-Centrum für Molekulare Medizin  
Robert-Rössle-Str. 10  
13092 Berlin



# Arbeitsgebiete

Bitte wählen Sie aus dieser Liste **maximal fünf Arbeitsgebiete** aus und übertragen Sie die Kennziffern auf das Formblatt:

## **Development and Plasticity**

- 1 cell proliferation and lineage
- 2 cell migration
- 3 cell determination and differentiation
- 4 process outgrowth
- 5 trophic agents
- 6 (neuro)trophic factors
- 7 substrates, ECM, cell adhesion molecules
- 8 synaptogenesis
- 9 regressive events in neural development
- 10 endocrine control and development
- 11 nutritional and prenatal factors
- 12 plasticity in adult animals
- 13 regeneration and sprouting
- 14 transplantations
- 15 developmental disorders
- 16 regional and system development
- 17 ageing

## **Cell Biology**

- 18 apoptosis, cell death
- 19 gene structure and function
- 20 regulation of gene expression
- 21 peptide and protein processing and sorting
- 22 membrane composition and cell-surface macromolecules
- 23 cytoskeleton, axonal transport
- 24 neuroglia and myelin
- 25 blood-brain barrier
- 26 neuroimmunology
- 27 staining and tracing techniques
- 28 protein chemistry
- 29 second messenger pathways

## **Excitable Membranes and Synaptic Transmission**

- 30 synaptic structure and function
- 31 presynaptic mechanisms
- 32 postsynaptic mechanisms
- 33 pharmacology of synaptic transmission
- 34 ion channels
- 35 ion channels modulation and regulation
- 36 functional synaptic plasticity

## **Neurotransmitters, Modulators and Receptors**

- 37 free radicals
- 38 (anti) oxidants
- 39 acetylcholine, cholinergic receptors
- 40 excitatory amino acids and their receptors
- 41 amino acids, GABA, benzodiazepines and receptors
- 42 peptides
- 43 opioids
- 44 catecholamines and their receptors
- 45 uptake, storage, secretion and metabolism
- 46 interactions between neurotransmitters,
- 47 co-transmission, co-localisation
- 48 regional localisation of receptors and transmitters
- 49 behavioural pharmacology
- 50 nucleotides and their receptors
- 51 other neuroactive substances (e.g. NO, adenosine)
- 52 serotonin and its receptors

## **Neuroendocrine and Autonomic Regulation**

- 53 neuroendocrine control
- 54 regulation of autonomic and cardiovascular functions
- 55 biological rhythms and sleep
- 56 brain metabolism

## **Sensory Systems**

- 57 somatic and visceral afferents
- 58 spinal cord
- 59 somatosensory pathways and cortex
- 60 sensory ganglia
- 61 pain
- 62 retina and photoreceptors

- 63 visual pathways and cortex
- 64 auditory systems
- 65 chemical senses
- 66 invertebrate sensory systems

## **Motor Systems and Sensorimotor Integration**

- 67 cortex
- 68 basal ganglia
- 69 thalamus
- 70 cerebellum
- 71 vestibular system
- 72 oculomotor system
- 73 reflex function
- 74 spinal cord and brainstem
- 75 control of posture and movement
- 76 circuitry and pattern generation
- 77 invertebrate motor function
- 78 muscle

## **Other Systems of the CNS**

- 79 limbic system
- 80 hypothalamus
- 81 hippocampus and amygdala
- 82 association cortex
- 83 brain stem systems
- 84 comparative neuroanatomy
- 85 brain of invertebrates
- 86 ventral cord of invertebrates

## **Behaviour**

- 87 human behavioural neurobiology
- 88 brain function and language
- 89 interhemispheric relations lateralisation
- 90 transgenic/gene knockout animals and behaviour
- 91 learning and memory
- 92 spatial cognition
- 93 motivation and emotion
- 94 neuroethology
- 95 invertebrate learning and behaviour
- 96 feeding and drinking
- 97 hormonal control of behaviour
- 98 monoamines and behaviour
- 99 neuropeptides and behaviour
- 100 drugs of abuse
- 101 psychotherapeutic drugs
- 102 behavioural aspects of ageing
- 103 invertebrate sensory systems
- 104 invertebrate motor systems

## **Disorders of the Nervous System**

- 105 genetic models
- 106 epilepsy
- 107 Alzheimer's
- 108 Parkinson's
- 109 Huntington's
- 110 degenerative disease others
- 111 ischemia/hypoxia
- 112 cerebrovascular diseases
- 113 tumors
- 114 neuromuscular diseases
- 115 motor neuron diseases
- 116 neuropathy
- 117 neuroprotection
- 118 behavioural disorders
- 119 neurotoxicity
- 120 neural protheses
- 121 clinical neurophysiology
- 122 psychosis
- 123 anxiety disorders

## **Computational Approaches**

- 124 neural networks
- 125 artificial intelligence

## Methoden

Bitte wählen Sie aus dieser Liste **maximal fünf Methoden** aus und übertragen Sie die Kennziffern auf das Formblatt:

### **Neuroanatomical Methods**

- 1 histological techniques
- 2 in situ hybridization
- 3 receptor binding techniques
- 4 tracing techniques
- 5 immunocytochemistry
- 6 electron microscopy/immunoelectron microscopy
- 7 intracellular marking

### **Cellular and Developmental Neuroscience**

- 8 cell culture techniques
- 9 organotypic tissue culture
- 10 neuronal cell culture
- 11 glial cell culture
- 12 immortalizing central nervous system cells
- 13 techniques to measure cell proliferation, necrosis and apoptosis
- 14 experimental transplantation

### **Gene Cloning, Expression and Mutagenesis**

- 15 PCR
- 16 cloning of neural gene products
- 17 interaction trap/two-hybrid system to identify interacting proteins
- 18 transient expression of proteins
- 19 mutagenesis approaches to study protein structure-function relationship
- 20 Gene targeting
- 21 Transgenic animals

### **Molecular Neuroscience**

- 22 RNA analyses by nuclease protection
- 23 reducing gene expression in the brain via antisense methods
- 24 production of antibodies
- 25 epitope tagging of recombinant proteins
- 26 transcriptome analysis (DD-PCR, CHIPS, SAGE)
- 27 hyperexpression of proteins in situ
- 28 deletion of genes (knockout techniques)
- 29 proteomanalysis (2-D gel electrophoresis)
- 30 Knock-out methodology
- 31 germline transgenic methodology
- 32 somatic transgenic methodology
- 33 protein chemistry

### **Neurophysiology**

- 34 use of brain slices
- 35 acute isolation of neural cells
- 36 extracellular recording techniques
- 37 intracellular recording techniques with sharp microelectrodes
- 38 patch-clamp recording
- 39 imaging nervous system activity
- 40 recording from behaving animals
- 41 recording from whole brains/ganglia

### **Neurochemistry/Neuropharmacology**

- 42 microdialysis
- 43 analyzing radioligand binding data
- 44 ligand characterization using microphysiometry
- 45 uptake and release of neurotransmitters
- 46 optical uncaging of compounds
- 47 analysis of brain metabolism
- 48 protein chemistry
- 49 peptide sequencing
- 50 ELISA
- 51 systemic or local manipulation of brain functions

### **Behavioral Neuroscience**

- 52 EMGs, EEGs, recording of locomotory activity
- 53 locomotor behavior
- 54 sexual and reproductive behavior
- 55 animal tests of anxiety
- 56 learning and memory
- 57 measures of food intake and ingestive behaviour
- 58 methods of behavioral pharmacology
- 59 methods of behavioral physiology
- 60 sensory and perceptual physiology
- 61 psychophysics
- 62 navigation and orientation
- 63 choice strategies and optimization of behavior

### **Clinical Neuroscience**

- 64 PET
- 65 MRI
- 66 DOPPLER
- 67 MEG
- 68 EEG
- 69 evoked potentials
- 70 CSF-analysis
- 71 animal models for diseases