

# NEUROWISSENSCHAFTLICHE GESELLSCHAFT E.V.

# MEMBERSHIP APPLICATION FORM

I herewith apply for membership in the German Neuroscience Society

Entry into the membership directory of the German Neuroscience Society.:

Littiy into the membership directory of the	ie German Neuroscience Society	
Name		
First Name		
Title		
Affiliation:		
Institution (University, Company)		
Department		
Street		
Postal code + City + Country		
Telephone number		
Fax		
Email		
Private address:		
Street		
Postal code + City + Country		
Telephone number / Fax		
I am a student (enclose certificate): □ yes □ no Year of birth   I am: □ female □ male □ diverse		
Membership Categories and Fee	<u>es:</u>	
Seniors (Professor, PD, PI, Group Leader, Junior-Prof., etc.)		
Postdocs (post-graduate, PhD, Dr., etc.)		
Students, members in parental le	eave, retired and unemployed members 40, EURO/Year	
	o can be found in the statutes (available in German only: https://nwg- ng this document, I confirm that I am aware of it and accept the statutes and	
Date:	Signature:	
I support this application for mer	mbership in the German Neuroscience Society	
Name, Address of NWG Member	Name, Address of NWG Member	
Date/Signature	Date/Signature	



# NEUROWISSENSCHAFTLICHE GESELLSCHAFT E.V.

# MEMBERSHIP APPLICATION FORM

I choose the following 2 sections:	
Behavioural Neurobiology Cellular Neurobiology Clinical Neuroscience Cognitive Neuroscience Computational Neuroscience	<ul> <li>□ Developmental Neurobiology und Neurogenetics</li> <li>□ Molecular Neurobiology</li> <li>□ Neuropharmacology and -toxicology</li> <li>□ Systems Neurobiology</li> <li>□ Young German Neuroscience Society - jNWG</li> </ul>
My area of work involves the following field below and fill in the numbers):	ds (please choose no more then five topics from the list
1 2	Others:
3 4	
5.	
My spectrum of methods involves the follo from the list below and fill in the numbers):	wing fields (please choose no more then five topics
1. 2	Others:
3. 4. 4.	
5.	
I agree with the use of any data for This decision can be revoked at any	or scientific information processing ( <b>FENS membership</b> ). y time.

Please send your application to:

or send it via email/fax to:

Stefanie Korthals Neurowissenschaftliche Gesellschaft e.V. Max-Delbrück-Centrum für Molekulare Medizin Robert-Rössle-Str. 10 13125 Berlin korthals@mdc-berlin.de, +49 30 9406 2813



# **N**EUROWISSENSCHAFTLICHE GESELLSCHAFT

E.V.

# **Payment**

Annual Fee: Seniors (Professor, PD, PI, Group Leader, Junior-Prof., etc.)

100,-- EURO/Year

Postdocs (post-graduate, PhD, Dr., etc.)

80,-- EURO/Year

Students, members in parental leave, retired and unemployed members 40,-- EURO/Year

SEPA Direct Debit Mandate  Creditor identifier of the GNS: DE64NWG00001110437
I authorise the German Neuroscience Society to withdraw the annual membership fee of $\square$ 100, EURO/Year $\square$ 80, EURO/Year $\square$ 40, EURO/Year.
from the following bank account (only SEPA area):
IBAN:
Name of Bank:
BIC/SWIFT Code:
Furthermore I inform my bank to debit my account in accordance with the instructions from the GNS.
Place, Date: Signature:
Account holder (Name, first name):
Address:
Payment via USA-Card or UEuro-/Mastercard
Card number: (These are the sixteen digits on the front of your credit card) (These are the three digits on
the back of your card)
Exp. Date: Name of the card holder:
Amount: EURO Signature:

## **Bank Transfer**

Correspondent bank: Deutsche Bank

<u>IBAN:</u> DE55 1007 0848 0463 8664 05 <u>BIC / SWIFT-CODE:</u> DEUTDEDB110

Please send your application to:

or send it via email/fax to:

Stefanie Korthals Neurowissenschaftliche Gesellschaft e.V. Max-Delbrück-Centrum für Molekulare Medizin Robert-Rössle-Str. 10 13125 Berlin korthals@mdc-berlin.de, +49 30 9406 2813

# **Topics**

Please choose no more then five topics from the list below and fill in the numbers to the form:

#### **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
- 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
- retina and photoreceptors

- 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 neuroethology95 invertebrate learning and behaviour
- 96 feeding and drinking
- 97 hormonal control of behaviour98 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's109 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

#### Methods

Please choose no more than **five methods** from the list below and fill in the numbers to the form

#### **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 prolifaration, 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 comounds
- 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. EEGSs, 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

## **Model Organisms**

- 72 C. elegans
- 73 Drosophila
- 74 zebrafish
- **75** mouse
- **76** rat
- 77 human
- 77 Hullian
- 78 annelid
- 79 mollusc
- 80 crustacean
- 81 insect
- 82 arthropod
- 83 invertebrate (other)
- **84** fish
- 85 amphibians and reptiles
- 86 rodent
- 87 bird (avian)
- 88 mammal
- 89 primate