As in humans, traumatic lesions of the spinal cord in dogs represent a frequently observed consequence of intervertebral disc prolapse. In dogs as well as in humans, epilepsy ranks among the most common chronic neurological disorders. It often develops after brain insults such as injuries, inflammation, febrile convulsions or tumors.

Upcoming questions and formulated hypotheses will be answered and tested by means of studies in dogs and rodent models as well as tissue cultures.

Due to the fact that dogs represent an important translational species to transfer results from laboratory studies to humans, these comparative studies are of particular importance for both species.

The interdisciplinary Research Unit 1103, composed of experts from the fields of veterinary medicine, biology and human medicine, allows a unique comparative study of (a) degenerative processes and (b) the regenerative potential in the canine CNS, as well as (c) development and realization of novel therapeutical approaches.
General Information

Congress Venue:
Department of Pathology
University of Veterinary Medicine Hannover
Bünteweg 17
30559 Hannover
Germany

Registration:
Please register as soon as possible, at the latest by January 15, 2014 to Angelika Pietsch, Department of Pathology, University of Veterinary Medicine, Bünteweg 17, 30559 Hannover, Germany
E-mail: angelika.pietsch@tiho-hannover.de
phone: +49 (0)511 953 8601
Or use the registration form on our website: www.tiho-hannover.de/forschung/dfg-forschergruppe-1103/
Further information will be given upon registration.

Registration fees:
Participation in the workshop (incl. dinner) 20,00 €

The registration fee should be paid upon registration to the following account of the DFG-FOR 1103:
Account holder: Stiftung Tierärztliche Hochschule Hannover
Bank: Norddeutsche Landesbank Hannover
Bank code: 250 500 00
Account Number: 106 031 495
IBAN: DE85 2505 0000 0106 0314 95
SWIFT-BIC: NOLA DE 2H
Reference: Nr. 62020000, last name, first name.

Congress language: English

Call for abstracts:
Abstracts on all aspects of veterinary neuroscience are welcome. The Scientific Committee reserves the right to allocate abstracts to poster or oral presentation as suitable. Please contact the scientific coordinator of the FOR 1103 for further information.

Scientific coordinator of the FOR 1103:
Kathrin Becker, Department of Pathology, University of Veterinary Medicine Hannover, Bünteweg 17, 30559 Hannover, Germany
E-mail: kathrin.becker@tiho-hannover.de
Tel.: +49 (0)511 953 8679

Miscellaneous:
ATF credit: 10 hours
Open for undergraduate students (max. 50)

Thursday, March 20th 2014
17.00 – 18.00 Registration
17.00 Welcome Reception

Friday, March 21st 2014
8.00 – 8.15 Welcome G. Greif (President, University of Veterinary Medicine Hannover [TiHo Hannover])
8.15 – 8.30 Presentation of DFG Research Unit 1103 W. Baumgärtner (TiHo Hannover)
8.30 – 9.30 State-of-the-art Lecture 1: Repairing the CNS – from laboratory to clinic A.H. Crawford and R. Franklin (University of Cambridge)
9.30 – 10.10 Oral presentations Research Unit 1103: Cell transplantation strategies for repair and regeneration in acute spinal cord injury C. Radtke (Hannover Medical School [MHH])
Targeting the basal ganglia for epilepsy therapy M. Gerwert (TiHo Hannover)
10.10 – 10.30 Coffee Break and Poster Session
10.30 – 11.30 State-of-the-art Lecture 2: Extracellular heat shock proteins in neuroinflammatory and neuroimmune responses M. Oglesbee (Ohio State University)
11.30 – 12.10 Oral presentations Research Unit 1103: Effects of immunomodulation upon neuroinflammation in Theiler’s murine encephalomyelitis A. Beineke (TiHo Hannover)
Targeting the basal ganglia for epilepsy therapy M. Gerwert (TiHo Hannover)
12.10 – 13.00 Oral presentations:
Nectin4-independent cell-to-cell transmission of a demyelinating CDV strain in primary astrocytes P. Plattet et al. (Vetsuisse faculty Bern)
Transcriptional changes in canine distemper virus-induced demyelinating leukoencephalitis R. Ulrich et al. (TiHo Hannover)

Friday, March 21st 2014
12.10 – 13.00 Oral presentations:
Morbillivirus control of the interferon response: relevance of STAT2 and mda5 but not STAT1 for canine distemper virus virulence in ferrets I. Gerhauser et al. (TiHo Hannover)
13.00 – 13.30 Lunch and Poster Session
13.00 – 13.30 Meeting of the Consortium of Veterinary Neuroscience in Europe (CVNE)
14.30 – 15.30 State-of-the-art Lecture 3: Mesenchymal stem cell transplantation for spinal cord injury: repair shop or pharmacy J. Kocsis (Yale University)
Pathogenesis of canine spinal cord injury and development of a cell-based therapy W. Baumgärtner (TiHo Hannover)
Concept of a transplantation study using Schwann cells in paraplegic dogs A. Tipold, V. Stein and N. Steffensen (TiHo Hannover)
16.30 – 17.00 Coffee Break and Poster Session
17.00 – 19.00 Oral presentations:
Canine adipose tissue derived mesenchymal stem cells – a useful therapeutic option for degenerative diseases of the central nervous system? N. Jungwirth et al. (TiHo Hannover)
Internalin J in cellular infection by Listeria monocytogenes S. Rupp et al. (Vetsuisse Faculty, University of Bern)
Listeria monocytogenes spreads within the brain by intra-axonal migration A. Oevermann et al. (Vetsuisse Faculty, University of Bern)
Schmallenberg virus: pathology of a new arthropod-borne virus in Germany V. Herder et al. (TiHo Hannover)
<table>
<thead>
<tr>
<th>Time</th>
<th>Friday, March 21st 2014</th>
<th>Saturday, March 22nd 2014</th>
<th>Saturday, March 22nd 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.00 – 19.00</td>
<td>Oral presentations:</td>
<td>State-of-the-art Lecture 4:</td>
<td>Oral presentations Research Unit 1103:</td>
</tr>
<tr>
<td></td>
<td>Pharmacological modulation of the endocannabinoid system:</td>
<td>Modelling the natural history of Pelizaeus Merzbacher Disease (PMD)</td>
<td>Mechanisms of epileptogenesis:</td>
</tr>
<tr>
<td></td>
<td>impact of 2-arachidonoylglycerol on epileptic seizures</td>
<td>I. Duncan (University of Wisconsin at Madison)</td>
<td>identification and evaluation of targets and biomarkers H. Potschka (Ludwig Maximilians University Munich)</td>
</tr>
<tr>
<td></td>
<td>in a mouse model of temporal lobe epilepsy</td>
<td>10.00 – 11.00 Oral presentations:</td>
<td>New strategies for prevention or modification of epilepsy after brain insults W. Löscher and C. Brandt (TiHo Hannover)</td>
</tr>
<tr>
<td></td>
<td>E.-L. von Rüden et al. (Ludwig Maximilians University Munich [LMU Munich])</td>
<td>Tectonin Beta-Propeller Repeat-Containing Protein 2 (TECPR2) missense mutation associated with neuroaxonal dystrophy in Perro de Agua Español K. Hahn et al. (TiHo Hannover)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hippocampal sclerosis in feline epilepsy: prevalence, clinical and etiopathologic correlates</td>
<td>Peripheral nerve regeneration after experimental section in ovine radial and tibial nerves using synthetic nerve grafts including bone marrow mesenchymal cells: morphological results M. Pumarola et al. (Autonomous University of Barcelona)</td>
<td>13.10 – 13.30 Poster prize award and closing remarks</td>
</tr>
<tr>
<td></td>
<td>F. Twelle et al. (TiHo Hannover)</td>
<td>Characterisation of bovine neurofibroma of the celiac ganglion I. Dammann et al. (University Medical Center Göttingen)</td>
<td>Lunch and farewell</td>
</tr>
<tr>
<td></td>
<td>Long-lasting anticonvulsant effects by chronic focal delivery of the antiepileptic drug vigabatrin into the subthalamic nucleus in an acute seizure model in rats L. Gey et al. (TiHo Hannover)</td>
<td>Effects of nerve root entrapment on the expression of voltage-gated calcium channel (VGCC) alpha-2 delta subunits in canine dorsal root ganglia M. Rosati et al. (LMU Munich)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bioavailability of the antiepileptic drug phenobarbital following oral administration of two pharmaceutical formulations (Phenoleptil®, Luminal® vet) in dogs M. Bankstahl et al. (TiHo Hannover)</td>
<td>Characterisation of a novel bovine congenital syndrome: vertebral and spinal dysplasia (VSD) C. Kühn et al. (Leibniz-Institute for Farm Animal Biology, Dummerstorf)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neuronal TNF overexpression and infection with the neurotropic Borna disease virus as trigger for epileptic seizures C. Herden et al. (Justus-Liebig-University Gießen)</td>
<td>Vermis aplasia and cerebellar hemispheric hypoplasia in Eurasian dogs Fischer et al. (LMU Munich)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endocannabinoids may influence the cell population in canine cerebrospinal fluid J. Freundt Revilla et al. (TiHo Hannover)</td>
<td>How nanomedicine and nanopharmacology can contribute to solve problems in veterinary neuroscience R. Zhang et al. (Christian-Albrechts-University Kiel)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How nanomedicine and nanopharmacology can contribute to solve problems in veterinary neuroscience R. Zhang et al. (Christian-Albrechts-University Kiel)</td>
<td>11.00 – 11.30 Coffee Break and Poster Session</td>
<td></td>
</tr>
<tr>
<td>19.00</td>
<td>Mediterranean dinner and party</td>
<td>11.30 – 12.30 State-of-the-art Lecture 5</td>
<td>13.30 Lunch and farewell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phenotypic and pathophysiological features of the Theiler’s murine encephalomyelitis virus (TMEV) model of epilepsy S. White (University of Utah)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30 – 13.10</td>
<td>Oral presentations Research Unit 1103:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Supported by**

- **Boehringer Ingelheim**
- **Virbac**
- **ALBRECHT**
- **MSD Animal Health**
- **NOVARTIS**
- **cp-pharma**
- **DGF**
- **ALPHARM**
- **The Science of Healthier Animals™**