

International Workshop on Transport Processes in Neurodegenerative and Neuromuscular Diseases”, Sept. 12 – 14th, 2011

- Mo. Sept. 12. Welcome and Key note lecture
- 17:00-17:15 Welcome, A. Greinacher, Vice Dean for Research  
A. Popa-Wagner, Coordinator of EU Project  
S. Vogelgesang, Organizer
- 17:15-18:00 Key note lecture: Chair: S. Vogelgesang  
Corruptive protein seeding in the pathogenesis of neurodegenerative disorders  
L.C. Walker, H. LeVine III, Y. Eisele and M. Jucker
- 19:30 *Dinner at “Olive”*
- Tu. Sept. 13. Session 1: Mechanisms of neurodegenerative disorders Chair: S. Vogelgesang
- 8:30 – 8:45 Welcome, M. Zygmunt, Medical Director of University Medicine  
C. Kessler, Speaker of the Neuroscience Group in Greifswald  
H. Brinkmeier, Organizer
- 8:45 – 9:20 Identification of pathways driving prion pathogenesis  
J.F. Pedersen, U. Hermann, K. Arroyo, A. Varol, M. Nuvolone, P. Liberski, C. Zhu, T. Sonati and A. Aguzzi
- 9:20 – 9:55 Imaging structural and functional alterations in AD mouse models  
M. Meyer-Lühmann
- 9:55 – 10:25 *Coffee break*
- 10:25 – 11:00 Blood-brain barrier P-glycoprotein: a new target for Alzheimer's disease?  
A.M.S. Hartz, D.S. Miller and B. Bauer
- 11:00 – 11:35 ABC-transporter at the blood-brain barrier: Impact for risk and therapy of neurological disorders  
I. Cascorbi, S. Haenisch, A. Werk, U. Stephani, R. Warzok, and S. Vogelgesang
- 11:35 – 12:00 Beta-amyloid downregulates MDR1-P-glycoprotein (Abcb1) expression at the blood-brain barrier in mice  
A. Brenn, M. Grube, A. Fischer and S. Vogelgesang
- 12:00 – 14:00 *Lunch break*

- Tu. Sept. 13      Session 2: Ca<sup>2+</sup> regulation in skeletal muscle and functions of TRP channels, Chair: H. Brinkmeier
- 14:00 – 14:35      The impact of ryanodine receptor (RyR1) mutations on orthograde and retrograde triadic coupling  
W. Melzer
- 14:35 – 15:10      Strictly controlled Ca<sup>2+</sup> influx through TRPC3 channels has a key role in insulin-mediated glucose uptake in striated muscle  
H. Westerblad and J. Lanner
- 15:10 – 15:45      Lack of TRPC1 channels impairs skeletal muscle regeneration  
N. Zanou, O. Schakman, A. Dietrich, L. Birnbaumer and P. Gailly
- 15:45 – 16:15      *coffee break*
- 16:15 – 16:30      TRPC3 channel blockers inhibit background calcium influx and modulate calcium transients in mouse muscle fibers  
Y.X. Zhang, B. Pritschow and H. Brinkmeier
- 16:30 – 17:05      Ca<sup>2+</sup> influx and sarcoplasmic reticulum Ca<sup>2+</sup> leak in normal and dystrophic skeletal muscle  
B. Allard
- 17:05 – 17:40      Surface and deeper networks structural alterations in mdx cardiomyocytes: a "plant staking" role for dystrophin?"  
C Lorin, M. Gueffier, P. Bois, J.-F. Faivre, S. Sebille and C. Cognard
- 19:30                      Dinner at "Alter Fritz"
- We. Sept 14      Session 3: Ca<sup>2+</sup> regulation in dystrophin-deficient muscle and prospects for a therapy of DMD  
Chair: C. Cognard
- 8:30 – 9:05      Syntrophin/dystrophin scaffold regulates TRPC/STIM1-dependent cation entry in developing skeletal muscle.  
J. Sabourin, R. Harisseh, N. Déliot, C. Cognard and B. Constantin
- 9:05 – 9:40      Calcium homeostasis in extraocular muscles: implications for Duchenne Muscular Dystrophy  
U. Zeiger, C.H. Mitchell, H. Brinkmeier, T.S. Khurana

- 9:40 – 10:15 Calcium channel blockade as an intervention strategy in Duchenne Muscular Dystrophy  
L.H. Jørgensen, A. Blain, E. Grealley, S.H. Laval, A.M. Blamire, B.J. Davison, H. Brinkmeier, G.A. MacGowan, H.D. Schröder, K. Bushby, V. Straub and H. Lochmüller
- 10:15 – 10:45 *Coffee break*
- 10:45 – 11:20 Effects of green tea polyphenols, prednisolone and tamoxifen on mdx mouse muscle: Improvement of motor performance and calcium handling  
U.T. Rüegg, C. Gallo, J. Patte-Reutenauer, H.M. Ismail, E. Gayi, K. Johansson and O.M. Dorchies
- 11:20 – 11:35 The role of the serum- and glucocorticoid-inducible kinase SGK1 for muscle function and fibrosis development in mdx muscle  
M. Steinberger, J. Kasch, S. Vogelgesang, D. Kuhl, M. Föllner, F. Lang and H. Brinkmeier
- 11:35 – 12:10 Molecular Therapies in Muscular Dystrophies entering clinical studies  
H. Lochmüller, M. Guglieri, V. Straub and K. Bushby
- 12:10 – 12:20 Concluding remarks, S. Vogelgesang and H. Brinkmeier

### **Location of the Workshop:**

Lecture Hall of the University library  
Felix-Hausdorff-Straße 10  
D-17489 Greifswald  
Germany

Further information:

[http://www.medizin.uni-greifswald.de/neuroscience\\_group/index.php?id=368](http://www.medizin.uni-greifswald.de/neuroscience_group/index.php?id=368)