



„Replace“ and „Reduce“  
based in Lower Saxony

Alternative methods to replace or reduce animal models  
in biomedical research

The research unit R2N – funded by the Federal State  
of Lower Saxony – encompasses 15 different research  
groups within 5 institutions in Hannover and  
Göttingen. They aim at developing scientifically-  
sound alternative methods on all levels of biomedical  
science to either minimize the quantity of animals  
used, or to fully replace existing animal experiments.

R2N institutions:

Location:  
Hannover Medical School  
Carl-Neuberg-Str. 1  
30625 Hannover

Building: to be confirmed  
Lecture room: to be confirmed

How to get there: [www.mh-hannover.de/verkehrsanbindung.html](http://www.mh-hannover.de/verkehrsanbindung.html)

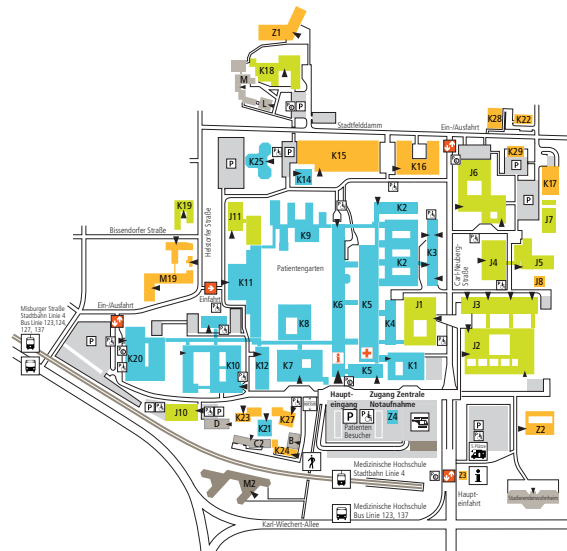
ATF credits: 7  
Registration until: October 15, 2018  
[www.r2n.eu/symposium2018](http://www.r2n.eu/symposium2018)

Organizing institute:  
Institute for Laboratory Animal Science  
and Central Animal Facility  
Hannover Medical School  
Phone: +49-511-532-6568  
[www.mh-hannover.de](http://www.mh-hannover.de)



**SYMPOSIUM**  
**November 6 + 7, 2018**

Alternative methods to replace or reduce  
animal models in biomedical research



Picture: Karin Kaiser/MHH

## PROGRAM

Tuesday, November 6

(Chair: Nils Hoppe, Centre for Ethics and Law in the Life Science, LUH)

- 14:00-14:20 **Begrüßung / Welcome**
- 14:20-15:10 **Prof. Dr. Dr. med. Thomas Hartung, USA**  
21<sup>st</sup> century – Alternative methods for 21<sup>st</sup> century safety sciences
- 15:10-15:45 **Dr. Sylvia Escher, Hannover**  
Development of an animal free testing strategy for risk assessment on inhalable compounds – EXITOX II
- 15:45-16:05 Coffee break
- 16:05-16:40 **Isabel Rüttschle, M. Sc., Berlin**  
Biology-inspired microphysiological systems (organs-on-a-chip) – status quo and future perspectives
- 16:40-17:15 **PD Dr. Alexander Mosig, Jena**  
Emulating the Gut-Liver Axis – Organ-on-chip as Translational Tool in Sepsis Research
- 17:15-17:45 **Poster flash – R2N PhD students**  
R2N project related talks
- 18:00-18:30 **Poster walk – R2N PhD students**  
R2N project related posters
- 18:30 **Get together**

Wednesday, November 7

(Chair: André Bleich)

- 09:00-09:35 **Dr. Udo Kraushaar, Tübingen**  
Transforming (stem) cell models from academic research to pharma – about assay development and validation
- 09:35-10:10 **Prof. Dr. Stefan Dübel, Braunschweig**  
Ready for prime time: Phage display as complete replacement for animal use in antibody generation
- 10:10-10:45 **Prof. Dr. Veronika v. Messling, Langen**  
Animal Experiments in Licensing and Batch Testing of Medicinal Products: 3R Possibilities and Perspectives
- 10:45-11:15 Coffee break
- 11:15-11:50 **Dr. Sebastian Dunst, Berlin**  
Validation and regulatory acceptance of alternative test methods
- 11:50-12:35 **Dr. Barbara Birk, Ludwigshafen**  
How can Alternatives to Animal Testing bring benefit to Chemical Industry?
- 12:35-12:50 Closing remarks & Winner of R2N PhD students travel award:  
**Prof. André Bleich, PhD, Hannover**  
Director of the Institute for Laboratory Animal Science and Central Animal Facility

Speakers

- Dr. Barbara **Birk** – BASF SE, Ludwigshafen  
Dept.: Experimental Toxicology and Ecology – Cellular Toxicology 1 – Alternatives to Animal Testing
- Prof. Dr. Stefan **Dübel** – Technische Universität Braunschweig  
Dept.: Biotechnology
- Dr. Sylvia **Escher** – Fraunhofer ITEM, Hannover  
Dept.: Chemical Assessment – Databases and Information Systems
- Prof. Dr. Dr. med. Thomas **Hartung** – John Hopkins University, Bloomberg School of Public Health, Maryland/USA  
Dept.: Environmental Health and Engineering; Molecular Microbiology and Immunology; Center for Alternatives to Animal Testing (CAAT)
- Dr. Udo **Kraushaar** – Natural and Medical Sciences Institute (NMI) at the University of Tübingen  
Dept.: Electrophysiology
- PD Dr. Alexander **Mosig** – University Hospital Jena  
Dept.: Integrated Research and Treatment Center, Center for Sepsis Control and Care
- Dr. Sebastian **Dunst** – German Federal Institute for Risk Assessment (BfR), Berlin  
Dept.: Experimental Toxicology and ZEBET
- Isabel **Rüttschle**, M.Sc. – TissUse GmbH, Berlin  
Dept.: Tissue analytics and cell banking
- Prof. Dr. Veronika **von Messling** – Federal Ministry of Education and Research, Berlin  
Dept.: Directorate-Generale 6 - Life Sciences - Research of Health