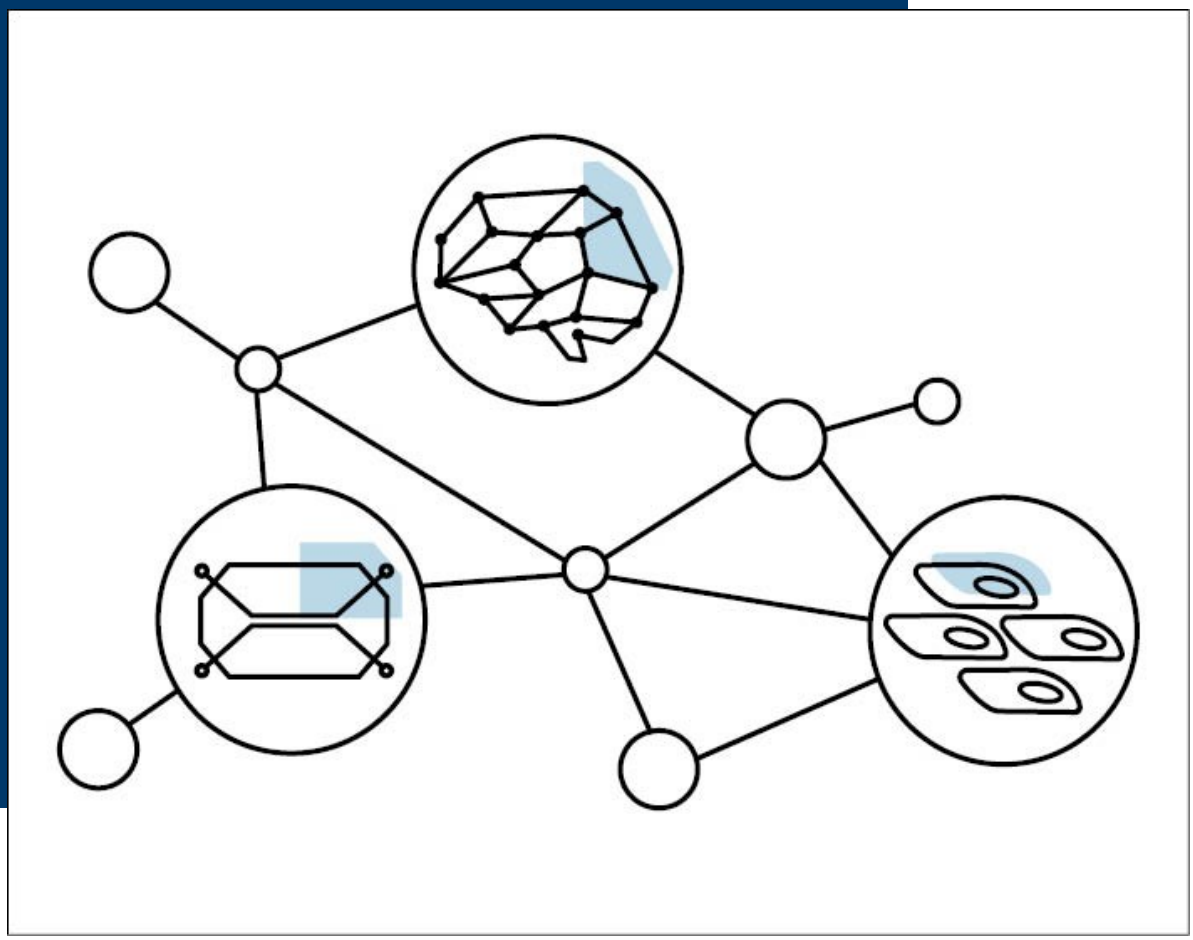
Programme



# BfR-KIT Joint symposium on organoid technologies and new approaches in biomedical research and toxicology

05 November 2025, Berlin

KIT Korea Institute of Toxicology

Bf3R German Centre for the Protection of Laboratory Animals

10 YEARS

BfR German Federal Institute for Risk Assessment

# BfR-KIT Joint symposium on organoid technologies and new approaches in biomedical research and toxicology

The symposium aims to exchange current knowledge and scientific expertise in the development and use of new approach methodologies (NAMs) in biomedical research and toxicology. It will also honour the work of the German Centre for the Protection of Laboratory Animals (Bf3R) on the occasion of its 10th anniversary.

Experts from the German Federal Institute for Risk Assessment (BfR), the Korea Institute of Toxicology (KIT), and invited renowned scientists will present currently developed methods, including human iPSC and organoid cultures, organ-on-a-chip systems and other phenotypic approaches, which are used in biomedical research and in the identification and characterization of the potential hazard of chemicals.

The symposium is supported by the Korea-Germany R&D Network Program funded by DFG and NRF and will take place in Berlin. It aims to foster scientific collaboration and knowledge exchange between Germany and Korea to promote scientific advancements towards the replacement of animal experiments according to the 3R principle.

## Programme

**Wednesday, 05 November 2025**

All session talks are scheduled for 20 min + 10 min discussion

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| 08:45–09:00 | **Arrival and registration** |
| 09:00–09:15 | **Opening and welcome**<br>Dr Tewes Tralau, Vice-President of the German Federal Institute for Risk Assessment (BfR) |
| 09:15–09:30 | **Ten years of the Bf3R at the BfR – Greetings from BMLEH**<br>StS Prof. Dr Dr Markus Schick, German Federal Ministry of Agriculture, Food and Regional Identity (BMLEH) |
| 09:30–09:40 | **Ten years of the Bf3R at the BfR – Achievements and perspectives**<br>Dr Michael Oelgeschläger, Head of the German Centre for the Protection of Laboratory Animals (Bf3R) |
| 09:40–09:45 | **General remarks and opening of the sessions**<br>Dr Julian Heuberger, BfR, Berlin<br>Dr Sebastian Dunst, BfR, Berlin |

| **Session I: Organoids of the nervous system**<br>Session Chair: Prof. Dr Marta Barenys Espadaler, BfR, Berlin | |
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| 09:45–10:15 | **Brain organoid technologies to model human brain diseases**<br>Dr Agnieszka Rybak-Wolf, Max Delbrück Center for Molecular Medicine (MDC), Berlin |
| 10:15–10:45 | **Investigating developmental neurotoxicity:**<br>**Insights from mouse models and human cortical organoids**<br>Dr Minhan Ka, Korea Institute of Toxicology (KIT), Daejeon |
| 10:45–11:15 | **Human neurospheres to evaluate the developmental neurotoxic potential of alternative plasticizers**<br>Prof. Dr Marta Barenys Espadaler, BfR, Berlin |
| 11:15–11:30 | Coffee Break |

| **Session II: Organoids of the gastrointestinal system and the liver**<br>Session Chair: Dr Julian Heuberger, BfR | |
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| 11:30–12:00 | **Infection, innate immune signalling and cancer in the gut – organoids as models**<br>Prof. Dr Sina Bartfeld, Technische Universität Berlin |
| 12:00–12:30 | **Advanced intestinal organoid systems to model tissue responses and regeneration**<br>Dr Julian Heuberger, BfR, Berlin |
| 12:30–13:00 | **Development of applications of hPSC-derived liver organoids for drug and chemical safety assessment**<br>Dr Han-Jin Park, KIT, Daejeon |
| 13:00–14:00 | Group photo, lunch break |

| **Session III: Stem cell technologies, organ-on-a-chip systems, and -omics approaches**<br>Session Chair: Dr Sebastian Dunst, BfR | |
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| 14:00–14:30 | **Pluripotent stem cells and process automation to improve reproducibility for biomedical research**<br>Dr Sebastian Diecke, MDC, Berlin |
| 14:30–15:00 | **Utilization of hiPSC-derived cardiac cell models (2D CMs and Organoids) in drug evaluation**<br>Dr Dong-Hun Woo, NEXEL Co., Ltd, Seoul |
| 15:00–15:30 | **Towards next-generation liver-on-a-chip systems**<br>Dr Adrien Guillot, Charité, Berlin |
| 15:30–16:00 | **Deciphering the role of YAP/TAZ in breast cancer**<br>Dr Björn von Eyss, Friedrich-Loeffler-Institut, Jena |

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| From 16:00 | **Wrap up of symposium and informal get-together**<br>Time for exchange and discussion of collaboration |

# Organisational information

**Venue**

German Federal Institute for Risk Assessment
Lecture hall
Diedersdorfer Weg 1
12277 Berlin

**Organiser**

German Federal Institute for Risk Assessment
Max-Dohrn-Straße 8-10
10589 Berlin, Germany
bfr.bund.de/en

**Directions**

Destination stop (www.bahn.de/en, www.bvg.de/en):
“Nahmitzer Damm/Marienfelder Allee (Berlin)”

**Participation**

Registration required for on-site and online participation.
www.bfr-akademie.de/english/jointsym25.html

The symposium is free of charge.

**General contact**

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**About the BfR**

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the German Federal Ministry of Agriculture, Food and Regional Identity (BMLEH). It protects people's health preventively in the fields of public health and veterinary public health. The BfR provides advice to the Federal Government as well as the Federal States (‘Laender’) on questions related to food, feed, chemical and product safety. The BfR conducts its own research on topics closely related to its assessment tasks.