# AAV MEETING

LEIPZIG | APRIL 1–2, 2025

FROM LAB TO CLINIC

## General information

**Venue**
Fraunhofer Institute for Cell Therapy and Immunology
Perlickstraße 1, 04103 Leipzig

**Registration counter – Opening hours**
Tuesday, April 1, 2025: 12:00 noon – 6:30 pm
Wednesday, April 2, 2025: 9:00 am – 3:15 pm

**Useful contacts**
Leipzig taxis: +49 341 4884 | www.taxi4884.de
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**WLAN**
WLAN is available throughout the building. Look out for the access code.

**Media check**
Please bring your presentation with you on a USB stick and hand it over at the check-in desk when you arrive. Your presentation should be created and presented in Microsoft PowerPoint. Please note that the presentations can only be played via the permanently installed presentation technology on site.

**Poster session**
Don't miss our poster session on Wednesday, April 2, 2025, 10:45–11:45 am.

Please hand in your poster at the check-in desk on April 1, 2025 between 12:00 noon and 12:30 pm (or when you arrive). The colleagues at check-in will place the poster for you and will remove it after the poster session. Your poster will be available for you to collect from the check-in desk at the end of the event. All poster authors are required to stay with their poster during the poster session and to be available for questions and discussions with the participants.

**Get-together**
We are happy to welcome you to the get-together and enjoying a great evening with all participants. You will then also have time to have good talks with the supporters. Delicious food and drinks will await you as well.
Date: Tuesday, April 1, 2025
Time: From 6:30 pm

## Program – Tuesday, April 1, 2025

12:00 noon

Check-in

12:30 pm

### Session I – Potential of AAV vectors I

Chairs: Ulrike Köhl, Thomas Schmid

**Improving adeno-associated virus (AAV) vectors for in vivo gene therapy**
KEYNOTE Hildegard Büning, Medical University Hannover, Hannover, Germany
**AAV gene therapy for temporal lobe epilepsy**
Regine Heilbronn, Charité - Unversitätsmedizin Berlin, Berlin, Germany
**Combination of CAR-NK cells with AAV-mediated gene transfer of NKG2A checkpoint inhibitor targeting glioblastoma**
Liang Xu, Goethe University Frankfurt, Franfurt am Main, Germany
**From workshop to assembly line – a cellular view on AAV production**
INDUSTRY LECTURE Cytiva

2:00 pm

Break

2:15 pm

### Session II – Potential of AAV vectors II

Chairs: Hildegard Büning, Jacqueline Breuer

**AAVs in precision medicine of hearing**
KEYNOTE Kathrin Kusch, University Medical Center Göttingen, Göttingen, Germany
**Unlocking the full potential of AAV-mediated gene transfer in the inner ear**
Jennifer Marx, Hannover Medical School, Hannover, Germany
**Nanobody-engineered AAV vectors for in vivo gene therapy approaches for HIV cure**
Hendrik Jahnz, Leibniz Institute of Virology, Hamburg, Germany
**Advancing AAV production: Engineered endonucleases for highly efficient DNA removal across broad salt concentrations**
INDUSTRY LECTURE C-Lecta

3:45 pm

Break

4:15 pm

### Session III – Innovations on AAV vectors I

Chairs: Claire Fabian, Thomas Schmid

**Enrichment of shuffled AAVs selects for different serotypes in mouse and macaque muscle**
Kristian Leite, Heidelberg University Hospital, Heidelberg, Germany
**Development of engineered AAV variants to target T lymphocytes in vivo**
Angela Enrica Araujo, Hannover Medical School, Hannover, Germany
**Nanobodies direct AAV to target cells**
Waldemar Schäfer, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

5:15 pm

Break

5:30 pm

### Session IV – Pitfalls from lab scale to GMP

Chairs: Thomas Schmid, Michael Bortz

**Navigating the roadblocks: Overcoming challenges in the translation of pre-clinical research to GMP production in the AAV field**
KEYNOTE Thomas Schmid & Jacqueline Breuer, Fraunhofer IZI, Leipzig, Germany
**Model-based decision support in process design and operation**
KEYNOTE Michael Bortz, Fraunhofer ITWM, Kaiserslautern, Germany

6:30 pm

### Get-together

## Program – Wednesday, April 2, 2025

9:00 am

Check-in

9:15 am

### Session V – Innovations on AAV vectors II

Chairs: Ulrich Blache, Jacqueline Breuer

**Generating CAR-T cells in vivo using evolved AAVs**
KEYNOTE William Nyberg, Karolinska Institutet, Stockholm, Sweden
**Enhanced precision for gene delivery into lymphocytes through DARPin retargeted vectors**
Jessica Hartmann, Paul-Ehrlich-Institut, Federal Institute for Vaccines and Biomedicines, Langen, Germany
**Transduction of primary human NK cells with Adeno-associated viral vectors**
Claire Fabian, Fraunhofer IZI, Leipzig, Gemany
**AAV capsid analysis platform – using Mass Photometry from R&D to cGMP manufacturing**
INDUSTRY LECTURE Refeyn

10:45 am

### Poster session

Chairs: Hildegard Büning, Ulrike Köhl, Jacqueline Breuer

11:45 am

Break

12:30 pm

### Session VI – Manufacturing AAV vectors

Chairs: Ulrike Köhl, Thomas Schmid

**AAV manufacturing challenges**
KEYNOTE Eduard Ayuso, DINAMIQS, Schlieren, Switzerland
**Optimized plasmid design and maintenance improves AAV vector yield and quality**
Kristian Müller, Bielefeld University, Bielefeld, Germany
**A cutting-edge Nanopore pipeline for AAV characterization and platform evolution**
INDUSTRY LECTURE Ascend Advanced Therapies
**From bench to bedside: Optimizing AAV for gene therapy**
INDUSTRY LECTURE Vectorbuilder

2:00 pm

Break

2:15 pm

### Session VII – Regulatory and funding

Chairs: Thomas Schmid, Ilka Henze

**The translation of gene therapies from bench to bedside – the European regulatory perspective**
KEYNOTE Martina Schüssler-Lenz, Paul-Ehrlich-Institut, Federal Institute for Vaccines and Biomedicines, Langen, Germany
**Bridging the valley of death: funding opportunities to bring AAV-based therapies into clinic**
KEYNOTE Stephan Junker, Eurogrant GmbH, Dresden, Germany

## Posters

**[PP01] Anti-pan AAV – PROGEN's new versatile antibody for the detection of various AAV serotypes**
Silja Adam, PROGEN Biotechnik GmbH, Heidelberg, Germany

**[PP02] Harnessing the therapeutic potential of AAV-mediated microRNA delivery to attenuate liver disease states**
Asha Balakrishnan, Hannover Medical School, Hannover, Germany

**[PP03] Capsid engineering approach to interfere with immune responses to AAV**
Martin Bentler, Hannover Medical School, Hannover, Germany

**[PP04] Next generation of genetically engineered stable producer cell lines to overcome viral vector manufacturing challenges**
Dominik Botermann, Cytiva, Cologne, Germany

**[PP05] AAV-mediated expression of therapeutic antibodies via minimal invasive application**
Valentina Eberlein, Fraunhofer IZI, Leipzig, Germany

**[PP06] Combinatorial targeting of adeno-associated virus (AAV) 2 vectors to fine-tune tropism**
Evelyn Gebel, Hannover Medical School, Hannover, Germany

**[PP07] NewBiologix Xcell™ Portfolio to overcome manufacturing challenges of rAAV**
Efrain Guzman, NewBiologix SA, Epalinges, Switzerland

**[PP08] Exploring chemically defined DNA packaging into AAV capsids**
Lucas Haverkamp, Bielefeld University, Bielefeld, Germany

**[PP09] Science meets strategy: The power of DoE in AAV production**
Peter Paul Heym, Sum Of Squares – Statistical Consulting, Delitzsch, Germany

**[PP10] Development of AAV genomes for cell-specific delivery of decoys targeting transcription factors**
Susanne Sophia Hille, University Hospital Schleswig-Holstein, Kiel, Germany

**[PP11] Tailoring AAV vectors as tools for in vivo transduction of adipocytes**
Nico Jäschke, Hannover Medical School, Hannover, Germany

**[PP12] Neutralizing antibodies against 20 different AAV serotypes are almost entirely absent from human CSF despite high seroprevalences**
Paul Krumpöck, Medical University of Vienna, Vienna, Austria

**[PP13] Tailoring AAV vectors for gene therapy of inner ear disorders by directed evolution**
Josephine Macdonald, Hannover Medical School, Hannover, Germany

**[PP14] In vivo targeting of HSC by capsid-engineered AAV vectors**
Xabier Perez Garmendia, Hannover Medical School, Hannover, Germany

**[PP15] In vivo evolution of heart-derived AAVs generates optimized cardiac capsids**
Anna Katharina Schrattel, Heidelberg University Hospital, Heidelberg, Germany

**[PP16] Advancing cost-efficient AAV2 vector production through multi-parameter optimization and innovative seed expansion strategies**
Nazgul Wagner, Sartorius Stedim Biotech GmbH, Göttingen, Germany

**[PP17] A novel S/MAR-tailored AAV vector for stable genetic modification of proliferating cells**
Jinbo Yu, Hannover Medical School, Hannover, Germany

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