Prof. Dr. Andreas Raue

Full Professor, Biomedical Data Science and
Systems Modeling University of Augsburg, Germany

Role in LiSyM-Cancer

- Associate Partner in SMART-NAFLD
- Contributes data-driven mechanistic modeling and integration of large-scale omics and clinical data to understand cancer-related liver disease progression and identify therapeutic strategies

Expertise

- Quantitative systems pharmacology and dynamic modeling
- Single-cell sequencing, immune profiling, and cancer systems biology
- AI and machine learning for biomarker discovery and therapeutic stratification
- Drug discovery from target identification through IND filing
- Leadership in cross-functional research teams across academia and industry

Vita

Dr. Andreas Raue is a professor and research leader with a decade of translational experience across biotech, pharma, and academia. His work integrates mathematical modeling and AI to understand complex disease mechanisms and drive innovative therapies, particularly in oncology and immunology. He has held senior positions at Novartis and HiFiBiO Therapeutics, where he led data science and biomarker discovery efforts, and now leads a research group at the University of Augsburg focused on cancer systems modeling.

Degrees

- Ph.D. in Physics (Dr. rer. nat.), University of Freiburg, 2013, summa cum laude
- Diploma in Physics, University of Freiburg, 2009, with distinction

Professional Experience

- Since 2024, Full Professor, University of Augsburg
- 2022 – 2024, Head of Data Science, Immuno-Oncology and Hematology, Novartis Biomedical Research
- 2019 – 2022, Executive Director & Head of Single-Cell and Data Science, HiFiBiO Therapeutics
- 2013 – 2019, Various scientific and leadership roles, Merrimack Pharmaceuticals
- 2009 – 2015, Research Associate, University of Freiburg

Honors and Awards (selection)

- 2014, MTZ Award for Medical Systems Biology
- 2013, Reinhart Heinrich Doctoral Thesis Award, ESMTB
- 2011 + 2012 + 2013, Top performer in DREAM Challenges