

Curriculum vitae of Prof. Dr. Andreas Raue

1. Personal Data

Andreas Raue

Full Professor (W3) and Chair of Modeling and Simulation of Biological Processes, University of Augsburg, Faculty of Medicine and Applied Computer Science

2. Scientific education

2009 – 2013 Ph.D. in Physics (Dr. rer. nat.), University of Freiburg

2001 – 2009 Diploma in Physics, University of Freiburg

3. Academic degrees

2013 Ph.D. in Physics (Dr. rer. nat.), University of Freiburg

2009 Diploma in Physics, University of Freiburg

4. Scientific positions

2013-2019 Director, Research, Merrimack Pharmaceuticals, Cambridge, USA

2019-2022 Executive Director, Global Head of Single-Cell and Data Science platform, HiFiBiO Therapeutics, Cambridge, USA

2022-2024 Head of Data Science, Immuno-Oncology and Hematology, Novartis Biomedical Research, Cambridge, USA

Since 2024 Full Professor (tenured), Biomedical Data Science and Systems Modeling, University of Augsburg, Germany

5. Others (Entrepreneur, honors and awards)

2014 MTZ-Award for Medical Systems Biology MTZfoundation

2013 Reinhart Heinrich Doctoral Thesis Award European Society for Mathematical and Theoretical Biology (ESMTB)

2011, 2012, 2013 Best performer in DREAM challenges Dialogue for Reverse Engineering and Methods (DREAM)

6. Selected recent publications (*shared first or senior authorship)

1. [Antibody-mediated targeting of TNFR2 activates CD8+ T cells in mice and promotes antitumor immunity](#). E Tam, R Fulton, J Sampson, ..., **A Raue**. *Science Translational Medicine* **11**, eaax0720, 2019
2. [Analysis of single-cell RNAseq identifies cell-cell communication associated with tumor characteristics](#). Kumar M, Jinyan D, Lagoudas G, Jiao Y, Sawyer A, Drummond D, Lauffenburger D, **Raue A**. *Cell Reports*, **25**(6), 1458-1468.E4, 2018
3. [Estimation of immune cell content in tumour tissue using single-cell RNA-seq data](#). M Schelker, S Feau, J Du, N Ranu, E Klipp, G MacBeath, B Schoeberl, **A Raue**. *Nature Communications* **8**(1), 2032, 2017
4. [Predicting ligand-dependent tumors from simulated signaling features](#). Hass H, Masson K, Wohlgemuth S, Paragas V, Allen J, Sevecka M, Pace E, Timmer J, Stelling J, MacBeath G, Schoeberl B, **Raue A**. *Nature Systems Biology and Applications* **3**(1), 27, 2017
5. [Understanding chemotherapy-induced replicative stress to identify rational combination therapies](#). Alkan O, Shah M, Koshkaryev A, Heinemann T, Yaffe M, Drummond D, Schoeberl B, **Raue A**. *Science Signaling*, **11**(540), eaat0229, 2018