

Curriculum vitae – Mathias Uhlen



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SHORT BIOGRAPHY

Mathias Uhlen research is focused on protein science, antibody engineering and precision medicine and ranges from basic research in human and microbial biology to more applied research, including clinical applications in cancer, infectious diseases, cardiovascular diseases, autoimmune diseases and neurobiology. His research has resulted in more than 650 publications and he is co-founder of 15 biotech companies. Since 2003, he has led an international effort to systematically map the human proteome and transcriptome to create a Human Protein Atlas using antibodies and various omics technologies. This effort has so far resulted in the Tissue Atlas (2015) showing the distribution of proteins across human tissues and organs, the Cell Atlas (2016) showing the subcellular location of human proteins in single cells, the Pathology Atlas (2017) showing how cancer patient survival is tied to RNA and protein levels, the Blood Atlas (2019) showing the genome-wide expression of genes in immune cells and a map of the proteins in human blood and finally the Brain Atlas (2020) showing the expression of proteins in the brain of humans, pig and mouse. He is member of the National Academy of Engineering (NAE) in USA, the Royal Swedish Academy of Science (KVA), the Swedish Academy of Engineering Science (IVA) and the European Molecular Biology Organization (EMBO). He is the President of the European Federation of Biotechnology. From 2010-2015, he was the Founding Director of the Science for Life Laboratory (SciLifeLab), a Swedish national center for molecular bioscience.

EDUCATION

1979	M.Sc. in Chemical Engineering, KTH, Stockholm, Sweden.
1984	Ph.D. Dept. of Biotechnology, KTH, Stockholm, Sweden
1985-86	Post-doc, EMBL, Heidelberg, Germany

CURRENT POSITIONS

1988- Full professor in Microbiology, KTH Royal Institute of Technology, Sweden

2012- Professor in Biotechnology (20%), Danish Tech. University (DTU), Denmark

2018- Guest professor (25%) in Neuroscience at the Karolinska Institutet, Sweden

PUBLICATION RECORD

Statistics (April 2020) according to Google Scholar:

- 650 articles with 63,000 citations (h-index: 119)
- Citations last year (2019): 6,189
- Among most cited scientists (www.webometrics.info/en/hlargerthan100)
- More than 20 articles in journals with impact factor > 25: Nature (3), Science (7), Nature Methods (5), Nature Biotechnology (8), Nature Medicine (2)
- More than 70 articles in journals with impact factor > 9, including PNAS (17), EMBO J (7) and Mol. Syst. Biol. (9)
- Link to all publications:
<https://scholar.google.com/citations?user=S8ER7X4AAAAJ&hl=en>

KEY PUBLICATIONS (selected):

Five selected publications from the last years with Uhlen as senior author:

1. Sjöstedt et al (2020) "An atlas of the human, pig and mouse brain" *Science* 367 eaay5947
2. Uhlén et al (2019) "The human secretome." *Science Signal.* 12(609).
3. Uhlen et al (2019) "A genome-wide transcriptomic analysis of protein-coding genes in human blood cells" *Science* 366 (6472): eann9198
4. Uhlen et al (2017) "A pathology atlas of the human cancer transcriptome" *Science* 357(6352)
5. Uhlen et al (2015) "Tissue-based map of the human proteome" *Science* 347(6220):1260419.

COLLABORATIONS AND SCIENTIFIC LEADERSHIP (selected)

2003- Director of the Human Protein Atlas (HPA) program

2016- Director of the KTH Center for Precision Medicine (KCAP)

2016- Director of Wallenberg Center for Protein Research (WCPR)

2010-2015 Founding Director, Science for Life Laboratory (SciLifeLab)

COMMISSION OF TRUST (selected)

- Chairman of the National committee for Biochemistry, 1994-1999
- Member of Advisor committee, Ministry of Education, 1999-2002
- Vice-President responsible for external relations, KTH, 1999-2001
- Chairman of the HUPO international Antibody Initiative (HAI), 2005-2017
- Member of HUPO Council (Human Proteome Organization), 2010-2015
- Chairman of the Scientific Advisory Board of UniProt, 2013-2016
- Member of the Board of the Swedish Research Council, 2019-2021
- President of the European Federation Biotechnology (EFB), 2014-2020
- Editor for the several journals, including BioTechniques 1992-, Current Opinion in Biotechnology 1992-, J of Biotechnology 1995-, Protein Engineering, Design and Selection (PEDS), 2004- and Cell Systems, 2015-

MEMBERSHIP OF SCIENTIFIC SOCIETIES (selected)

- Member of the National Academy of Engineering (NAE), USA, 2013-
- Member of the Royal Swedish Academy of Science (KVA), 1993-
- Member of the Swedish Academy of Engineering Science (IVA), 1992-
- Member of European Molecular Biology Organization (EMBO), 1995-

AWARDS AND HONORS (selected)

- IVA Gold Medal, 2003, from the Royal Academy of Engineering Sciences
- H.M. The King's Medal, 2004, from His Majesty the King of Sweden
- HUPO Distinguished Award, Long Beach, USA, 2006 from HUPO
- ABRF Award from the Assoc. Biomolecular Resources Facilities in 2009
- Honorary Doctor, Chalmers University, Gothenburg in 2011

ENTREPRENEURIAL ACHIEVEMENTS (selected):

More than 70 international patent applications. Founders of 16 start-up companies and former member of several Board of Directors, including public companies such as Bure (Sweden), Biotage (Sweden), Alligator Bioscience (Sweden), Novozymes (Denmark), Nordiag (Norway) and Amersham (UK). Vice-President KTH (1999-2001) responsible for external relations.