

PERSONAL INFORMATION

Magnus Ingelman-Sundberg

WORK EXPERIENCE

May 1996–Present

Professor of Molecular Toxicology
Karolinska Institutet (Sweden)

1987-1996

Acting professor of Physiological Chemistry
Karolinska Institutet (Sweden)

1977-1987

Lecturer in Physiological Chemistry (Appointed 1982)
Karolinska Institutet (Sweden)

EDUCATION AND TRAINING

September 1969–May 1975

Masters of Science Technology
Royal Institute of Technology, KTH, Stockholm (Sweden)
Chemistry, molecular biology, biochemistry

September 1975–May 1978

Bachelor of Science in Medicine
Karolinska Institutet, Stockholm (Sweden)
Histology, Anatomy, Embryology, Medical Chemistry, Physiology, Immunology

March 1973–May 1977

PhD and Docent in Physiological Chemistry
Karolinska Institutet, Stockholm (Sweden) PhD and Docent

ADDITIONAL INFORMATION

Expertise

Professor of Molecular Toxicology at Karolinska Institutet, Sweden, since 1996.

Academic honors, awards and prizes

- More than 440 original papers, (<http://www.ncbi.nlm.nih.gov/pubmed/?term=ingelman-sundberg+m> 28,201 citations (ISI), 49,000 in Google Scholar and a h-factor of 86 (ISI) or 109 (Google Scholar).
- Ranked as one of the world's most cited authors within the category Pharmacology (<http://isihighlycited.com/>)
- Assigned "Highly Cited Researcher for 2014, 2015, 2016 and 2017 by Thomson & Reuters (www.highlycited.com).
- Categorized by Thomson Reuters as one of the World's Most Influential Scientific Minds (<http://sciencewatch.com/sites/sw/files/sw-article/media/worlds-most-influential-scientific-minds-2014.pdf>) based on recent (2002-2012) citations from highly ranked papers. (Top 1 % cited in the field of pharmacology)
- The research group ranked as outstanding in Karolinska Institutet's External Research Assessment (ERA) in 2010 and by ERC Panel LS7 2014, 2015 and 2016
- **Awards** include The Svedberg Prize, The Swedish Society for Biochemistry and Molecular Biology 1989; Honorary member of The American Society for Biochemistry and Molecular Biology 1990; The Gerhard B Zbinden Lecture Award, EUROTOX 1996; The ISSX European Scientific Achievement Award 2003; The Bengt Danielsson Prize, The Swedish Academy of Pharmaceutical Sciences 2008; The John G Warner Pfizer Lectureship in Pharmaceutical Sciences, University of Michigan, USA, 2011.
- Elected member of **Academia Europea** 2017
- Selected as **Nauta Chair**, Vrije University of Amsterdam, April, 2012.
- Received the **ERC Advanced Grant (AdG)** for 2017-2022.
- Member of **Editorial Advisory Boards** of e.g. *Trends in Pharmacological Sciences* (Editorial Board), *Pharmacogenetics and Genomics*, *Pharmacogenomics*, *Drug Metabolism Reviews*, *The Pharmacogenomics J*, *Drug Metabolism and Disposition*, *Human Genomics*;
- 2018 BCPT Nordic Prize in Basic and Clinical Pharmacology and Toxicology.

Research achievements

Ingelman-Sundbergs group identified the first example of stable gene duplication and

Curriculum vitae

gene amplification in the human genome in 1993 and identified the ultrarapid metaboliser (UM) phenotypes for CYP2D6 and CYP2C19. His group has identified additionally several different important variant alleles of CYP2D6. Including the most common defective *CYP2D6*10* allele. His work has also identified CYP2E1 as a major enzyme responsible for development of Alcoholic liver disease (ALD). His group discovered that overexpression of CYP2C19 in fetal life in brain causes smaller hippocampi and an increased risk for anxiety and depression in adult life both among humans and mice and that the polymorphism of CYP2C19 is important for dosing of antidepressants and therapeutic outcome. His group also developed a novel *in vitro* system for studies of human liver function with an *in vivo* like phenotype where the important liver diseases can be mimicked. He also found the major importance of rare genetic variants for inter-individual differences in drug metabolism and response. The current research is centered about genetic predictors for drug response and adverse drug reactions. A major focus is taken for the use of novel 3D hepatic systems for prediction of drug hepatotoxicity and treatment of liver diseases.

Supervision of graduate students and postdoctoral fellows

Main supervisor to a PhD degree for 32 postgraduate students: Anders Hansson, Gunilla Ekström, Inger Johansson, Göran Skoglund, Ylva Terelius, Erik Eliasson, Collen M Masimirembwa, Niclas Tindberg, Irene Persson, Yin Hu, Mikael Oscarson, Roman A. McLellan, Che Fang, Etienne Neve, Souren Mkrtchian, Mats Hildebrand, Eleni Aklilu, Maria Backlund, Anastasia Simi, Tove-Rylander Rudqvist, Anna Westlind Johnsson, Jue Wang, Maria Karlgren, Sarah Sim, Ylva Edling, Alvin Gomez, Jessica Mwinyi, Louise Sivertsson, Sandra Travica, Anna Persson, Juo Gia, Delilah Hendriks.

Postdoctoral training for 31 PhDs:

Mariá Pitarque, Oliver von Richter, Vessela Nedelcheva, Cristina Rodriguez-Antona, Jukka Hakkola, Vita Dolzan, Seokjoo Yoon, Shin Ichii Miura, Yvonne Hoffman, Martin Ronis, Maria-Louisa Ledesma, Simon D Lytton, Vincenzo Longo, Mike Baldwin, Monica Ek, Rasmus Pedersen, Isa Cavaco, Jana Nekvindova, Irene Loryan, Sarah Sim, Maxim Ivanov, Marina Kacevska, Isabel Barragan, Volker Lauschke, Sabrina Moro, Catherine Bell, Lisa Fredriksson, Marin Jukic, Sabine Vorrink, Tracey Hurrell. Julia Riede

Commissions of trust

- Member of **The Nobel Assembly** at Karolinska Institutet since 2008 .
- Chairman of the international Scientific Advisory Committee of “*Microsomes and Drug Oxidations*” (MDO) since 2005 (www.mdo.ki.se), the major congress series in the field of drug metabolism and related areas.
- Chairman for the Human CYPallele Nomenclature (1985-2017)
- Member and expert at EMA (PGWP) in pharmacogenomics since 2004
- Programme committee of the MD curriculum: Head of curriculum committee 3 years, responsible for the new 1990 study plan for the MD curriculum.
- Docenturnämnden, Karolinska Institutet, member for 6 years,
- Chairman of Karolinska Institutet Research Training Programme KIRT 6 years,
- Chairman of the Committee for Elective Periods in the MD curriculum 6 years.
- Chairman of Karolinska Institutets Recruitment Committee (2008-March 2014).
- Vice Dean (Recruitment) Karolinska Institutet (2012-March 2014)
- Chairman of study section, The Swedish Natural Science Research Council 3 Y.
- Member of study sections at The Swedish Natural Science Research Council 6 Y
- Vice Chairman at the Department (2001-2006; 2014-Sep 2019)
- Member of Study sections The Swedish Medical Research Council, 6 years, The Norwegian Research Council for 6 years.
- Invited presentations to peer reviewed internationally established conferences during the last 10 years to about 60 different international meetings

Current Major Research Funding

- The Swedish Research Council, Karolinska Institutet, The Swedish Cancer Society, EU Horizon 2020, ERC Advanced Grant, AstraZeneca, Eurostars-Vinnova