Curriculum Vitae – Erik Lindahl

Date of birth: March 14, 1972   URL: http://www.scilifelab.se/researchers/erik-lindahl/
e-mail: erik.lindahl@scilifelab.se   ORCID: 0000-0002-2734-2794
Address: Science for Life Laboratory, Box 1031, 17121 Solna, Sweden

1. Higher education & degrees
2007   Reader (Swedish 'docent'), Theoretical chemistry, Stockholm University
2001-06-29 PhD in Theoretical Biophysics, KTH, Stockholm, Sweden
2000-04-07 Licentiate in Theoretical Biophysics, KTH, Stockholm, Sweden
1992-1993 Studies in Russian language, Stockholm University (Part of military service)
1991-1995 Master of Science in Engineering Physics, Lund University, Sweden

2. Positions/appointments
2010-   Professor of Biophysics, Dept. Applied Physics, KTH
2009-   Professor of Biophysics, Dept. Biochemistry & Biophysics, Stockholm University
2004-2009 Assistant & associate professor, Dept. Biochemistry & Biophysics (VR position)
2004   Visiting scientist, École Normale Supérieure & Institut Pasteur, Paris, France
2001-2003 Postdoctoral scholar, Stanford University School of Medicine, USA, w. Michael Levitt
2001   Postdoctoral scholar, Groningen University, Netherlands, w. Herman Berendsen

4. Awards & prizes
2021   The Wallmark Prize, Royal Swedish Academy of Sciences
2019-   Member of the Royal Swedish Academy of Engineering Sciences
2017   Intel Parallel Programming Award
2016   CECAM Annual lecture, Lausanne, Switzerland
2011-2017 Senior Research Fellow of the Swedish Research Council
2011-2016 Founding member of the Young Academy of Sweden
2009   Wallenberg Consortium North Star Award
2008   SSF Future Research Leaders III
2006   SSF Ingvar Carlsson Award
2005   Sven and Ebba-Christina Hagberg Prize, Royal Academy of Sciences
2003   "Prix Jeune Chercheur Blaise Pascal", École Normale Supérieure
1996   Fellowship of Excellency for PhD studies 1996-2001, KTH, Stockholm

5. Selected research funding track record
2022-2025 Project grant from Swedish Research Council, SEK 5.15M (PI)
2022-2024 The European PILOT, EuroHPC hardware consortium, 0.4M€ (co-investigator)
2021-2026 NIH project grant, structure of acetylcholine receptors (co-investigator)
2021-2024 LIGATE, EuroHPC project for drug discovery, 0.4M€ (co-investigator)
2021-2023 PerMedCoE, EU Center-of-Excellence in personal medicine, 0.4M€ (co-investigator)
2020-2022 Postdoctoral funding, lipid-protein interactions, SciLifeLab/SU, SEK 2M (PI)
2020-2021 Exscalate4CoV, EU Horizon 2020 Covid-19 project, 0.15M€ (co-investigator)
2020-2025 Strong Research Environment, Swedish Research Council, SEK 16M (PI)
2019-2022 BioExcel2, EU Center-of-Excellence, EUR 8M€ total (scientific director, my part 1M€)
2019-2022 Software infrastructure for structural biology, Swedish Research Council, SEK 4M (co-PI)
2019-2021 PRACE 6IP; EU software libraries for molecular modeling, 0.2M€ (Scientific lead)
2018-2021 Project grant from Swedish Research Council, SEK 3.8M (PI)
2018-2023 Strong Research Environment, Swedish Research Council, SEK 17M (co-investigator)
2017-2022 NIH project grant for biomolecular software (co-investigator)
2017-2020 Cryo-EM computational infrastructure, Science for Life Laboratory, SEK 3M (PI)
2015-2020 SSF Infrastructure Fellow development project, supporting scientific PI
2015-2018 BioExcel, EU center-of-excellence, EUR 0.6M€ (lead scientist)

2014-2020 KAW "Dynamics and regulation of mammalian channels", SEK 26M (co-PI)
2014-2017 Project grant from Swedish Research Council, SEK 3.6M (PI)
2012-2013 ERC Proof-of-Concept grant, 120k€ (PI)
2011-2016 STINT institutional collaboration grant SU-University of Virginia, SEK 1.6M (PI)
2011-2014 EU CRESTA, FP7, €0.4M (co-investigator)
2011-2013 Project grant from Swedish Research Council, SEK 2.4M (PI)
2010-   1/10 PIs for the Swedish eScience Research Center (SeRC) strategic research area
              Including project grant/researcher funding averaging ~1MSEK/year since 2011.
2010-2013 EU FP7, Scalable Life Science Software Infrastructure grant, SEK 3.6M total (co-PI)
2008-2013 SSF Future Research Leaders award, SEK 8.5M (PI)
2008-2013 ERC independent researcher grant (consolidator category), €1.3M (PI)
2008-2011 EU Drug Initiative for Channels & Transporters (EDICT), FP7, SEK 1M (co-PI)
2008-2010 Project grant from Swedish Research Council, SEK 2.1M (PI)
2007-2011 Vetenskapsrådet infrastructure grant, compute cluster, SEK 3M (PI)
2007-2010 Human Frontier Science Program "biodiversity of the voltage sensor", SEK 1M (co-PI)
2006-2009 SSF Ingvar Carlsson Award Grant, SEK 3M (PI)
2006-2008 SSF Strategic center for biomembrane research (co-investigator)
2006-2011 STINT institutional collaboration grant SU/UU-Stanford University (co-PI)
2005-2008 SSF Bio-X grant "membrane protein interactions" (co-investigator)
2004-2008 Project grants & position from Swedish Research Council, SEK 6M total (PI)
2001-2003 Postdoctoral fellowship from the Knut & Alice Wallenberg foundation (PI)
1996-2001 Fellowship of Excellence for PhD studies

6. Recent research evaluation/assessment outcomes
- For the last two rounds, Lindahl's applications to the Swedish Research Council have been awarded scores of 7 out of 7 both for the research project, track record, and overall priority.
- Lindahl is main PI of one "strong research environment" grant from VR, and co-PI on a second.
- Lindahl's software GROMACS has repeatedly been selected as one of KTH's main impact cases

7. Supervision of students & postdoctoral fellows
- Guided 10 students to PhD degrees as main advisor, 2 to licentiate degree
- Primary current research team with 6 PhD students, 4 postdoctoral fellows, 6 researchers
- Mentored 12 previous postdoctoral fellows.
- 7 previous students/postdocs now have PI positions: Magnus Andersson, Umeå University (tenure); Björn Wallner, Linköping University (tenure); Per Larsson, Uppsala University (tenure); Peter Kasson, University of Virginia (tenure); Berk Hess, KTH (tenure, ERC awardee); Jens Carlsson, Uppsala University (tenure, ERC awardee); Laura Orellana, Karolinska Institutet (tenure track). Four more are currently postdoctoral scholars abroad, and four are senior researchers in academia.

8. PhD/Habilitation thesis opponent appointments
Perttu Niemelä (Helsinki University of Technology, Finland 2007); Hector Martinez-Seara (Universitat de Barcelona, Spain, February 2010; Lucie Delemotte (Université de Nancy, France, July 2011); Johan Kraft (Aarhus University, Denmark, March 2012); Marina Kasimova (Université de Lorraine, France, December 2014); Ivan Ivani (Universitat de Barcelona, Spain, Dec 2016); José Miguel de la Rosa Trevin (Universidad Autonóma de Madrid, Spain, October 2017); Fredrik Robertsen (Åbo Akademi, Finland, May 2018); Ludovic Sauguet (Habilitation, Institut Pasteur, Paris, France, May 2018); Lucy Ladefoged (Aarhus University, Denmark, Jan 2019); Anna Sinelnikova (Uppsala University, Uppsala, Sweden, March 2021).

9. Didactic merits
- Introduction to university didactics (KTH, 1997); PhD supervision didactics (SU, 2005); Advanced university didactics (SU, 2009)

- Developed masters-level classes on computational structural biology (Stanford), bioinformatics (SU), molecular modeling (SU), protein physics (KTH), and molecular biophysics (KTH/SU). Taught over 25 class rounds, comprising ~700 lecture hours.
- Development of master's program ("bioinformatics"), SU 2007
- Speaker & mentor, International HPC Summer School XSEDE/PRACE/RIKEN 2010-
- Development of master's program in "Molecular Techniques for Life Sciences", and program co-director, jointly KTH-SU-KI, 2015. The program now attracts >350 first-hand applicants for 24 positions, and of the class starting fall 2021, 13 students are fee-paying. The program was lifted as a prime example of KTH-KI-SU collaborations by the SciLifeLab international advisory board.
- The flipped-classroom lectures using a lightboard for my "Molecular Biophysics" class are published on YouTube, with more than 2,000 international students following the channel.
- Developed new communicating science class, PhD level class, Stockholm University, 2021
- PhD-level classes overall responsibility, Chemistry section, Stockholm University, 2021-

10. Community & Industrial Engagement
- Returning speaker on Nobel week, Nobel breakfasts, commenting Nobel prizes on Swedish TV.
- Outreach talks at "Vetenskapens hus", The Berzelius days, Folkuniversitetet, public classes at SU.
- Our simulation software is used my millions of volunteers all over the world as part of the Folding@Home distributed computing citizen science project, in particular for Covid-19 work, with in-kind or monetary support e.g. from Bahnhof, Amazon and Intel.
- Intel OneAPI Technical Advisory Board, USA, 2020-
- Khronos SYCL advisory group, USA, 2020-
- IVA Mentor4Research industrial collaboration program, 2006-2007
- Startups: Founder BinaryBio AB; Scientific advisor/collaborator, ERCO Pharma AB.
- Acted as mentor to students in IVA's student council and assistant professors at KTH & SU

11. Selected commission of trust, administrative & leadership positions
2023	Organization Committee, European Biophysical Society Conference, Stockholm
2021-2022	Stockholm trio expert group on research assessment/reward systems, Stockholm, Sweden
2021-2022	DDLS recruitment group for 20 new PI positions in data-driven life science in Sweden
2021-2022	EU-Japan task force on High-performance computing-based biomedical research
2021	Stockholm University strategic research profile areas selection group
2021	Organizer, EMBO workshop on advances in biomolecular simulation (Brno/virtual)
2021	"Beyond Transformative Agreements", National Library of Sweden Open Access group
2021	PASC21, Interdisciplinary dialogue chair, Geneva, Switzerland
2021-	Natural Science Faculty board, Stockholm University
2021-	KAW Data-driven life science (DDLS) project national steering board
2021-	Vice dean, chemistry section, Stockholm University
2020	External evaluation committee for PhD program in biochemistry, Uppsala University
2020-	Swedish EuroHPC Competence Center steering board, Uppsala University
2020	KTH Digital Futures "Rich & Healthy Life" working group
2020	EPSRC grant evaluation panel member, Swindon, UK
2020	EU-US international task force for Covid-19 rapid research infrastructure access
2020	Chair, Applications track, Supercomputing 2020, Atlanta, USA
2019	Academy of Finland panel chair, Helsinki, Finland
2019-	Vice chair, Chapter VII of the Royal Swedish Academy of Engineering Sciences
2019-	PASC Project & Conference Steering board, ETH Zurich, Switzerland
2019	Organizing committee, CompBioMed conference, London, UK
2019-2021	EuroHPC RIAG (Research & Industrial Advisory Group), Luxembourg

2018	PRACE Ada Lovelace prize selection committee, Brussels
2018	Academy of Finland panel member, Helsinki, Finland
2018	Editor-in-chief, PRACE/EuroHPC Scientific Case for Computing in Europe
2018	Chair, PASC18 Conference, Basel, Switzerland
2018-	Teacher appointment board, faculty of science, Stockholm University
2017	European Commission Digital Summit, presenter, Tallinn, Estonia
2017-2018	Board of Directors, EU PRACE HPC infrastructure, Brussels, Belgium
2017	Digital Infrastructures for research (DI4R) program committee, EUDAT, Brussels
2017-2018	Chair, Scientific Steering Committee, EU PRACE HPC infrastructure
2017	PRACEdays17 organizing committee, Brussels, Belgium
2016-	Vetenskapsrådet panel member (apart from years I applied), NT-9/NT-F
2016	CECAM Bernie J Alder Prize judging panel, Lausanne, Switzerland
2016-	Scientific advisory board, CSCS, Zurich, Switzerland
2016-	Council member, Centre Européen de Calcul Atomique et Moléculaire, Lausanne
2016-	Scientific advisory board, Multiscale genomics consortium, Barcelona, Spain
2016	Vice chair, Scientific Steering Committee, EU PRACE HPC infrastructure
2015-	Scientific director, BioExcel Center of Excellence in Biomolecular Simulation
2015	Academy of Finland panel member, Helsinki, Finland
2014-	Co-director, Swedish e-Science Research Center
2014	EU Innovation Convention, speaker, Brussels, Belgium
2013-2015	Scientific Steering Committee, EU PRACE computing infrastructure
2012-2016	Board of directors, Swedish National Infrastructure for Computing
2012-2019	Platform director for Bioinformatics, Science for Life Laboratory, Stockholm
2011-2013	Chair of election panel, Young Academy of Sweden
2011-2016	Gender equality board, School of Engineering Science, Royal Inst. Technology
2009-2014	Steering group, Swedish eScience Research Center
2008-2010	Board of directors, Center for Parallel Computers, Royal Institute of Technology

12. Research impact metrics

>130 publications, 62,000 citations, 2 pubs above 10,000, 5 above 5,000, 6 above 1,000, 40 above 100.
h-index 60, m-index 2.6 (h/years-since-1st-paper), i10-index 116, >100 invited talks.
Google scholar public profile: https://goo.gl/zKzue2