

CV: Kjetill Sigurd Jakobsen

Born April 12th, 1958.

Professor at Department of Biosciences, University of Oslo (UiO)

<https://www.mn.uio.no/cees/english/people/core/kjetillj/>

Academic record

- 1989: PhD, University of Oslo
- 1984: Master of Science (Cand.scient.), University of Oslo

Research record

- 2019-present: Norwegian initiative for the Earth BioGenome Project: EBP-Nor (PI) and European Reference Genome Atlas (ERGA) in Norway (2020)
- 2011-present: Teleost immune system evolution, genome dynamics and functional impact of simple repeats (RCN FRIPRO Toppforsk, UiO: Strategic Res. Initiative, Convergence environment (PI)
- 2008-present: Teleost, mammal and plant evolutionary (comparative and populational) genomics with a particular emphasis on Atlantic cod and codfishes (PI)
- 2009-2011: Genome sequencing of Atlantic cod by a pure high throughput sequencing approach (PI)
- 2003-2012: Phylogeny, HGT and secondary metabolite genes in protists and bacteria (PI)
- 2000-2012: Plastid replacement, phylogeny/eukaryotic supergroups and genomics in protists (PI)
- 1997-2004: Phylogeography and population genetics of vertebrate species (PI)
- 1996-2000: Evolution of dinoflagellate plastids (PI)
- 1993-1998: Strategic University Program (RCN) – Biotechnology methods development (PI)
- 1985-1993: Plant molecular biology – seed development, PhD dissertation (1989)

Appointments held include

- 2018-present: chair CEES
- 2009-present: director Norwegian Sequencing Centre
- 2004-present: Core member, Centre for Ecological and Evolutionary Synthesis (CEES), UiO
- 2000-2002: CEO, Genpoint AS
- 1994-present: Professor, Department of Biology, UiO
- 1990-1994: Assistant Professor, Division of General Genetics, UiO
- 1987-1988: Visiting scientist, Botany Department, University of Georgia, Athens, USA
- 1986: Visiting scientist, ARCO Plant Cell Laboratory, Dublin, CA, USA

Adjunct positions held include

- 2009-present: Founder and Director, Norwegian Sequencing Centre
- 2009-2011: Vice-Dean (Life Sciences), Faculty of Mathematics and Natural Sciences, UiO
- 2008-2012: Chairman of the Board, marine network MareLife
- 2002-2006: Board of Directors, Genpoint AS
- 2001-2003: Founder and Chairman of the Board Algene Biotech AS
- 1998-2000: Chairman of the Board, Genpoint AS
- 1997-1999: Head of Division, General Genetics, UiO

Expertise and knowledge

The focus of my current research is to bridge the gap between organism-oriented evolutionary and ecological research and genomics/molecular biology by employing interdisciplinary approaches. Key focus areas: genomics, comparative and population genomics, marine systems/fish biology.

Funding ID (PI of the following recent research projects. Total external funding indicated.)

- 2021-2024: A Norwegian Earth BioGenome initiative: the initial launch phase (30 MNOK; RCN)
- 2017-2022: COMPARE – Convergence Environment (15 MNOK; UiO)
- 2016-2021: “Top tier research (Toppforsk)” – Evolutionary and functional importance of simple repeats in the genome – REPEAT (25 mill NOK; RCN)
- 2014-2017: Centre for Computational Inference in Evolutionary Life Sciences (21 MNOK; UiO)
- 2014-2017: Norwegian Sequencing Centre – Phase II (41 MNOK; RCN)
- 2013-2016: Novel techniques for seabed monitoring of CO₂ leakage (2.35 MNOK; RCN)
- 2013-2016: Functional and comp. immunology in a teleost world without MHC II (9 MNOK; RCN)
- 2013-2017: The Aqua Genome Project (cod and salmon) (40 MNOK; RCN)
- 2010-2014: Translating the cod genome for aquaculture (6 MNOK; RCN)
- 2008-2012: Genome sequencing of Atlantic cod (10 MNOK; RCN)
- 2008-2012: Saxitoxin biosynthesis and genomics: horizontal gene transfer (4 MNOK; RCN)
- 2007-2010: Grants from FUGE, Infrastructure, UiO (33 MNOK; RCN)

Other professional activities (editorial/review, administrative, supervision)

- 2019 – present: Advisory Board, NGS Competence Network, German Research Foundation
- 2018 – present: leader group Dept of Biosciences, UiO
- 2016 – 2018: board member Dept of Biosciences, UiO
- 2015 – present: Leader Digital Life Norway communication Work Group
- Referee on manuscripts submitted to journals such as *Nature*, *Science*, *Nat Genet*, *Nat Commun*, *PNAS*, *Cell*, *Plant Cell*, *Plant J*, *PLOS journals*, *Current Biol*, *MBE*, *GBE*, *Mol Ecol*, *BMC journals*.
- 2009-2014: Chairman, Norwegian Plant Network
- 2009-2014: Board member, Research Council of Denmark, Strategic growth technologies
- 2009-2011: Leader, Bioinformatics Strategy – Computational Life Sciences initiative (CLSi), UiO
- 2008-2014: Board member of the Molecular Life Science (MLS) Board, University of Oslo
- 2007-2008: Training program for scientific leaders – University of Oslo
- 1996-1999: Secretary, European Union for Biotechnology, Appl. Mol. Genetics Working Group
- 1998: Guest editor, *J Biotechnology*
- 1994-2000: Editorial board, *BioTechniques*
- Teaching: Undergraduate teaching at all levels (introductory biology, genetics, cell biology, evolutionary biology etc.). Graduate teaching: genetics, genomics, molecular biology, evolution. Developed new courses in biology, genetics, evolutionary biology, molecular evolution, gene technology. Teacher at EMBO and NorFa courses (PhD level)
- Supervision: Supervisor for 36 completed PhDs, 24 postdocs
- Management experience: Leading a large research group, founder/director of Norwegian Sequencing Centre; founder/CEO/board member of several companies and programs of the Research Council of Norway and the Danish Research Council; Vice-Dean of Life Sciences at UiO; Head of Division General Genetics, UiO; PI of several large projects including sequencing of the Atlantic cod genome and The Aqua Genome Project.

Granted patents

- 5 granted patents

Invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools

Invited presentations at international conferences, symposia, keynote lectures, seminar series, international advanced schools (EMBO, NorFa) across Europe and the American (USA and Canada) and Asian continents.

Invited popular lectures for the political leadership of Norway, the Ministry of Education and Research, the financial elite and many more.

Organisation of international conferences

- Organizer (leader) of several international conferences in biochemistry, biotechnology, plant biology, genome evolution, genome sequencing and bioinformatics

Prizes/Awards/Academy memberships

- 2017: Award for best publication Trends in Biotechnology
- 2016: Best publication 2016, Dept. of Biosciences, UiO
- 2015: Awarded top-notch researcher status by the Research Council of Norway
- 2012: Elected member, Norwegian Academy for Science and Letters
- 2011 Prize for the best publication at Dept. of Biosciences, University of Oslo
- 2011: “The Atlantic cod reveals a unique immune system” (Star et al. 2011) included in the F1000
- 2004: Darwin Prize, University of Oslo
- 1998: Annual Celebration of Research, Research Council of Norway

Major contributions to early careers of excellent researchers

I have taken an active part in the training of young researchers. A large number of PhDs and postdocs have been trained under my supervision. For example: Knut Rudi professor at NMBU; Mari Espelund CTO of INHIBIO; Ole J Dahlberg CEO Thermo Fisher Scientific, Norway; Kamran Shalchian-Tabrizi professor IBV, UiO; Camilla L. Nesbø young outstanding researcher University of Alberta, Canada; Paul E. Grini professor IBV, UiO; Lex Nederbragt associate professor/senior lecturer Dept. of Informatics/IBV, UiO; Bastiaan Star associate professor IBV, UiO; Michael Matschiner associate professor The Natural History Museum, UiO; Unn Hilde Refseth Research Director Norwegian Radiation Protection Agency (Dept. of Monitoring and Research); Tove M Gabrielsen Prof Univ of Agder; Trine B Rounge Associate Prof. Dept of Pharmacy UiO; Trine J Meza Rector Kristiania University College.