

Personal data

Name: Peter Refsing Andersen

Born April 29th, 1983 in Randers, Denmark. Danish nationality.

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**Academic positions**

Aarhus University, Denmark 2019 – present

Assistant Professor (tenure-track) at the Department of Molecular Biology and Genetics

- Establishing transcription, germline biology and genetic conflicts as institute focus areas
- Awarded Hallas-Møller Emerging Investigator grant by the Novo Nordisk foundations
- Awarded AIAS COFUND Fellowship at Aarhus Institute of Advanced Studies

Aarhus University, Denmark 2019 – 2022

AIAS-COFUND Fellow at the Aarhus Institute of Advanced Studies (AIAS)

IMBA, Vienna, Austria 2013 – 2019

Postdoctoral Fellow, Laboratory of Julius Brennecke

- Research subject: Tissue-specific gene expression mechanisms in the animal germline.
- Awarded stipends from the Alfred Benzon and Novo Nordisk foundations.
- Published discovery of novel animal gene expression mechanism in *Nature* and *Cell*.

Aarhus University, Denmark 2012 – 2013

Postdoctoral Researcher, Laboratory of Torben Heick Jensen

- Led three projects to completion for publication.

Education

Aarhus University, Denmark 2008 – 2012

PhD student, Laboratory of Torben Heick Jensen

- Thesis: “Linked biogenesis and degradation of human non-coding RNAs”.
- Awarded full faculty PhD stipend (based on university study merits).
- Conducted research on human gene expression resulting in four first-author papers.

Aarhus University, Denmark 2003 – 2008

Bachelor and Master studies in molecular biology

Main scientific focus areas

- Genome regulation in animal germline biology
- Genetic conflicts between animal genomes and genetic parasites (transposons and viruses)
- How paralog genes enable ‘hacking’ of textbook dogmas of gene regulation

Research summary

Fundamental processes in genome biology, such as genome stability, transcriptional regulation, and chromosome transmission are ancient and highly conserved processes. However, some genes that support these processes are remarkably young and rapidly evolving.

My work aims to understand the evolutionary mystery of how such highly conserved genome processes can be supported by young and often fast-evolving genes and to reveal the evolutionary drivers and consequences of this enigmatic genetic innovation. We do so by developing research projects within three connected areas that each address a key aspect of genetic innovation of genome regulation: genome regulation, germline biology and intragenomic conflicts.

To understand this biology, we apply a diverse range of methods including genetics in both *in vivo* and cell culture *Drosophila* systems, CRISPR/Cas9-mediated genome editing, chemical genetics for time-resolved protein depletion, high-resolution microscopy, interaction proteomics and high-throughput sequencing for transcriptomic and genomic bioinformatic analyses.

Funding

<i>Foundation</i>	<i>Grant type</i>	<i>Running period</i>
Danmarks Frie Forskningsfond	Sapere Aude – DFF research leader	2020 to 2024
Carlsberg Foundation	Infrastructure grant	2020 to 2021
AIAS	COFUND Fellowship	2019 to 2022
Novo Nordisk Foundation	Hallas-Møller Emerging Investigator	2019 to 2024
Novo Nordisk Foundation	Postdoc Stipend for Research Abroad	2014 to 2018
Alfred Benzon Foundation	Postdoc Stipend	2013 to 2014
Aarhus University	Full independent faculty PhD scholarship	2008 to 2012

Management and leadership

- Running a growing lab at Aarhus University since the beginning of 2019. The lab presently consists of myself, a technician and two PhD students with another student and a postdoc joining in September 2020.
- Before starting my own lab, I have previously supervised (practical training as well as project management) two technicians, three master students and one PhD student
- Scientific management training:
 - NNF Leadership coaching program (2019 – 2020, ongoing)
 - Project Management (2016, Prosciencia)
 - Leadership in Science (2014, hfp consulting)

Teaching and outreach

Teaching (lectures, practical sessions and theoretical exercises):

- 2019-present: RNA Biology course (Aarhus University)
- 2006 - 2011 Course instructor: “Theory of Science and Ethics”
- 2010 - 2010 Instructor in “Physical Biochemistry”

Public outreach

- 2019 Contribution to the science-art book “Looking Glass” made by collaboration between applied arts students at the University of Vienna and researchers at VBC, Vienna
- 2010 Instructor at “Natur i Teltet”
- 2009 - 2010 Teacher at “The Rolling University”

Additional academic activities

- 2019-2024: Selected member of the Young Academy under The Royal Danish Academy of Sciences and Letters
- Peer-reviewer for multiple journals including PLoS Biology, PLoS Genetics and Cell Reports.
- Co-organizer of the “RNAarhus” student and postdoc seminar series on RNA biology at Aarhus University; supported by an “RNA salon” grant from the RNA Society.

Previous and current international collaborators

- Rippei Hayashi (The Australian National University, Canberra): 2019 - present
- Joan Barau (IMB, Mainz): 2019 - present
- Mia Levine (University of Pennsylvania): 2018 - present
- Edouard Bertrand (Institut de Génétique Moléculaire de Montpellier): 2012-2013
- Richard Sandberg (Karolinska Institutet, Stockholm): 2012-2013

Oral presentations at international conferences (only past 3 years included)

- 10/2019 Selected speaker, The Non-Coding Genome EMBO Symposium 2019, Heidelberg, DE
- 07/2019 Selected speaker, 14th Drosophila Heterochromatin meeting, Spoleto, Italy
- 03/2019 Invited speaker, TERM European RNA meeting, Warsaw, Poland
- 12/2018 Invited speaker, Institut Pasteur Symposium on RNA and genome stability, Paris, France
- 11/2018 Evo-Chromo Workshop (Company of Biologists), Wiston House, West Sussex, UK
- 04/2018 Invited lecture, MDC-BIMSB, Berlin, Germany
- 06/2017 Annual Meeting of the RNA Society 2017, Prague.
- 05/2017 The 12th Microsymposium on Small RNA Biology, Vienna.
- 05/2017 Workshop: "The dynamic genome: hidden and mobile activities", Les Treilles.

Additional work experience and education

- 2003 - 2007 Co-manager, Stevnstrup Youth Club (social initiative for 13-17-year-old kids)
- 2001 - 2003 Co-owner, PR and event manager at the music venue Café von Hatten, Randers
- 1999 - 2002 High-school graduate from Randers Statsskole (math/physics major)