

## Personal information

Anni Hangaard Andersen

Born: 03.07.57

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## Positions

1998-Associate Professor, Department of Molecular Biology and Genetics, Aarhus University

1993-97Assistant Professor, Department of Molecular Biology and Genetics, Aarhus University

1992Maternity leave, twins (June to December)

1985-93Research Associate, Department of Molecular Biology and Genetics, Aarhus University, Funded by the Danish Research Councils

## Education & training

1997-98Research Stay, Laboratory of Molecular Genetics, NIA, NIH, Baltimore, USA

1991Lic. Scient, Ph.D., Molecular Biology, Aarhus University

1986Research visit, Department of Biochemistry, Vanderbilt University, USA

1985 Master, Molecular Biology, Aarhus University

## Scientific summary

Area of research: Cellular functions of DNA topoisomerases in transcription with emphasis on their role in gene activation and their interplay with chromatin regulating factors. Cellular functions of topoisomerases and RecQ helicases in replication with focus on replication termination. Studies of topoisomerases as targets for cancer chemotherapy with focus on the identification of repair factors counteracting efficient treatment.

Publications: The total publication list contains 54 publications, including 45 scientific papers, 3 reviews and 6 book chapters. Of the 45 papers 30 are published in journals with an impact factor of around 6 and above and 13 in journals with an impact factor between 4 and 6.

Pedersen, J. M.\*, Fredsoe, J.\*, Roedgaard, M., Andreasen, L., Mundbjerg, K., Kruhøffer, M., Brinch, M., Schierup, M.H., Bjergbaek, L., and Andersen, A.H. (2012) DNA topoisomerases maintain promoters in a state competent for transcriptional activation in *S. cerevisiae*. *PLOS Genet.* 8(12) e 1003128s. Bendsen, S., Oestergaard, V., Skouboe, C., Brinch, M., Knudsen, B.R. and Andersen, A.H. (2009) The QTK-loop is Essential for the Communication Between the N-Terminal ATPase Domain and the Central Cleavage/Ligation Domain in Human Topoisomerase II *Biochemistry*, 48, 6508-15. Jonstrup, A.T, Thomsen, T, Wang, Y., Knudsen, B. R., Koch, J., and Andersen, A. H. (2008) Hairpin Structures Formed by Alpha Satellite DNA of Human Centromeres are Cleaved by Human Topoisomerase II $\alpha$ . *Nucleic Acids Res.* 38, 6165-74. Oestergaard, V. H., Knudsen, B. R, and Andersen, A. H. (2004). Dissecting the Cell Killing Mechanism of the Topoisomerase II Targeting Drug ICRF-193. *J. Biol. Chem.*, 279, 28100-105.

## Research funding

Approximately 1-1.5 mill kr. per year since 2000.

## Teaching and supervision

Formal pedagogical training:

Pedagogical course for assistant professors

Teaching experience:

Former teacher on a number of undergraduate and graduate courses at MBG

Present teacher and coordinator on: Eukaryotic Research Organisms (10 ECTS, graduate course) and Eukaryotic

Research Organisms –Experimental (5 ECTS, graduate course).

Supervision of students:

Supervisor for 10 Ph.D.-students, 15 master students and 5 post docs since 2000

## Evaluation of others work

Opponent at Ph.D. defences at Copenhagen University

Chairman at several Ph.D. defences at MBG, AU

Reviewer of research grants from Fonds National de la Resherche and The Wellcome Trust

Reviewer for ACS Journals

## Leadership, development and collaboration

Committees:

Member of the Science Committee, the Ph.D.- Committee and the Working Environment Committee at MBG, AU

Collaboration:

Collaboration with several national and international researchers.

Knowledge exchange:

Coordinator for molecular biology in the former yearly communication of science to the public by the Science Faculty, AU.

Four interviews published in newspapers and publications from the Research Councils.

Participation in the delegation of Danish politicians, researchers and the trade council to India in 2004.

