

Anne-Lise Børresen-Dale

Born 030746, Molde, Norway

Addresses:

1. Department of Cancer Genetics, Institute for Cancer Research, Oslo University Hospital The Norwegian Radiumhospital.

2. Institute for Clinical Medicine, Faculty of Medicine University of Oslo, Norway.

Phone: +4722781373, Fax: +4722781395 Cell phone: +4792854455

Email: a.l.borresen-dale@medisin.uio.no <http://radium.no/genetics>

Academic Degrees.

1970 M.Sc. Biochemistry, Technical University of Norway, Trondheim, Norway.
1978 Doctor of Science in Medical Biochemical Genetics, University of Oslo, Norway.
1987 Judged qualified as a professor in gene technology, University of Oslo, Norway.
1992 Professor in Molecular Tumor biology, Univ. of Oslo, Norway (still holding)

Main Positions held

1970-72 Research assistant, Institute of Medical Genetics, University of Oslo.
1972-78 Research Fellow, Institute of Medical Genetics, University of Oslo.
1978-82 Senior Research Fellow, Institute of Medical Genetics, University of Oslo
1982-86 Senior Biochemist, Head, section for prenatal diagnosis, Department of Medical Genetics, UiO
1987-99 Senior Scientist, Dept. of Genetics, Inst. for Cancer Research, DNR, Norway
1999-present Head of Department, Dept. Genetics, Inst. for Cancer Research, OUS/DNR, Norway

Honors and awards

1989 Prof.Olav Torgersens Prize and Memorial Lecture: Gene tech. in the fight against cancer.
1989 Honorary lecturer at the 175th anniversary of the Medical Faculty, Univ.Oslo.
1994 King Olav V's Cancer Research Prize
1998 Member of The Royal Academy of Science, Norway
2001 Honorary member of The Norwegian Biochemical Society
2002 University of Oslo's Research Prize for Outstanding Research
2002 SalusAnsva Medical prize for Outstanding Research in Tumor biology
2002 The Employer of the year at The Norwegian Radiumhospital
2004 Member of The Norwegian Academy of Science and Letters
2004 Swiss Bridge Award for outstanding Cancer Research
2008 Doctor medicinae honoris causa, University of Copenhagen
2008 The Möbius prize for outstanding Research from The Research Council of Norway
2009 ESTRO Honorary member award
2009 International Journal of Cancer/ Meyenburg-Stiftung Joint Lectureship distinguished speaker
2009 Elected member of the European Academy of Cancer Sciences
2009 Associate Investigator of Centre for Molecular medicine (NCMM), Nordic EMBL Partnership
2010 Honorary ambassador of the Norwegian Cancer Society
2012 Honorary member of The Hungarian Cancer Society
2014 Helmholtz International Fellow Award, Germany
2014 European Journal of Surgical Oncology Award Lecture, Liverpool
2015 Elena Timofeeff-Ressovsky Lecturer, Berlin
2015 Mildred Scheel Lecturer, Germany
2015 The AACR Distinguished Lectureship in Breast Cancer Research
2015 Fritjof Nansen medal and award for Outstanding Research
2015 Oslo University Hospital's Excellent Researcher Award

Research work abroad (3-6 months)

1972: Dep. Hum.Biol.Chem. & Gen, Univ. Texas, (Barbara Bowman), protein sequencing.
1977: The Rockefeller University, New York (Thomas Kindt), protein sequencing
1985: EMBL (Hans Lerach), recombinant DNA-techniques
1986: Recombinant DNA Tech. Lab, Helsinki, Finland (Leena Peltonen,)
1990: Harvard Med. Sch., Mass. (David Yandell), PCR/SSCP on Rb,
1992: MIT, Cent. Envir. Health Sci. MA (William Thilly), mutation assay systems
1992: MGH Cancer Cent and Harvard Med. Sch, Boston, MA (Stephen Friend)
2002: Visiting Prof, Dept of Genetics, Stanford Univ.CA (David Botstein), Microarray analyses.

Teaching responsibilities

Supervised: 40 PhD stud (22 as main supervisor, 2 ongoing), 18 MSc stud. (10 as main superv)
PBL Medical Students since 1996.

Selective Administrative Experience on national and international Boards

1986-91: Secretary General, The Norwegian Biochemical Society.
1989-93: PI of a Nordic technology development project financed by Nordisk Industrifond
1995-00: Chair of expert committee on Biotech. and Genetics. Norwegian Board of Health.
1995-00: Chairman of the program committee, MedKap, NFR
1999-02: Member of the Scientific Council, International Agency for Res. of Cancer, IARC, Lyon
2002-03: Vice-Chairman of the Scientific Council, IACR, Lyon
2001-04: Board member of the National Committee for Functional Genomics, FUGE
2003-06: Member of The Board of Directors, American Ass. for Cancer Res. (AACR)
1996-06 Member of The Scientific Board "Forskningutvalget" DNR/RR-HF.
2004-08 One of the PI's in the EU Integrated project on "Mutant TP53 and Cancer"
2000 Member of the Scientific Committees for the 2nd ESF conference, and ECCO 13
2006-08 President Elect, European Association for Cancer Research, EACR
2007- Scientific Advisory Board, CREATE HEALTH Consortium Lund Sweden
2008-10 President EACR
2008-12 Board of Directors and Executive committee as Treasure, ECCO (European CanCer Organization)
2008-10 Member of the Nomination Committee, AACR
2008- External Advisory Board (EAB) of the SPORE in Breast Cancer at Univ. of North Carolina
2010-17 Scientific Advisory Board member, DKZF, Heidelberg, Germany'
2011-13 Council of Scientific Advisors, AACR (American Association for Cancer Research)
2011 Scientific co-chair, ECCO16 Conference, Stockholm
2011- Senior Associated Editor, Molecular Oncology
2011-16 Director of the K.G. Jebsen Centre for Breast Cancer Research
2011-14 Chair of Scientific Advisory Board for TRANSCAN ERA-net
2012 Chair and organizer of International Symposium on Personalized Cancer Care
2013-17 Scientific Board of the Pezcoller Foundation
2013-16 Scientific Advisory Board, German Consortium for Translational Cancer Research (DKTK)
2013 Basic Science track chair, ECCO17 Conference, Amsterdam
2013-18 External Advisory Group, ReQuiTe: Radiotherapy for Quality of life through reduced Toxicity
2014-15 Breast Cancer track chair, ECCO18 Conference, Vienna
2014-17 Member of the scientific committee FRIMEDBIO, NFR
2015-17 Scientific Advisory Board (SAB) of ERACoSysMed ERA-net
2015- Editorial Board of Genome Medicine

Publications:

Author of 468 published/in press scientific papers, 41 chapters in books and invited reviews, 33 articles in Nordic journals and books, 8 consortium papers

Main funding

- 1) Annually from the Cancer Society of Norway, on Exploring the Systems Biology of Breast Cancer.
Pt: One postdoc 100% (started August 2014), 2 technicians and laboratory expenses
- 2) 2011-2016: Funding for a K.G Jebsen Center for Breast Cancer Research
- 3) 2013-2017: Funding from HSØ for a PhD student and a post doc in the project: Exploring the Systems Biology of Breast Cancer, focusing on noncoding RNA and its role in breast cancer progression
- 4) 2012-2016: NFR grant together with GM Mælansdmo, MetAction: Actionable Targets in Cancer Metastasis - from Bed to Bench to Byte to Bedside
- 5) EU-7FP: BASIS: Breast Cancer Somatic Genetics Study under HEALTH-2009-2.1.1-2: Large-scale functional genomics efforts to identify molecular determinants of cancer:
- 6) EU-7FP: "GlycoHIT: Glycomics by High-throughput Integrated Technologies: Development and validation of complementary and integrated technologies for glycomic analysis of serum in cancer glycomarker discovery, diagnostics and glycotherapeutic monitoring" under HEALTH 2010.1.1-3: High-throughput analysis of posttranslational modifications of proteins.
- 7) EU-7FP: "EUROCANPLATFORM" A European Platform for Translational Cancer Research: Network of Excellence under HEALTH 2.4.1-2 .

Selected peer-reviewed publications (from a total of 529)

[Citations \(>10\) per May 2015 marked in blue](#)

Two most cited Before 2005

1. Perou, CM., Sørlie, T., Eisen, MB., van de Rijn, M., Jeffrey, S. S., Pollack, JR., Rees, CA., Ross, DT., Johnsen, H., Akslen, LA., Pergamenschikov, CW., Zhu, SX., Lønning, PE., [Børresen-Dale, AL](#), Brown, PO. and Botstein, D.: Molecular portraits of human breast tumours. **Nature** 406: 747-52, 2000. [8893 citations](#)
2. Sørlie, T., Perou, C. M., Tibshirani, R., Aas, T., Geisler, S., Hastie, T., Johnsen, H., Eisen, M.B., Thorsen, T., Rijn, M. van der., Jeffrey, S., Quist, H., Rees, C. A., Brown, P.O., Botstein, D., Lønning, P.E. and [Børresen-Dale, A.-L.](#): Gene expression patterns of breast carcinomas distinguish tumor subclasses with potential clinical implications. **PNAS** 98 (19): 10869-74, 2001. [6856 citations](#)

Key publications after 2005

1. Stephens, P. J., McBride, D. J., et al and [Børresen-Dale, A.-L.](#), Campbell, P. J., Futreal, P. A. and Stratton, M. R.: Complex landscapes of somatic rearrangement in human breast cancer genomes. **Nature**, 462(7276):1005-10, 2009. [529 citations](#)
2. Russnes, H. G., Volla, H. K. M., Lingjærde, O. C., Krasnitz, A., Lundin, P., Naume, B., Sørlie, T., Borgen, E., Rye, I. H., Langerød, A., Chin, S-F., Teschendorff, A. E., Stephens, P. J., Månèr, S., Schlichting, E., Baumbusch, L. O., Kåresen, R., Stratton, M. P., Wigler, M., Caldas, C., Zetterberg, A., Hicks, J. and [Børresen-Dale, A.-L.](#): Genomic architecture characterizes tumor progression paths and fate in breast cancer patients. **Science Translational Medicine**, 2, 38ra47 (2010) [101 citations](#)
3. Van Loo, P., Nordgard, S. H., Lingjærde, O. C., Russnes, H. G., Rye, I. H., Sun, W., Weigman, V. J., Marynen, P., Zetterberg, A., Naume, B., Perou, C. M., [Børresen-Dale, A.-L.](#) and Kristensen, V. N.: Allele specific copy number analysis in tumors (ASCAT). 2010. **PNAS** 107 (39) 16910-16915 Sep.28, 2010, www.pnas.org/cgi/doi/10.1073/pnas.100984310 [186 citations](#)
4. Enerly, E., Steinfeld, I., Kleivi, G. K., Leivonen, S. K., Aure, M. R., Russnes, H. G., Rønneberg, J. O., Johnsen, H., Navon, R., Rødland, E., Mäkalä, R., Naume, B., Perälä, M., Kallioniemi, O., Kristensen, V. N., Yakhini, Z. and [Børresen-Dale, A.-L.](#): miRNA-mRNA integrated analysis reveals roles for miRNAs in primary breast tumors. **Plos One**, 2011 Feb 22:6 (2) e16915 [154 citations](#)
5. Kristensen, V.N., Vaske, C et al and [Børresen-Dale, A.-L.](#): Integrated molecular profiles of invasive breast tumors and ductal carcinoma in situ (DCIS) reveal differential vascular and interleukin signaling. **PNAS** Sep 9, 2011 [63 citations](#)
6. Stephens, P.J., Tarpe P et al and [Børresen-Dale, A.-L.](#), Richardson, A.L., Campbell, P.J., P Andrew Futreal, P.A. and Stratton, M.R. The landscape of cancer genes and mutational processes in breast cancer. **Nature** 486 (7403), 400-4, 2012. [548 citations](#)
7. Nik-Zainal S, van Loo P, Wedge DC et al and [Børresen-Dale A.-L.](#), Futreal PA, Stratton MR and Campbell PJ: The Life History of 21 Breast Cancers. **Cell**, 149 (5), 994-100, 2012. [390 citations](#)
8. A. Margolin, E. Bilal, E. Huang, T. C. Norman, L. Ottestad, et al and The Sage DREAM Breast Cancer Challenge Consortium, V. N. Kristensen, J. Hellerstein, S. Friend, G. Stolovitzky, S. Aparicio, C. Caldas, [A.L. Børresen-Dale](#) Systematic Analysis of Challenge-Driven Improvements in Molecular Prognostic Models for Breast Cancer 2013 **Science Translational Medicine**, 17 April 2013 Vol 5 Issue 181 181re1. [25 citations](#)
9. Silwal-Pandit L, Moen Volla HK, Chin SF, Rueda OM, McKinney SE, Osako T, Quigley D, Kristensen VN, Aparicio S, [Børresen-Dale AL](#), Caldas C, Langerød A: TP53 mutation spectrum in breast cancer is subtype specific and has distinct prognostic relevance. **Clin Cancer Res. Clin Cancer Res. 2014 Jul 1;20(13):3569-80 PMID:24803582** [12 citations](#)
10. Kleivi Sahlberg K, Bottai G, Naume B, Burwinkel B, Calin GA, [Børresen-Dale AL](#), Santarpia L.: A Serum MicroRNA Signature Predicts Tumor Relapse and Survival in Triple Negative Breast Cancer Patients. **Clin Cancer Res. 2015 Mar 1;21(5):1207-14 PMID: 25547678** [A patent has been filed for the findings in this paper](#)

Invited high profiled reviews

1. Russnes HG, Navin N, Hicks J, [Børresen-Dale A.-L.](#): Insight into the Heterogeneity of Breast Cancer through Next-Generation Sequencing. **JCI**, Oct 3; 121(10) 3810-8, 2011 PMID: 21965338 [108 citations](#)
2. Engebraaten, Volla, H.K.M., and [Børresen-Dale, A.L.](#): Triple-negative breast cancer and the need for new therapeutic targets. **Am J Pathol. Volume 183(4), October 2013, pp 1064–1074. PMID: 23920327** [22 citations](#)
3. Vessela N. Kristensen, Ole Christian Lingjærde, Hege G. Russnes, Hans Kristian M. Volla, Arnaldo Frigessi, and [Anne-Lise Børresen-Dale](#): Principles and methods of integrative genomic analyses in cancer, **Nature Reviews Cancer** 14: 299–313, 2014, PMID: 24759209 [12 citations](#)