

Dr. Jan Ellenberg



23.11.67, Hamburg

Gene Expression Unit
European Molecular Biology Laboratory (EMBL)
69117 Heidelberg, Germany

Phone: +49-(0)6221-387-328
Fax: +49-(0)6221-387-98328
E-mail: jan.ellenberg@embl.de

CURRICULUM VITAE

- 2006 - present Coordinator and Senior Scientist, Gene Expression Unit, EMBL.
- 2004 - present Coordinator, EMBL Centre for Molecular and Cellular Imaging.
- 1999 - present Interdisciplinary Group Leader, Gene Expression and Cell Biology/Biophysics Programmes, EMBL, Heidelberg, Germany.
- 1998 - 1999 Postdoctoral research at the NIH, lab of Dr. Jennifer Lippincott-Schwartz.
- 1995 - 1998 Ph.D. research at the National Institutes of Health (NIH), Bethesda, USA, laboratory of Dr. Jennifer Lippincott-Schwartz.

COORDINATING FUNCTIONS

- 2005 - present Coordinator of Federal Ministry of Education and Research (BMBF) grant within the National Genome Research Network (NGFN-2) "Genome wide RNAi screening using cell arrays".
- 2004 - present Local Coordinator of EC Integrated Project MitoCheck "Regulation of Mitosis by Phosphorylation - A Combined Functional Genomics, Proteomics and Chemical Biology Approach", framework 6, priority 1: Life Sciences, Genomics and Biotechnology for Health, FP6-503464.
- 2004 - present Coordinator EMBL Centre for Molecular and Cellular Imaging.
- 2004 Minisymposium chair "Chromatin Structure and Functional Organization of the Nucleus", 44th American Society for Cell Biology Meeting, Washington D.C., USA.
- 2003 Organizer, EMBL Mini-Symposium "Functional Organization of the Nucleus", EMBL, Heidelberg, Germany.
Organizer, EMBO Young Investigator Programme Mini Symposium on "Fluorescence Microscopy", EMBL, Heidelberg, Germany.
- 2001 Organizer, 1st International Meeting & Workshop on "Advanced Light Microscopy", Santa Maria Imbaro (Chieti), Italy.

HONORS

- 2004 Walter Flemming Medal of the German Society of Cell Biology (DGZ)
- 2004 Summer Research fellow, MBL, Woods Hole, MA, USA.
- 2004 ELSO Early Career Award, European Life Scientist Organisation, ELSO
- 2002 Nikon Fellow, Marine Biological Laboratory (MBL), Woods Hole, MA, USA
- 1998-1999 Visiting Fellow Award of the Fogarty International Center, NIH, Bethesda
- 1998 Fellows Award for Research Excellence, NIH.
- 1995-1998 Predoctoral fellowship of the Boehringer Ingelheim Fonds, Stuttgart

FIELDS OF INTEREST

Cell biology; cell division (mitosis and meiosis); nuclear structure; nuclear envelope; nuclear transport; chromosome condensation and segregation; nuclear (dis)assembly; live cell imaging.

CURRENTLY FUNDED PROJECTS

German Research Council (DFG) grant within in the priority programme “dynamics of cellular membranes and their exploitation by viruses” (SPP 1175), EL 246/3-1.

Quantitative Analysis of the Structural Dynamics of Mitotic Chromosomes in Live Mammalian CellsNetwork (NGFN-2) 01GR0403 “Genome wide RNAi screening using cell arrays”.

European Science Foundation ESF 03-DYNA-F-29 network grant “The control of chromosome structure by cohesin/condensin complexes”. Nationally funded through the German Research Council, DFG EL 246/2-1/2.

EC Integrated Project MitoCheck “Regulation of Mitosis by Phosphorylation - A Combined Functional Genomics, Proteomics and Chemical Biology Approach”, framework 6, priority 1: Life Sciences, Genomics and Biotechnology for Health, FP6-503464.

PUBLICATIONS (10 selected recent publications):

Gerlich, D., Hirota, T., Koch, B., Peters, J.-M. and J. Ellenberg. 2006. Condensin I stabilizes chromosomes mechanically through a dynamic interaction in live cells. **Curr Biol**. in press.

Lenart, P., C.P. Bacher, N. Daigle, A.R. Hand, R. Eils, M. Terasaki, and J. Ellenberg. 2005. A contractile nuclear actin network drives chromosome congression in oocytes. **Nature**. 436:812-8.

Rabut, G., V. Doye, and J. Ellenberg. 2004. Mapping the dynamic organization of the nuclear pore complex inside single living cells. **Nat Cell Biol**. 6:1114-21.

Rabut, G., and J. Ellenberg. 2004. Automatic real-time three-dimensional cell tracking by fluorescence microscopy. **J Microsc**. 216:131-7.

Conrad, C., H. Erfle, P. Warnat, N. Daigle, T. Lorch, J. Ellenberg, R. Pepperkok, and R. Eils. 2004. Automatic identification of subcellular phenotypes on human cell arrays. **Genome Res**. 14:1130-6.

Gerlich, D., J. Beaudouin, B. Kalbfuss, N. Daigle, R. Eils, and J. Ellenberg. 2003. Global Chromosome Positions Are Transmitted through Mitosis in Mammalian Cells. **Cell**. 112:751-64.

Lenart, P., G. Rabut, N. Daigle, A.R. Hand, M. Terasaki, and J. Ellenberg. 2003. Nuclear envelope breakdown in starfish oocytes proceeds by partial NPC disassembly followed by a rapidly spreading fenestration of nuclear membranes. **J Cell Biol**. 160:1055-68.

Gerlich, D., and J. Ellenberg. 2003. 4D imaging to assay complex dynamics in live specimens. **Nat Cell Biol**. Suppl:S14-9.

Beaudouin, J., D. Gerlich, N. Daigle, R. Eils, and J. Ellenberg. 2002. Nuclear envelope breakdown proceeds by microtubule-induced tearing of the lamina. **Cell**. 108:83-96.

Daigle, N., J. Beaudouin, L. Hartnell, G. Imreh, E. Hallberg, J. Lippincott-Schwartz, and J. Ellenberg. 2001. Nuclear pore complexes form immobile networks and have a very low turnover in live mammalian cells. **J Cell Biol**. 154:71-84.

EXPERIENCE IN THE SUPERVISION OF DOCTORAL CANDIDATES

Member of numerous thesis and thesis advisory committees

SUPERVISED DISSERTATIONS (last 5 years)

Felipe Mora-Bermúdez, PhD (2006) Quantitative analysis of the structural dynamics of mitotic chromosomes in live mammalian cells
Current occupation: unknown

Péter Lénárt, PhD (2004) The mechanism of nuclear envelope breakdown and chromosome congression during meiotic maturation of starfish oocytes
Current occupation: unknown

Gwenaél Rabut, PhD (2004) Dynamic organization of nuclear pore complexes
Current occupation: unknown

Joël Beaudouin, PhD (2003) Structural and molecular dynamics of nuclear proteins revealed by fluorescence microscopy
Current occupation: unknown