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SCIENTIFIC VITA

1988-1992	Diploma and PhD work at the University of Göttingen with Dr. Thomas Jovin at the Max-Planck-Institut für biophysikalische Chemie, Göttingen
1992-1994	Postdoctoral studies with Prof. Peter von Hippel at the University of Oregon, Eugene, USA
1994-2001	Scientist at the Deutsches Krebsforschungszentrum (DKFZ) at the Divisions Biophysics of Macromolecules (Prof. Jörg Langowski) and Molecular Genetics (Prof. Peter Lichter)
2000	Habilitation (approval as university lecturer) in Biochemistry/Biophysics at the Ruprecht-Karls-Universität Heidelberg
2001-2007	Group leader of the *Molecular Biophysics Group* (Junior Research Group of the Volkswagenstiftung) at the Kirchhoff-Institut für Physik at the University of Heidelberg
since 2007	Group leader of the Research Group *Genome Organization & Function* at the DKFZ and the BIOQUANT in Heidelberg

AWARDS

Otto Hahn medal awarded by the Max Planck Society for the work on parallel-stranded DNA with double helical structure, Dresden, 6/3/92.

Post-doctoral fellowship of the Boehringer Ingelheim Fonds, Stiftung für medizinische Grundlagenforschung, 10/92 to 10/93.

European Beckman DNA Award for the paper “Association States of the Activator Protein NtrC Determined by Analytical Ultracentrifugation”, Lisbon, Portugal, 5/11/98.

Selected by the Volkswagen Foundation in the program “Junior Research Groups at German Universities” (2001-2007).

FIELDS OF INTEREST

Interdisciplinary experimental approaches from molecular/cell biology and physics to investigate the relation between genome organization in the nucleus and cell function, chromatin structure and dynamics, chromatin assembly, translocation of nucleosomes by chromatin remodeling complexes, modeling and quantitative descriptions of chromatin related structures and processes, application and development of biophysical methods like fluorescence spectroscopy/microscopy, atomic force microscopy and analytical ultracentrifugation.

SELECTED PUBLICATIONS

Kepper, N., Foethke, D., Stehr, R., Wedeman, G., and Rippe, K. (2008). Nucleosome geometry and internucleosomal interactions control the chromatin fiber conformation, *Biophys. J.* **94**, advance online publication, 22 January 2008.

Rippe, K. (2007). Dynamic organization of the cell nucleus. *Curr. Opin. Gen. Dev.* **17**, 373-380

Rippe, K., Schrader, A., Riede, P., Strohner, R., Lehmann, E., and Längst, G. (2007). DNA sequence- and conformation-directed positioning of nucleosomes by chromatin-remodeling complexes. *Proc. Natl. Acad. Sci. USA* **104**, 15635-15640.

Mazurkiewicz, J., Kepert, J. F. and Rippe, K. (2006). On the mechanism of nucleosome assembly by histone chaperone NAP1. *J. Biol. Chem.* 281, 16462-1647.

Görisch, S. M., Wachsmuth, M., Fejes Tóth, K., Lichter, P. and Rippe, K. (2005). Histone acetylation increases chromatin accessibility. *J. Cell Sci.* **118**, 5825-5834.

Kepert, J. F., Mazurkiewicz, J., Heuvelman, G., Fejes Tóth, K. and Rippe, K. (2005). NAP1 modulates binding of histone H1 to chromatin and induces an extended chromatin fiber conformation. *J. Biol. Chem.* 280, 34063-34072.

Fejes Tóth, K., Mazurkiewicz, J. and Rippe, K. (2005). Association states of the nucleosome assembly protein 1 and its complexes with histones. *J. Biol. Chem.* **280**, 15690-15699.

Fejes Tóth, K., Knoch, T. A., Wachsmuth, M., Stöhr, M., Frank-Stöhr, M., Bacher, C., Müller, G. and Rippe, K. (2004). Trichostatin A causes decondensation of the interphase chromatin. *J. Cell Sci.* **117**, 4277-4287.

For a complete list of publications see:
http://malone.bioquant.uni-heidelberg.de/publications/publications.html