

## Prof. Dr. Frank Lyko

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### SCIENTIFIC VITA:

1990-1994 University of Heidelberg, study of Biology  
1998 Ph.D. (Dr. rer. nat.), University of Heidelberg (summa cum laude)  
1998-2000 Postdoc, Whitehead Inst. for Biomedical Research, Cambridge, USA  
2001-2004 Group leader, German Cancer Research Center  
since 2004 Division Head at the German Cancer Research Center  
since 2006 Professor of Epigenetics, Faculty of Medicine, University of Heidelberg

### AWARDS:

Emmy Noether fellowship, Deutsche Forschungsgemeinschaft (1999-2004); Heinz Meyer-Leibnitz award, Deutsche Forschungsgemeinschaft (2002); Karl-Freudenberg award Heidelberg Academy of Sciences (2003); Technology Review Magazine, TR100 Young Innovator (2004); Novartis Foundation award for pharmacological research (2007)

### FIELDS OF INTEREST:

Epigenetics, DNA methylation, Cancer epigenetics

### SELECTED PUBLICATIONS (SINCE 2000)

Brueckner, B., Stresemann, C., Kuner, R., Mund, C., Musch, T., Meister, M., Sultmann, H., Lyko, F. (2007). The human *let-7a-3* locus contains an epigenetically regulated microRNA gene with oncogenic function. **Cancer Res** 67, 1419-1423

Barreto, G., Schafer, A., Marhold, J., Stach, D., Swaminathan, S.K., Handa, V., Doderlein, G., Maltry, N., Wu, W., Lyko, F., Niehrs, C. (2007). *Gadd45a* promotes epigenetic gene activation by repair-mediated DNA demethylation. **Nature** 445, 671-675

Stresemann C, Brueckner B, Musch T, Stopper H, Lyko F (2006). Functional diversity of DNA methyltransferase inhibitors in human cancer cell lines. **Cancer Res** 66, 2794-2800

Lyko F, Brown, R (2005). DNA methyltransferase inhibitors and the establishment of epigenetic cancer therapies. **J Natl Cancer Inst** 97, 1498-1506

Mund C, Hackanson B, Stresemann C, Lubbert M, Lyko F (2005). Characterization of DNA demethylation effects induced by 5-aza-2'-deoxycytidine in patients with myelodysplastic syndrome. **Cancer Res** 65, 7086-7090

Brueckner B, Garcia Boy R, Siedlecki P, Musch T, Kliem HC, Zielenkiewicz P, Suhai S, Wiessler M, Lyko F (2005). Epigenetic reactivation of tumor suppressor genes by a novel small-molecule inhibitor of human DNA methyltransferases. **Cancer Res** 65, 6305-6311

Mund C, Beier V, Bewerunge P, Dahms M, Lyko F, Hoheisel JD (2005). Array-based analysis of genomic DNA methylation patterns of the tumour suppressor gene p16<sup>INK4A</sup> promoter in colon carcinoma cell lines. **Nucleic Acids Res** 33, e73

Weissmann F, Muyrers-Chen I, Musch T, Stach D, Wiessler M, Paro R, Lyko F (2003). DNA hypermethylation in *Drosophila melanogaster* causes irregular chromosome condensation and dysregulation of epigenetic histone modifications. **Mol Cell Biol** 23, 2577-2586

Stach D, Schmitz OJ, Stilgenbauer S, Benner A, Döhner H, Wiessler M, Lyko F (2003). Capillary electrophoretic analysis of genomic DNA methylation levels. **Nucleic Acids Res** 31, e2.

Lyko F, Ramsahoye BH, Jaenisch R (2000). DNA methylation in *Drosophila melanogaster*. **Nature** 408, 538-540