



Professor Dr. Thomas Efferth

born June 23th, 1960, married with Monika Efferth

Education:

1980-1986 Study of Biology, Technical University Darmstadt, Germany
1990 PhD Thesis at the German Cancer Research Center, Heidelberg, Germany
1997 Habilitation (Postdoctorate Thesis), Technical University Aachen, Germany

Positions:

2005 Research group leader, German Cancer Research Center, Heidelberg, Germany
2007 Associate Professor (apl.), University of Heidelberg, Germany
2009 Full Professor, Chair of the Department of Pharmaceutical Biology, Institute of Pharmacy and Biochemistry, University of Mainz, Germany

Honors:

1991 Ludolf Krehl-Award (1st place) of Southwest-German Society for Medicine
2006 Honorary professor at the Northeast Forestry University, Harbin, China
2006 Dr. Wilmar Schwabe Award conferred by the Society for Medical Plant Research in Helsinki, Finland, August 30th 2006
2008 Citizen Medal (*Bürgerplakette*) of the City of Heidelberg, Germany
2010 Visiting professor at the Zhejiang Medical University. Hangzhou, China
2011 Award of the Central European Society for Anticancer Drug Research (CESAR) for translational research in the development of antitumoral agents

Teaching:

Pharmaceutical Biology, Molecular Pharmacology and Toxicology, Cancer Biology

Research:

- Molecular Pharmacology and Toxicology of Anticancer Drugs: We analyze novel cytotoxic synthetic and natural compounds with improved tumor specificity and efficacy against otherwise drug-resistant tumors.
- Prediction of therapy response of tumors and survival of patients to devise novel individualized therapy options with chemo- and radiotherapy.

Publications:

- Hirsch (H)-factor: 45; total number of citations: >7000
- More than 350 original publications and reviews in PubMed-listed peer-reviewed journals in the field of pharmaceutical biology, pharmacology, and cancer research
- 18 book chapters, 1 textbook
- Two US patents (US60/619,829 and US10/748,713), one European patent (EP 1 550 731 A1), one Spanish patent (ES200401396)
- More than 130 lectures at international meetings and congresses
- More than 120 poster presentations at international meetings and congresses

Top 5 original papers:

- Horwedel C, Tsogoeva SB, Wei S, **Efferth T**. Cytotoxicity of artesunic acid homo- and heterodimer molecules towards sensitive and multidrug-resistant CCRF-CEM leukemia cells. *Journal of Medicinal Chemistry* 2010;53:4842-8. **(IF: 5.248)**
- Li PCH, Lam E, Roos WP, Zdienicka MZ, Kaina B, **Efferth T**. Artesunate derived from traditional Chinese medicine induces DNA damage and repair. *Cancer Research* 2008;68:4347-51. **(IF: 7.856)**
- Efferth T, Konkimalla VB, Wang YF, Sauerbrey A, Furchtbar S, Zintl F, Mattern J, Volm M. Prediction of broad spectrum resistance of tumors towards anticancer drugs. *Clinical*

Cancer Research 2008;14:2405-12. (IF: 7.742)

- Steinbach D, Gillet JP, Sauerbrey A, Gruhn B, Dawczynski K, Bertholet V, de Longueville F, Zintl F, Remacle J, Efferth T. ABCA3 as a possible cause of drug resistance in childhood acute myeloid leukemia. *Clinical Cancer Research* 2006;12:4357-63. (IF: 7.742)
- Volm M, Koomägi R, Mattern J, Efferth T. Expression profile of genes in non-small cell lung carcinomas from long-term surviving patients. *Clinical Cancer Research* 2002; 8, 1843-48.(IF: 7.742)

Top 5 reviews:

- Efferth T, Li P, Kaina B. From traditional Chinese medicine to rational cancer therapy. *Trends in Molecular Medicine* 2007;13:353-361 (IF: 10.355)
- Efferth T, Romero MR, Wolf DG, Stamminger T, Marin JJG, Marschall M. The antiviral activities of artemisinin and artesunate. *Clinical Infectious Diseases* 2008;47:804-811 (IF: 9.154)
- Gillet JP, Efferth T, Remacle J. Chemotherapy-induced resistance by ATP-binding cassette transporter genes. *Biochemical Biophysical Acta – Reviews on Cancer* 2007;1775:237-262 (IF: 9.380)
- Efferth T, Volm M. Pharmacogenetics and individualized cancer chemotherapy. *Pharmacology and Therapeutics* 2005;107:155-176 (IF: 8.562)
- Efferth T. Mechanistical perspectives of 1,2,4-trioxanes for anti-cancer therapy. *Drug Resistance Updates* 2005;8:85-97 (IF: 9.559)

Scientific Advisory Board Memberships:

- Agricultural Biotechnology Research Center, Academia Sinica, Taipei Taiwan
- Begell House Publishers, New York, USA;
- Dafra Pharma R&D, Tournhout, Belgium
- Deutsche Pharmazeutische Gesellschaft
- HanseMercur Zentrum, Universitätsklinikum Eppendorf, Hamburg
- International Institute of Anticancer Research

Editorial Boards:

- Editor-in-Chief: Medicinal and Aromatic Plants
- Co-Editor: *Planta Medica*, *European Journal of Medicinal Plants*, *Natural Products and Bioprospecting*, *BMC Complementary and Alternative Medicine* and others
- Editorial Board member: *International Journal of Oncology*, *Chemico-Biological Interactions*, *Current Medicinal Chemistry*, *Cancer Genomics and Proteomics*, *Advances in Molecular Imaging*, *Critical Reviews in Oncogenesis*, *Journal of Ethnopharmacology*, *Phytomedicine*, *Pharmaceuticals*, *World Journal of Translational Medicine*, *World Journal of Pharmacology* and others

Appointments of former PhD students and Postdocs as assistant professors:

- 2009: Badireenath Konkimalla, Assistant Professor, National Institute of Science Education and Research (NISER), Bhubaneswar. India
- 2009: Mahmoud Youns, Assistant Professor: Department of Biochemistry and Molecular Biology, Faculty of Pharmacy, University of Helwan, Ain Helwan, University Campus, 11795 Cairo, Egypt
- 2010: Hiroshi Nakagawa, Assistant Professor, Department of Applied Biological Chemistry, College of Bioscience and Biotechnology, Chubu University, 1200 Matsumoto-cho, Kasugai, Aichi, 487-8501, Japan
- 2013: Else Dapat, Assistant Professor, Department of Biology, University of the Philippines, Padre Faura Street, Ermita, Manila, Philippines 1000

Awards for former and current PhD students and Postdocs:

- 2010: Tolga Eichhorn, L.A.B. Award of GIT Publishing House and Fair Leipzig
- 2012: Else Dapat, Poster Award, 34th Annual Scientific Meeting, National Academy of Science and Technology, Philippines
- 2012: Badireenath Konkimalla, Innovative Young Biotechnologist Award (IYBA), DBT, India.
- 2012: Victor Kuete, Alexander von Humboldt fellowship
- 2013: Onat Kadioglu. Poster Award, Bahecesehir University Drug Design symposium. March 21-23, 2013, Istanbul, Turkey.
- 2014: Benjamin Wiench, Boehringer Ingelheim Award for best PhD thesis