

BARBARA K. ZEHENTNER, PH.D., HCLD (ABB)

AMERICAN BOARD OF BIOANALYSIS (ABB)
HCLD certification (High-complexity Clinical Laboratory Director)

UNIVERSITY RWTH, AACHEN, GERMANY
2000 - Ph.D. in Molecular Biology
summa cum laude

PROFESSIONAL COLLEGE, WEIHENSTEPHAN, GERMANY
1996 - M.S. in Biotechnology
Graduate award of the German Engineering Society (VDI)

HEMATOLOGICS INC., SEATTLE

September 2004-present

DIRECTOR OF MOLECULAR ANALYSIS

- Comprehensive PCR and FISH analysis menu [see separate documents] for diagnosis and prognosis of hematopoietic malignancies.

CORIXA CORPORATION, SEATTLE

April 2000-September 2004

PROJECT LEADER MOLECULAR DIAGNOSTICS

- Development of RT-PCR assays for the detection of disseminated tumor cells in blood, bone marrow, urine and sentinel lymph nodes of breast and prostate cancer patients.

ROCHE DIAGNOSTICS, PENZBERG, GERMANY

1996-2000

PH.D. THESIS

BOEHRINGER MANNHEIM, PENZBERG, GERMANY

1995-1996

GRADUATE THESIS

SYNTEX RESEARCH, PALO ALTO, CA

1994

INTERNSHIP

PUBLICATIONS

Cutler J.A., Wells D.A., van de Loosdrecht A.A., de Baca M.E., Kalnoski M.H., Zehentner B.K., Eidenschink L., Ghirardelli K.M., Sanford Biggerstaff J. Loken M.R. "Phenotypic abnormalities strongly reflect genotype in patients with unexplained cytopenias." *2010 Cytometry B Clin Cytom* Dec 23.

Zehentner B.K., Cutler J.A., Fritschle W.K., Bennington R.K., Wentzel C., Smading S.R., Jeffery E.W., Wells D.A., Loken M.R. "A minority of concurrent monoclonal lymphocytes and plasmacytic cells sharing light chains are genetically related in putative lymphoplasmacytic lymphoma." *2011* submitted to *Leuk Res*.

Hartmann L., Sanford Biggerstaff J., Chapman D.B., Scott J.M., Johnson K.R., Ghirardelli K.M., Fritschle W.K., Martinez D.L., Bennington R.K., de Baca M., Wells D.A., Loken M.R., Zehentner B.K. "Detection of genomic abnormalities in Multiple Myeloma: The application of FISH analysis in combination with various plasma cell enrichment techniques." *2011* submitted to *AJCP*.

Zehentner B.K., Loken M.R., Wells D.A. "JAK2(V617F) mutation can occur exclusively in the erythroid lineage and be absent in granulocytes and progenitor cells in classic myeloproliferative disorders." *2006 Am J Hematol* 81(10):806-7.

Zehentner B.K., Secrist H., Zhang X., Hayes D.C., Ostenson R., Goodman G., Xu J.C., Kiviat M., Kiviat N., Persing D.H. and Houghton R.L. "Detection of α -Methylacyl-CoA racemase transcripts in blood and urine samples of prostate cancer patients" *2006 Mol Diagn Ther*. 10(6):397-403.

Zehentner B.K., Secrist H., Hayes D.C., Zhang X., Ostenson R.C., Loop S., Goodman G.E., Houghton R.L., Persing D.H. "Detection of circulating tumor cells in peripheral blood of breast cancer patients during or after therapy using a multigene real-time RT-PCR assay." *2006 Mol Diagn Ther* 10(1):41-7.

Hayes D.C., Secrist H., Bangur C.S., Wang T., Zhang X., Harlan D., Goodman G.E., Houghton R.L., Persing D.H., **Zehentner B.K.** "Multigene real-time PCR detection of circulating tumor cells in peripheral blood of lung cancer patients." *2006 Anticancer Res* 26(2B):1567-75.

Zehentner B.K., Fritschle W., Stelzer T., Ghirardelli K., Hunter K., Wentzel C., Bennington R., Hansen C., Myerson D., Kalnoski M., Wells D.A., Loken M.R. "Minimal Disease Detection and Confirmation in Hematologic Malignancies: Combining Cell sorting with Clonality Profiling" *2006 Clin Chem* 52(3):430-7.

Teinholz M.M., Nibbe A., Jonart L.M., Kitzman K., Suman V.J., Ingle J.N., Houghton R., **Zehentner B.K.**, Roche P.C., Lingle W.L. "Evaluation of a panel of tumor markers for molecular detection of circulating cancer cells in women with suspected breast cancer." *2005 Clin Cancer Res* 11(10):3722-32.

Zehentner B.K., Carter D. "Mammaglobin: a candidate diagnostic marker for breast cancer" *2004 Clinical Biochemistry* 37(4):249-57

Zehentner B.K., Feng Q., Dillon D., Xu J.C., Reynolds L., Zhang X., Reed S.B., Persing D.H., Houghton R.L., Kiviat N. "Mammaglobin as a novel breast cancer biomarker: Multigene RT-PCR assay and sandwich ELISA" *2004 Clinical Chemistry* 50(11):2069-76.

Zehentner B.K., Dillon D., Jiang Y., Xu J.C., Zhang X., Reed S.G., Persing D.H., Houghton R.L. "Application of a multigene reverse transcription-PCR assay for detection of mammaglobin and complementary transcribed genes in breast cancer lymph nodes" *2002 Clin Chem* 48(8):1225-31

Zehentner B.K.

"Detection of disseminated tumor cells: strategies and diagnostic implications" *2002 Expert Rev Mol Diagn* 2(1):89-96

Zehentner B.K., Dillon D.C., Jiang J., Xu J.C., Reed S.G., Persing D.H., Houghton R.L. "A multiplex real-time PCR assay for the detection of mammaglobin and complementary transcribed genes in breast cancer" Chapter 33: Emerging Cancer Biomarkers *Tumor Markers: Physiology, Pathobiology, Technology and Clinical Applications, AACCC press 2002*

Houghton L., Dillon D., Molesh D., **Zehentner B.K.**, Xu J.C., Jiang J., Schmidt C., Frudakis A., Repasky E., Badaro R., Zhang X., Roche P.C., Persing D.H., Reed S.G. "Transcriptional complementarity in breast cancer: application to detection of circulating tumor cells" *2001 Molecular Diagnosis* 6(2): 79-91

Zehentner B.K., Hausmann A., Burtscher, H. "The BMP antagonist Noggin is regulated by Sox9 during endochondral differentiation" *2002 Development, Growth & Differentiation* 44(1): 1-9

Zehentner B.K., Leser, U., Burtscher, H. "BMP-2 and Sonic Hedgehog have contrary effects on adipocyte-like differentiation in C3H10T1/2 cells" *2000 DNA Cell Biol* 19:275-81

Zehentner B.K., Dony, C., Burtscher, H.
"The transcription factor Sox9 is involved in BMP-2 signaling"
1999 J Bone Miner Res 14:1734-1741

MEETING PRESENTATIONS

Shaver A., Ma L., Vnencak-Jones C., **Zehentner B.K.**, Haupt H., Schwarting R.S., Fasig K.J., Kim A.S.
"Unusual transformation of follicular lymphoma" Case report presentation. *Academy of Clinical Laboratory Physicians and Scientists* **2010**

Zehentner B.K. "Minimal Disease Detection and Confirmation: Combining Flow Cytometric Cell sorting with Molecular Analysis" *Northwest Regional Cytometry Meeting* **2006** OSHU Portland, Oregon.

Zehentner B.K., Fritschle W.K., Ghirardell K.M., Stelzer T., Wentzel C., Hunter K., Bennington R., Kolvek B., Kalnoski M., Wells D.A., Loken M.R. "Combining Cell Sorting with Clonal Profiling: Confirmation of Minimal Disease for Monitoring Hematopoietic Malignancies" Poster presentation **ASCP 2005** (American Society of Clinical Pathology) Seattle

Zhang X., Secrist H., Hayes D., Goodman G., Kiviat N., Xu J.C., Persing D.H., Houghton R.L., **Zehentner B.K.** "Alpha-methylacyl-CoA racemase real-time RT-PCR for detection of circulating tumor cells in peripheral blood of prostate cancer patients" Poster presentation **AACR 2004** (American Association for Cancer Research Annual Meeting) Orlando

Hayes D., Bangur C., Wang T., Persing D.H., Goodman G., Houghton R.L., **Zehentner B.K.**
"Detection of circulating tumor cells in peripheral blood of lung cancer patients using a multiplex real-time RT-PCR assay for L762P, L550S, L587S, and L984P." Poster presentation **AACR 2004** Orlando

Zehentner B.K., Houghton R.L. "Real-time multiplex RT-PCR assays for the detection of disseminated tumor cells in breast, prostate and lung cancer" Poster presentation
International Symposium on Minimal Residual Cancer 2003 Oslo

Zehentner B.K., Houghton R.L. "Real-time multiplex RT-PCR assays for the detection of disseminated tumor cells in breast, prostate and lung cancer" Invited speaker
Santa Barbara Tumor Marker Conference 2003

Zehentner B.K., Houghton R., Zhang X., Brooks L., Hayes D., Persing D., Xu J.C., Kiviat N.
"Real-time multiplex RT-PCR assays for the detection of disseminated tumor cells in breast, prostate and lung cancer" Invited speaker **EDRN 2003** (Early Detection Research Network) Ann Arbor

Braun S., Prang N., Sinz S., Persing D.H., Houghton R.L., **Zehentner B.K.**
"Mammaglobin RT-PCR for the detection of bone marrow micrometastasis: Analysis of preanalytical variables and comparison with benchmark anti-cytokeratin immunostaining" Poster presentation
AACR 2003 Washington DC

Zehentner B.K., Dillon D.C., Jiang J., Xu J.C., Reed S.G., Persing D.H., Houghton R.L.
"The detection of disseminated breast tumor cells in peripheral blood and bone marrow using a multiplex real-time RT-PCR assay for Mammaglobin and complementary transcribed genes" Poster presentation
AACR 2002 San Francisco

Zehentner B.K., Dillon D.C., Jiang J., Xu J.C., Badaro R., Reed S.G., Persing D.H., Houghton R.L.
"A Multiplex Real-time PCR Assay for the detection of complementary transcribed genes in breast cancer" Poster presentation **AACC 2001** (American Association for Clinical Chemistry) Chicago

Zehentner B.K., Dony C., Burtscher H. "Sox9 is regulated by BMP-2 and Hedgehog Proteins in osteogenic cells" Poster presentation **ASBMR 1998** (American Society for Bone and Mineral Research) San Fransisco

Seytter T., **Zehentner B.K.**, Leser U., Wozny M., Rueger P., Burtscher H., Papadimitriou A., Proetzel G., Honold K., Lang K. "Hydrophobic Modifications at the amino-terminal cysteine of recombinant Sonic Hedgehog signaling domain dramatically increase activity" Poster presentation **ASBMR 1998** San Fransisco

Zehentner B.K., Dony C., Lang K., Leser U., Ingolia T., Jin P. Wang E., Burtscher H. "Influence of Sonic Hedgehog on the expression pattern of Patched, Gli and other genes in bone-derived primary human cells in vitro" Poster presentation **ASBMR 1997** Cincinnati