

# Bringing Discovery to Life



**Ingeborg Zehbe, PhD., D.Sc.**  
Scientist

## EDUCATION

- B.A., Anthropology and Archaeology (1987), University of Uppsala, Sweden
- Ph.D., Molecular Pathology, (1996), University of Uppsala, Sweden
- D.Sc., Molecular Pathology, (1999), University of Uppsala, Sweden

## APPOINTMENTS AND AFFILIATIONS

- Cross-appointment as Associate Professor at the Northern Ontario School of Medicine, West Campus (since 2008) and as Adjunct Professor, Department of Biology, Lakehead University, 2005-present
- Department of Microbiology, University of Mainz, Mainz, Germany; 2002-2004
- Deutsches Krebsforschungszentrum, Heidelberg, Germany; 1996-2001

## RESEARCH AREAS OF FOCUS

Dr. Zehbe's research is primarily concentrated on virus-related cancer with a focus on human papillomavirus (HPV). Infectious agents such as bacteria or viruses have been identified as carcinogens. About 20% of all malignancies are caused by tumour

## Scientist Biography

viruses. Dr. Zehbe's lab is interested in virus-related cancer using high-risk HPV and skin or mucosa as a model.

Previous epidemiological, functional and structural studies strongly suggest that intratype variants of the E6 oncoprotein lead to diverse cancer susceptibility. They want to substantiate this evidence by systematically testing the biological activity and immunogenicity of naturally occurring E6 variants.

The project involves all steps of carcinogenesis from the beginning of viral infection to malignant transformation. Multi-disciplinary approaches such as global transcriptomics and proteomics, three-dimensional organotypic cultures, animal models and image-guided technologies are implemented. This will substantially advance the knowledge in tumour virus research, tumour biology and tumour immunology. Other initiated projects include the role of a novel interferon in cervical carcinogenesis and integrin receptors as potential targets for therapy. The obtained results will benefit the development and commercialization of biomarkers and individual treatment regimens.

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