Priit Kogerman

National Institute of Chemical Physics and Biophysics, Tallinn, Estonia

CV

EDUCATION AND PROFESSIONAL DEVELOPMENT

2001:	Head of the Laboratory of Molecular Genetics, National Institute of Chemical Physics and Biophysics (NICPB)
1999:	Senior Research Scientist, NICPB and Associate Professor, Tallinn Technical University Gene Technology Center
1999:	Assistant Professor, Karolinska Institute, Department of Biosciences at Novum
1997-98:	postdoctoral training at Karolinska Institutet, Department of Biosciences at Novum (Advisor Prof. Rune Toftgård)
1992-96:	Case Western Reserve University, Department of Molecular Biology and Microbiology, Ph. D. (1997). "Significance of CD44s for tumor progression of a murine fibrosarcoma model". Advisor Dr. Lloyd Culp
1991-92:	University of Helsinki, Department of Biochemistry and Institute of Biotechnology.
1988-91:	University of Tartu, Faculty of Biology, Department of Biochemistry Cum Laude Diploma in Biology and Biochemistry, Diploma. Thesis: "Nucleotide Sequence of the Potateo Leafroll Virus (Russian Isolate) coat protein gene and its constructs in plant expression vectors". Advisor Prof. Mart Saarma.
1985-88	Moscow State University, Faculty of Biology

AWARDS

2001:	President of Estonia, Young Scientist Award
1999:	Paul Kogerman Memorial Medal
1997:	Visby Scholar, Swedish Institute
1995:	Jüri Lellep Memorial Award, Nikolai Küttis Memorial Award
1993:	Rotalia Foundation Award
1991:	Rector of the University of Helsinki, Outstanding Foreign Student Award

ACADEMIC DUTIES

Board Member: Estonian Genome Project Foundation, Estonian Society of Human Genetics
Member of the Scientific Council: NICPB and TTU Gene Technology Center

CONTACT INFORMATION

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From Genes to Functions: The Case of CD44

The postgenomic era offers enormous new opportunities for uncovering the genes involved in complex human diseases. However, such genes have been discovered and their functions elucidated even in pregenomic times. Recent history offers numerous examples of breakthrough discoveries creating elevated expectations about immediate benefits in the clinic which have gone through a painful reality check only to reemerge at a more realistic level. One such example that has gone through the full cycle is CD44, a cell surface receptor for the glycosaminoglycan hyaluronan. Discovered 10 years ago by Herrlich and colleagues as the molecule capable of conferring metastatic behavior to rat pancreatic carcinoma cells, it was expected to have enormous potential in early detection of metastatic cancers. However, the numerous studies in the mid-nineties gave contradictory results resulting in considerable confusion and disappointment about this molecule. However, our results to be presented show that CD44 has a dual role in cancer progression: it is important for metastatic spread, but is inhibitory for angiogenesis, a process absolutely necessary for local growth of both primary and metastatic tumors. These results present an explanation for the conflicting data in the literature, establish CD44 as a novel type of metastasis molecule and offer a new strategy for simultaneously interfering with angiogenesis and metastasis, both critical processes in malignant tumor progression.