Karsten Buschard, MD, DMSc, DVSc

Bartholin Institute, Rigshospitalet, Copenhagen, Denmark
Tel. +45-27 22 60 07
E-mail: buschard@dadlnet.dk

Born 28. September 1946, Copenhagen, Denmark. Married, 6 children

Professional preparation

Medical Education (MD)	University of Copenhagen	1974
Certified Physician		1981
Doctor of Medicine (DMSc)	University of Copenhagen	1984
Doctor of Veterinary Medicine (DVSc)	University of Copenhagen	2011

Appointments

Intern and resident at clinical departments in Copenhagen Hospitals especially training in endocrinology and diabetology	1974-1976 and 1980-1983
Research Candidate, Pathological Department, Copenhagen University Hospital	1977-1979
Associate Professor, Bartholin Institute, Copenhagen University Hospital	1983-2001
Adj. Professor, Copenhagen University, Faculty of Life Sciences	2001-
Chief Physician, Bartholin Institute, Rigshospitalet	2003-

Commission of Trust

Member of the elected Diabetes Pregnancy study Group	1993-
Member of the program committee for EASD	1998-1999
Co-Editor for Diabetologia	2003-2007
Reviewer for 19 international scientific journals	

Networks

Several local and international collaborators, including groups in Göteborg, Malmö, Leiden.

Supervision of DMSc-, PhD- and Master thesis

More than 25 since 1994

Honors and awards

Bernhard Rasmussen og hustru Meta Rasmussen's award	1996
Dandy award	2000
Receiver of numerous research grants from public and private funds	

Previous research achievements

Published 212 scientific papers. Major findings are:

1. **Studies on type 1 diabetes as an autoimmune disease**
   Being the first to describe adoptive transfer in diabetes animal models. First studies on the dependency of the thymus immune system for EMC-M virus induced diabetes. Original studies on reduced regulator T cell function in newly T1D patients.

2. **Studies on the functional state of the beta cells in the pathogenesis of type 1 diabetes**
   Initiated the idea that the activity of the beta cells is important for development of T1D. First studies on increased antigen expression on beta cells in high activity, and amplified incidence of true T1D in the last trimester of pregnancy with augmented insulin demand. Original studies on prophylactic insulin treatment in order to prevent T1D. The idea of foetal and neonatal development of the beta cells as being pathogenetic important. Corresponding studies in autoimmune thyroid disease.

3. **Studies on glycolipids, especially sulfatide**
   Original studies on sulfatide, which is present in the beta-cell granules together with insulin. Sulfatide activates the potassium channels and induces by this mechanism rest of the individual beta cell. Sulfatide acts anti-inflammatory by reducing cytokine production, and by raise of regulator T cells and NKT cells after presentation using CD1d molecules. Sulfatide increases the production of adiponectin and increases insulin sensitivity.

4. **Studies on prevention of type 1 diabetes induced by gluten-free diet**
   Original studies on the preventive effect of gluten-free diet in animal models of T1D. First studies on intestinal regulator T cells and gluten.