

## CONFERENCE

Statuts de l'association  
**LUXPHA**

**Daniel R. Witte**

Professor of Diabetes Epidemiology  
Aarhus University, Denmark

🕒 5 - 6pm

**Dr Anna Chiotti**

Luxembourg Institute of Health

🕒 6 - 6.30pm

**22.06.2017**

📍 **Amphitheatre du CHL**  
4, rue Ernest Barblé  
L-1210 Luxembourg

# Linking everything from genes to registers: Diabetes Epidemiology in Denmark

The Nordic countries have a long tradition of maintaining national registers covering demography, social and economic indicators, medication and health outcomes, making these registers linkable at the individual level and accessible to researchers. This combination of national registers makes it possible to study research questions at the level of the entire population, enabling the study of small subgroups, rare outcomes and detailed longitudinal patterns. Combination of register data with data from cohorts and biobanks further expands the research possibilities.

Using examples from diabetes epidemiology, this lecture will review some of the major contributions of Danish register-based research and explore possibilities for the future as an ever larger array of linkages is made. As an example of upcoming advanced linkage initiatives, the lecture will review the structure and aims of the Danish Social Network database, which will document familial and social connections between all individuals in the Danish population.

Daniel Witte is Danish Diabetes Academy Professor of Diabetes Epidemiology, based at the department of Public Health, Aarhus University in collaboration with the Department of Clinical Epidemiology at Aarhus University Hospital.

Daniel started his career at the University of Utrecht, the Netherlands, where he studied medicine and completed a PhD in clinical epidemiology with a thesis focused on the non-invasive assessment of endothelial function in patients at high cardiovascular risk. He subsequently worked for 5 years as a post-doctoral clinical research fellow at the department of Epidemiology and Public Health, University College London, UK. His work there focused on screening models for type 2 diabetes and the analysis of risk factors for diabetes and its complications based on several large cohorts such as EURODIAB-Pro prospective Complications Study (Type 1 Diabetes) and the Whitehall II study (Type 2 Diabetes).

Between 2008 and 2012 Daniel was head of the diabetes epidemiology group at Steno Diabetes Center in Gentofte, Denmark. In this position he further developed his main research interests: the study of the pathophysiological mechanisms which determine the transition from normal

glucose control via pre-diabetes to diabetes and the early stages of its complications at the level of large populations. He has a special focus on longitudinal trajectory analyses and analysis of clustering of diabetic complications. His work uses data from several large longitudinal studies, such as the Inter99 and ADDITION trials, the ADDITION-PRO and Whitehall II cohorts, as well as routine medical and population registers. Daniel has a strong interest in the use of routine registers to enrich cohort datasets with a view to studying the long-term consequences of dysglycaemia, diabetes risk and the clinical management of diabetes.

Between 2012 and 2014 Daniel was the Principal Investigator for the Luxembourg Cohort at the Luxembourg Institute of Health, Strassen, Luxembourg, tasked with the design and concept development for a national cohort in Luxembourg. In January 2015 he was appointed Professor of Diabetes Epidemiology at Aarhus University, Denmark; based on a grant from the Danish Diabetes Academy. He teaches at national and international courses at the post-graduate level and supervises several PhD students. Daniel is a member of the Danish Diabetes Academy and of the Steering Committees of the ADDITION-Denmark and ADDITION-Europe studies.



**SPEAKER**

**Daniel Rinse Witte**

MD, PhD  
Professor of Diabetes Epidemiology  
(Danish Diabetes Academy)

**HOST:**

Department of Population Health