

CV FOR THERESIA M. SCHNURR (APRIL 2021)

Theresia Maria Schnurr

Born: November 7th 1988, Nationality: German

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Key contributions to Science

During the past 7 years, I applied diverse analysis methods to uncover genetic underpinnings of obesity and diabetes and to understand, at the molecular level, their complex relationship with lifestyle. My vision is to provide insights that will pave the way for personalized prevention, treatment and for new drug targets. I have significantly contributed to advancing the research field by findings of (selected recent 1st author publications):

- A *TBC1D4*-determined risk of diabetes is amendable to physical activity in the Greenlandic population, providing an opportunity to implement precision medicine in the Arctic (accepted in *Diabetologia*).
- The effect of obesity on type 2 diabetes risk is dominant over lifestyle and genetic factors, highlighting the importance of weight management in type 2 diabetes prevention (published in *Diabetologia*)
- Children who are genetically predisposed to overweight, due to their common gene variants, can still lose weight by changing their diet and exercise habits (published in *Obesity*).

Current Position

2020 and on Visiting Scholar, Department of Medicine, Division of Cardiovascular Medicine, Stanford University, USA

Training and Positions (selected)

2019-2020 Maternity leave

2017 and on Postdoctoral Researcher, Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR), Faculty of Health and Medical Sciences, University of Copenhagen (UCPH), Denmark

2018 PhD in Basic Metabolic Research, CBMR, UCPH

Thesis title: The Impact of Genetic Variation on Objectively Assessed Physical Activity and Fitness and Its Relevance for Obesity and Metabolic Traits

Academic supervisor: Torben Hansen

2014-2017 PhD student, CBMR, UCPH

2014 Scientific Assistant, CBMR, UCPH

2013 MSc in Biochemistry & Molecular Biology, University of Alaska Fairbanks (UAF), USA

Thesis title: GLUT-4 expression in mononuclear cells of sled dogs

2012-2013 Research Assistant, Institute for Arctic Biology, UAF

2012 BSc in Biochemistry & Molecular Biology, UAF

Minors in Management & Organization as well as General Business

Interdisciplinary and translational collaborations

I have vast experience with working in interdisciplinary research teams. I have been coordinating and performing genetic analysis activities within the interdisciplinary project “Governing Obesity” at UCPH and on-going research activities within the Danish Childhood Obesity Biobank at Holbaek Sygehus. While navigating in projects with critical contributions from a wide field of researchers, such as medical, basic and social scientists, has sometimes been challenging, it has always been very stimulating, especially when diverse inputs are put together in data-driven strategic decisions on how to move projects forward.

International collaborations (selected)

- During my PhD studies, I visited the University of Eastern Finland, Kuopio for one month and established several collaborations investigating risk factors and genetic determinants of overweight, cardio-metabolic disease and diabetes in children.

- I am analyst and collaborator in various international large-scale genetic discovery consortia activities within metabolic disease-related trait outcomes, for example within the Early Growth Genetics (EGG) consortium, where we recently identified novel loci for childhood body mass index and shared heritability with adult cardiometabolic traits.

Grants, Scholarships and Prices (selected)

- Novo Nordisk Foundation Visiting Scholar or Postdoc Fellowship at Stanford Bio-X (2019). I received 4 million DKK for the interdisciplinary project “Identifying causal genes and mechanisms of action in non-alcoholic fatty liver disease towards drug target discovery”. Under this project, I moved with my family to California where I will spend 3 years (Nov 2020-Oct 2023) at Stanford University, followed by 1 year at CBMR (Nov 2023-Oct 2024)
- Danish Diabetes Academy (DDA) co-financed PhD scholarship (2014)
- More than 10 travel grants for support of conference travel and research stays (2013-present)
- Recipient of the Marion Frances Boswell Memorial Award (most outstanding graduating senior woman out of 500+ students) at UAF (2013)
- National Institute of Health IDeA Network of Biomedical Research Excellence undergraduate research award (2012), UAF
- Scholarship Student-Athlete (2008-2013), UAF

Science communication (selected)

- In total, 33 original PubMed-indexed research articles including articles in high-ranked journals within the field of obesity and diabetes. Of these, I was first or shared-first author on 14: <https://pubmed.ncbi.nlm.gov/?term=schnurr+TM>
- Presenter (oral and poster) at more than 10 international conferences and meetings; e.g. oral presentations at the American Diabetes Association Scientific Sessions (San Diego, 2017), the North Europe Young Diabetologists meeting (Copenhagen, 2019) and NunaMed (Nuuk, 2017)
- Engaged in public outreach events and projects, e.g. the Videnskabsteatret: <https://videnskabsteatret.dk> (2016-2018), KulturNatten (2017) and Akademiet for Talentfulde Unge (2015)
- Popular communication of research through web-based media, e.g.: <https://videnskab.dk/krop-sundhed/dansk-forsog-boern-taber-sig-trods-fedme-gener>, <https://sciencenews.dk/da/fitness-og-fatness-dikteres-af-de-samme-gener>

Contribution to planning of courses, supervision, teaching and networking activities (selected)

- Board Member of the peer-led network for CBMR’s early career scientists Metabolic Research Association of Postdocs and Students. Organizing of the monthly scientific seminars and social networking hour (2017-2019)
- Supervision of high school, undergraduate and graduate students and teaching of lab technicians (2013-present)
- Planning and organizing of the PhD course “Genomics and Metabolic Diseases”, UCPH (2016)
- Steering committee member of the PhD school for Basic Metabolic Research. Organizing and managing courses, seminars and social activities for enrolled PhD students (2014-2017)
- Completion of the iTeachU teaching seminar (certified in 2013) and assisting in the development of iPad taught Biochemistry classes at UAF.

Other relevant experiences

- Consultant for the Virtual Laboratory 2.0 (DDA, Odense, Denmark, 2015-2016). My role in this collaboration with the Biotech Academy was to expand the Diabetes area of the Virtual Laboratory by developing computer based exercises that give a realistic insight into diabetes research. I also presented the program to high-school students/teachers and project stakeholders. Link to the free e-tool targeted for first year high school students: <http://virtueltlaboratorium.dk/>.
- Team Manager and ski coach for the Danish Ski Federation and Københavns Skiklub (2014-2018); e.g. managing the Danish National Team during the FIS Nordic Skiing World Championships in Park City, Utah, USA (2017, juniors) and Falun, Sweden (2015, seniors)