

C.V.

Ruth Loos, PhD

Professor and Vice Executive Director at CBMR since April 15, 2021

Deputy Coordinator for Research Program 1: Human Variation and Functional Genomics from January 1, 2023

#### PERSONAL INFORMATION

Family name, first name: Loos, Ruth

Researcher unique identifier: ORCID 0000-0002-8532-5087

URL for website (Group page): <https://cbmr.ku.dk/research/human-genomics-and-metagenomics-in-metabolism/loos-group/>

#### EDUCATION

1997 – 2001 PhD in Medical Sciences (Genetic Epidemiology) at the University of Leuven, Belgium (Leuven, Belgium)

1993 – 1994 MSc in Public Health and Fitness

1992 – 1993 MEd in Kinesiology

1991 – 1993 MSc in Kinesiology

1988 – 1991 BSc in Kinesiology

#### CURRENT POSITION(S)

2021 – Vice Executive Director, Faculty of Health and Medical Sciences, Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR), University of Copenhagen, Denmark

2021 – Professor and Group Leader of Precision Health in Obesity and Metabolism, Faculty of Health and Medical Sciences, Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR), University of Copenhagen, Denmark

2011 – Director, Genetics of Obesity and Related Metabolic Traits Program, Icahn School of Medicine at Mount Sinai (New York, NY, USA)

2011 – Professor (part-time since 2021), Charles Bronfman Institute for Personalized Medicine, Icahn School of Medicine at Mount Sinai (New York, NY, USA)

#### PREVIOUS POSITIONS

2018 – 2021 Charles Bronfman Professor in Personalized Medicine (Endowed chair), Icahn School of Medicine at Mount Sinai (New York, NY, USA)

2015 – 2021 Co-Director, Charles Bronfman Institute for Personalized Medicine, Icahn School of Medicine at Mount Sinai (New York, NY, USA)

2011 – 2021 Honorary Scientist, University of Cambridge, MRC Epidemiology Unit (Cambridge, UK)

2007 – 2011 Programme Leader, University of Cambridge, MRC Epidemiology Unit (Cambridge, UK)

2005 – 2007 Investigator Scientist, University of Cambridge, MRC Epidemiology Unit (Cambridge, UK)

2002 – 2005 Postdoctoral researcher, Pennington Biomedical Research Center (Baton Rouge, LA, USA)

1994 – 1997 Research Associate, University of Leuven (Leuven, Belgium)

#### PRINCIPAL INVESTIGATOR ON EXTERNAL GRANTS

Summary: Dr. Loos has so far raised >\$35 million in funding from the NIH (USA), MRC (UK), NNF (DK), DNRF (DK) and other agencies, and was awarded a NHLBI TOPMed Award to sequence 10,000 whole genomes (value ~\$10 million).

#### Current grants

09/2022 – 08/2025 Danish National Research Foundation, 'Precision Health in Metabolism'

04/2021 – 03/2028 NNF Laureate award, 'Obesity: From genes to biology and personalized health'

04/2020 – 03/2025 NIH NIDDK R01DK124097, 'Resilience to obesity in carriers of monogenic obesity mutations - a study on the underlying mechanisms'

12/2016 – 12/2023 NIH NHLBI X01HL134588, 'The BioMe Biobank at Mount Sinai: a diverse ancestry biobank to map biomedical traits and health disparities'

09/2016 – 06/2023 NIH NIDDK R01DK110113, 'Study of coding variants in human obesity and their functional characterization using iPSC-derived cellular models'

05/2019 – 04/2023 International Research Alliance NNF Center for Basic Metabolic Research, 'Resilience to obesity in genetically at-risk individuals'

#### FELLOWSHIPS, AWARDS AND HONORS

2023 Novo Nordisk Foundation – European Association for the Study of Obesity Prize for Excellence in Obesity

2022 Ranked #91 among 'Best Female Scientists in the World 2022 Ranking' by Research.com

2014 - 2018 Clarivate Analytics Highly Cited Researcher

2010 Distinguished Alumnus of the Faculty of Kinesiology, University of Leuven (Belgium)

2008 Medal of the Swedish Society of Medicine (Sweden)

2010 – Fellow member of The Obesity Society (USA)

2001 – Fellow of the Belgian American Educational Foundation (Belgium)

2001 – Fellow of the Collen Foundation (Belgium)

2001 – Fellow of the Francqui Foundation (Belgium)

## LEADERSHIP AND MANAGEMENT ROLES

2023 –Scientific Advisory Board, EU Project, INTERCEPT-T2D, PIs P. Froguel, A. Bonnefond, M. Donath, and M. Roden  
2023 Program Committee, Wellcome Connecting Science, Multi-omics in Metabolic Disease 2023, Cambridge, UK  
2022 –Board of Directors, European Association for the Study of Diabetes  
2022 –Board of Directors, Trustee of European Diabetology  
2022 –Associate Editor, ‘Diabetes’  
2022 –Program Committee, Metabolism Day, Copenhagen  
2020 Awards Committee, the bi-annual Leena Peltonen Prize  
2020 Program Committee, World Obesity Federation - ECO & ICO 2020 Programme  
2020 Program Committee, Precision medicine: from patient to lab and back again, Copenhagen Bioscience Conference  
2020 – 2021 Scientific Advisory Board, NIH NIDDK - Working Group to develop NIDDK’s Strategic Plan  
2019 –Scientific Advisory Board, ADIPOSIGN PI: Susanne Mandrup, Odense, DK  
2018 –Associate Editor, ‘Human Molecular Genetics’  
2018 – 2021 NIH Study Section, KNOD [Kidney, Nutrition, Obesity, Diabetes] study section, member  
2016 –2021 Associate/Reviewing Editor, ‘PLoS Genetics’  
2016 –2020 Founder: Annual New York City Regional Obesity Forum  
2015 Program Committee, GTCbio’s Functional Genomics Conference, Boston  
2013 Program Committee, Program in Quantitative Genomics Conference, Boston, MA  
2012 – 2016 Program Committee, American Society of Human Genetics – ASHG Annual Meeting  
2011 – 2015 Scientific Advisory Board, MetaPredict (FP7 EU) PI: Jamie Timmons, Loughborough, UK  
2010 – 2013 Scientific Advisory Board, GENDINOBI PI: Thorkild Sorensen, Copenhagen, DK  
2009 – 2012 Scientific Advisory Board, UNIK Food, Fitness and Pharma PI: Thue Schwartz, Copenhagen

## TEACHING ACTIVITIES

Graduate & undergraduate courses

2009 – 2022 4 lectures/year in Genetic Epidemiology and/or Genetics of Obesity  
2013 – 2022 Course-director: Genetic Epidemiology  
2022 –Course-director: Machine Learning in Metabolism

Courses at workshops

2-3 workshops a year, including;  
2015 – 2020 Leena Peltonen School of Human Genomics, Les Diablerets, Switzerland  
2016 –Strengthening Causal Inference in Obesity Research, Bloomington, IN  
2020 –Columbia Cornell Obesity Course, online  
2022 –Harvard Blackburn Course in Obesity Medicine, online

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

-Since 2005, 12 postdoctoral fellows and 5 PhD students have completed their training and have moved on to higher positions in academia (n=12) or industry (n=4).

-Currently, I mentor 6 postdoctoral fellows, 1 MD/PhD student, 3 PhD students, and 2 visiting postdoctoral fellows, and I supervise 2 data scientists and 2 research associates.

## SELECTED RECENT CONFERENCE PRESENTATIONS

2022 Future of Precision Medicine Symposium – Invited Lecture – “Overview of the ADA/EASD Precision Diabetes Medicine Initiative”, Hellerup, Denmark

2022 Diabetes Day 2022 Karolinska Institutet – Invited Lecture – “Genetic subclassification of obesity and its role in precision health”, Stockholm, Sweden

2022 Adipose Tissue and Metabolic Health – Lecture on Genetics Uncoupling Obesity from Metabolic Complications, Whistler, Canada

2022 82nd Scientific Sessions of the American Diabetes Association – Invited lecture – “The Non-coding Genome – a Repository for Variation affecting Obesity and Diabetes”, New Orleans, USA

2022 EASO’s 29th annual European Congress on Obesity - Plenary presentation entitled ‘Towards Personalized Interventions: Balancing (Epi)genetics and Environmental Factors’, Maastricht, The Netherlands

## PUBLICATIONS

> 500 publications <https://orcid.org/0000-0002-8532-5087>

H-index: Google scholar: 158 Scopus: 142

Citations: Google scholar: 122,948 Scopus: 100,305