

GRK2576 vivid - in vivo investigations towards the early development of type 2 diabetes - vivid.hhu.de

### **GRK 2576 Guest Lecture**

Title: Some novel aspects on white adipose tissue and its role in cardiometabolic

disease

Speaker: Mikael Rydén, MD

Head of the Center for Clinical Metabolic Research in Diabetes and the

Endocrinology Unit, Karolinska Institute, and senior consultant in

Endocrinology/Diabetology at the Karolinska University Hospital, Stockholm,

Sweden

Date: 4 September 2024 Time: 14:00 h CET

Location: Oskar Minkowski-Hall & Paul Langerhans-Hall, DDZ

Zoom:

https://us06web.zoom.us/j/81148756160?pwd=6OfsfTukUQSo4CX1xRO4AvZsCP6eFH.1

Meeting-ID: 811 4875 6160; Kenncode: 955908

## **Biography**



Mikael Rydén is professor in clinical and experimental adipose tissue research and heads the Center for Clinical Metabolic Research in Diabetes and the Endocrinology Unit at the Karolinska Institute. He is also senior consultant in Endocrinology/Diabetology at the Karolinska University Hospital, Stockholm, Sweden. His research focuses on the role of human adipose tissue in several different conditions and spans from advanced cell- and molecular biology techniques in different cell culture models to clinical studies in man. He served as the Honorary Secretary of the EASD 2018 - 2022 and is also an elected member of the Nobel Assembly at the Karolinska Institute.

#### Selected recent publications

Maqdasy S, Lecoutre S, Renzi G, Frendo-Cumbo S, Rizo-Roca D, Moritz T, Juvany M, Hodek O, Gao H, Couchet M, Witting M, Kerr A, Bergo MO, Choudhury RP, Aouadi M, Zierath JR, Krook A, Mejhert N, Rydén M. Impaired phosphocreatine metabolism in white adipocytes promotes inflammation. Nat Metab. 2022 Feb;4(2):190-202. doi: 10.1038/s42255-022-00525-9. Epub 2022 Feb 14. PMID: 35165448; PMCID: PMC8885409.

Petrus P, Lecoutre S, Dollet L, Wiel C, Sulen A, Gao H, Tavira B, Laurencikiene J, Rooyackers O, Checa A, Douagi I, Wheelock CE, Arner P, McCarthy M, Bergo MO, Edgar L, Choudhury RP, Aouadi M, Krook A, Rydén M. Glutamine Links Obesity to Inflammation in Human White Adipose Tissue. Cell Metab. 2020 Feb 4;31(2):375-390.e11. doi: 10.1016/j.cmet.2019.11.019. Epub 2019 Dec 19. PMID: 31866443.

Petrus P, Lecoutre S, Dollet L, Wiel C, Sulen A, Gao H, Tavira B, Laurencikiene J, Rooyackers O, Checa A, Douagi I, Wheelock CE, Arner P, McCarthy M, Bergo MO, Edgar L, Choudhury RP, Aouadi M, Krook A, Rydén M. Glutamine Links Obesity to Inflammation in Human White Adipose Tissue. Cell Metab. 2020 Feb 4;31(2):375-390.e11. doi: 10.1016/j.cmet.2019.11.019. Epub 2019 Dec 19. PMID: 31866443.

Arner P, Andersson DP, Bäckdahl J, Dahlman I, Rydén M. Weight Gain and Impaired Glucose Metabolism in Women Are Predicted by Inefficient Subcutaneous Fat Cell Lipolysis. Cell Metab. 2018 Jul 3;28(1):45-54.e3. doi: 10.1016/j.cmet.2018.05.004. Epub 2018 May 31. PMID: 29861390.

**Information on access:** please visit <a href="https://www.vivid.hhu.de">https://www.vivid.hhu.de</a>/qualification-program/guest-lectures Contact: Dr. Nicole Rockel, +49-211-3382-558, vivid@hhu.de













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#### Talk teaser

GRK 2576 vivid Guest lecture with Prof. Dr. Mikael Rydén

# Some novel aspects on white adipose tissue and its role in cardiometabolic disease

In this presentation Mikael Rydén will go through some recent advancements he has done in recent years and why he believes this could be important for precision medicine approaches in the treatment of people living with obesity and type 2 diabetes.









