



---

## Curriculum Vitae Prof. Dr. Matthias Tschöp



Image: Matthias Tunger | Helmholtz Munich

**Name:** Matthias H. Tschöp

**Born:** 7 April 1967

**Research Priorities: Metabolic disease, prevention and treatment of obesity and diabetes, gut-brain communication, insulin resistance, drug research**

Matthias Tschöp is a German physician-scientist and is considered one of the leading international scientists for diabetes and obesity. He unraveled fundamental gut-brain signals to discover medicines capable of normalizing body weight, the dual and triple gut hormone multi-agonists. A first representative is FDA-approved, others are successfully progressing through clinical trials. Offering more than 20% body weight loss and unprecedented blood sugar control, these new medicines enable the reversal of the obesity and diabetes pandemic, a scientific achievement previously believed to be impossible.

### Academic and Professional Career

- since 2023 Vice President of Health Research, Helmholtz Association of German Research Centers, Germany
- since 2018 Chief Executive Officer and Chief Scientific Officer, Helmholtz Munich, Munich, Germany
- since 2012 Adjunct Professor, Yale University, New Haven, USA
- since 2012 Alexander von Humboldt Professor and Chair, Division of Metabolic Diseases, Technical University of Munich, Munich, Germany
- 2017 - 2020 Founding Director, Helmholtz Pioneer Campus, Munich, Germany
- 2011 - 2018 Founding and Scientific Director, Helmholtz Diabetes Center, Helmholtz Munich, Munich, Germany

- 2011 - 2018 Founding Director, Institute for Diabetes and Obesity, Helmholtz Munich, Munich, Germany and Research Director, Helmholtz Diabetes Center, Munich, Germany
- 2009 - 2011 Arthur Russell Morgan Chair of Medicine, College of Medicine, University of Cincinnati, Cincinnati, USA
- 2009 - 2011 Research Director, Cincinnati Diabetes and Obesity Centre, College of Medicine, University of Cincinnati, Cincinnati, USA
- 2009 - 2011 Professor, Institute for Metabolic Diseases, Division of Endocrinology, Diabetes and Metabolism, Department of Medicine, University of Cincinnati, Cincinnati, USA
- 2003 - 2013 Visiting Scientist, Department Pharmacology, German Institute for Human Nutrition Potsdam-Rehbrücke, Nuthetal, Germany
- 2003 - 2009 Associate Professor (Tenure since 2007), Obesity Research Center and Genome Research Institute, Department of Psychiatry and Medicine, University of Cincinnati, Cincinnati, USA
- 2002 - 2003 Senior Scientist, Department Pharmacology, German Institute for Human Nutrition Potsdam-Rehbrücke, Nuthetal, Germany
- 1999 - 2002 Postdoc, Discovery Research, Lilly Research Laboratories, Eli Lilly and Co., Indianapolis, USA
- 1995 - 1999 Researcher, Neuroendocrinology Working Group, Clinic City Centre, LMU Munich, Munich, Germany
- 1998 MD in Medicine, LMU Munich, Munich, Germany
- 1995 - 1999 Assistant Physician, Clinic City Centre, LMU Munich, Munich, Germany
- 1987 - 1994 Studies in Medicine (pre-medical and medical school, internship in internal medicine, surgery and psychiatry), LMU Munich, Munich, Germany

### **Functions in Scientific Societies and Committees (Selection)**

- since 2023 Member, Programme Committee, EASD 60<sup>th</sup> Annual Meeting, Madrid, Spain
- since 2023 Chair, Founding Committee of the Carl and Gerty Cori Institute of Molecular Metabolism, Austrian Academy of Sciences, Graz, Austria
- since 2023 Member, Scientific Advisory Board, MRC London Institute of Medical Sciences, London, UK
- since 2022 Member, Commission on Clinical Obesity, The Lancet, UK
- since 2022 Member, National Committee for Health Research (Forum Gesundheit), Federal Ministry of Education and Research, Germany

- since 2021 Member, Advisory Board, Comprehensive Cancer Center (CCC) Munich, Munich, Germany
- since 2014 Scientific Advisory Board, Max Planck Institute for Metabolism Research, Cologne, Germany

**Honours and Awarded Memberships (Selection)**

- 2023 Heinrich Wieland Prize, Boehringer Ingelheim Foundation, Mainz, Germany
- 2023 Ernst Schering Prize, Schering Stiftung, Berlin, Germany
- 2023 Banting Medal, American Diabetes Association (ADA), USA
- 2022 EASD-Lilly Centennial Anniversary Prize, European Association for the Study of Diabetes
- since 2022 Elected Member, Association of American Physicians (AAP), USA
- 2021 Ernst Jung Prize for Medicine, Jung Foundation (Jung-Stiftung für Wissenschaft und Forschung), Hamburg, Germany
- 2021 Berthold Medal, German Society of Endocrinology (DGE)
- since 2020 Elected Member, European Molecular Biology Organization (EMBO)
- 2019 Paul Langerhans Medal, German Diabetes Association, Germany
- since 2018 Elected Member, Bavarian Academy of Sciences and Humanities, Germany
- 2017 Outstanding Innovation Award, Endocrine Society, Washington D.C., USA
- 2017 Charles H. Best Lectureship and Award, University of Toronto, Toronto, Canada
- 2017 Carus Medal, German National Academy of Sciences Leopoldina, Germany
- 2017 Carus Prize, Stadt Schweinfurt, Germany
- 2017 Hansen Family Award, Bayer Foundation, Leverkusen, Germany
- 2017 Rolf Sammet Guest Professorship, Goethe University Frankfurt/Main, Frankfurt/Main, Germany
- 2017 Honorary Doctorate Degree (Dr. h.c.), University of Leipzig, Leipzig, Germany
- since 2016 Elected Member, Academia Europaea (AE)
- 2016 European Medal, Society for Endocrinology
- 2014 Erwin Schrödinger Prize, The Stifterverband, Essen, Germany
- 2014 Paul Martini Prize, Paul Martini Foundation, Berlin, Germany

- 2014 Linda and Jack Gill Distinguished Scientist Award, Gill Center for Biomolecular Science, Indiana University Bloomington, Bloomington, USA
- since 2013 Member, German National Academy of Sciences Leopoldina, Germany
- 2012 Werner Creutzfeld Award, German Diabetes Society
- 2012 Alexander von Humboldt Professorship, Alexander von Humboldt Foundation, Bonn, Germany
- 2011 Outstanding Scientific Achievement Award, American Diabetes Association, USA
- 2010 NIDDK 60th Anniversary Scholar Award, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), USA
- 2010 André Mayer Award, International Association for the Study of Obesity (IASO)
- since 2009 Elected Member, American Society for Clinical Investigation (ASCI), USA
- 2007 Scientific Achievement Award, The Obesity Society (TOS), Rockville, USA

### Research Priorities

Matthias Tschöp is a German physician-scientist and is considered one of the leading international scientists for diabetes and obesity. He unraveled fundamental gut-brain signals to discover medicines capable of normalizing body weight, the dual and triple gut hormone multi-agonists. A first representative is FDA-approved, others are successfully progressing through clinical trials. Offering more than 20 percent body weight loss and unprecedented blood sugar control, these new medicines enable the reversal of the obesity and diabetes pandemic, a scientific achievement previously believed to be impossible.

As a physician-scientist, Matthias Tschöp embarked on a mission to discover effective therapeutics for obesity and identified the hunger hormone: Ghrelin. This breakthrough revealed a fundamental metabolic control signal. Recognizing that one signal would not be sufficient to effectively reverse obesity, Matthias Tschöp then started to combine several hormone action profiles into single hybrid molecules. Together with the chemist Richard DiMarchi, he created dual and triple hormone-like peptides by strategically choosing specific amino acids from a pool of metabolically active gut hormones (e.g. GIP, GLP-1, Glucagon) as well as adding modifications to increase half-life, stability and solubility. The result was a new class of therapeutics, offering unprecedented levels of metabolic benefits and weight loss in obesity. Tschöp and DiMarchi then validated the first types of these poly-agonists in rodent and primate models and led the very first clinical tests.

Today, numerous pharmaceutical companies are advancing versions of these co-agonists through clinical trials. The FDA-approved first representative of this drug class, Tirzepatide ("Mounjaro", Eli Lilly & Co), already achieves an average weight loss of 22.5% in human obesity and delivers unprecedented benefits in diabetes. In aggregate Matthias Tschöp pioneered a new era of

metabolic medicine: For the first time, human obesity can be effectively treated, significantly reducing the risk for diabetes and enabling the reversal of a global pandemic.