Curriculum Vitae	
Michael Krebs, MD **Associate Professor of Medicine**	
Personal Data	
Affiliation	Medical University Vienna Division of Endocrinology and Metabolism, Department of Internal Medicine III A-1090 Vienna, Währinger Gürtel 18-20, Austria Tel. ++43-(0)1-40400 4311; Fax: ++43-(0)1 40400 43090 michael.krebs@meduniwien.ac.at
Date and place of birth	July 28, 1971, Salzburg, Austria
Citizenship	Austrian
Personal profiles	https://www.meduniwien.ac.at/web/forschung/researcher-profiles/researcher-profiles/index.php?id=688&res_id=71&name=Michael_Krebs
List of Publications	https://orcid.org/0000-0002-9265-7274 https://scholar.google.de/citations?hl=de&pli=1&user=sw6FImEAAAAJ
	Career history
Education	
2005 – present	Associate Professor of Internal Medicine / Endocrinology and Habilitation – Venia Docendi, Medical University of Vienna
1998-2005	Residency in Internal Medicine at the Division of Endocrinology and Metabolism, Department of Internal Medicine III, (Head: Prof. W. Waldhäusl)
1996-1998	Postdoctoral training at the Department of Vascular Biology and Thrombosis Research (Head: Prof. B. R. Binder), University of Vienna Medical School
2 July1996	MD degree from the University of Vienna
1990-1996	Medical School, University of Vienna
	Duties and Honors
Career-related Activities	
2021 -	President Austrian Society of Endocrinology and Metabolism
2011 – 2018	Board member of the Austrian Society of Endocrinology and Metabolism
2009, 2010	Secretary of the Austrian Society of Endocrinology and Metabolism
Memberships	European Society of Endocrinology (ESE); European Association for the Study of Diabetes (EASD) Austrian Society of Internal Medicine (ÖGIM); Austrian Obesity Association (ÖAG); Austrian Thyroid Association (OSDG); Austrian Society for Endocrinology and Metabolism (ÖGES) Endocrine Society; Austrian Society of Nephrologhy
Research	
Interests and research achievements	Methods: metabolic phenotyping and pathophysiology of glucose metabolism in humans employing NMR spectroscopy, various tracer techniques and biopsies of skeletal muscle in combination with hyperinsulinemic- and pancreatic-clamp tests to determine rates of glucose turnover, gluconeogenesis, and molecular mechanisms insulin resistance. Research focus on the elucidation of the mechanisms of nutrient induced insulin resistance in humans, mechanistic studies on novel therapeutic

	strategies (phase 2 studies) and the associations between metabolic derangements and cardiovascular disease. Leading and Coordinating the Group "Substrate Metabolism" at Division of Endocrinology and Metabolism, Department of Internal Medicine III, MUW – joined with Prof. M. Krssak – members: Y. Winhofer, P. Wolf, S. Smajis, D. Jankovic, P. Fellinger, M. Metz, H. Beiglböck The long-term cooperation with Prof. Kršśák, revealed that in vivo ^{31}P MRS measurement of glycerophosphocholine in muscle and liver as unique tissue specific biomarker for the action of thyroid hormones in humans (JCEM 2020). I have supervised 11 Ph.D., and 9 master students. Experience in the design and conduct of multiple clinical studies (phase 2 and phase 3) since 1999
International Network	Prof. G. Paccini, CNR, Padua, Italy Prof. Amalia Gastaldelli, Pisa, Italy
Sources of Funding	Austrian Diabetes Association (35 000 €) „Molecular mechanisms of amino acid induced insulin resistance in human skeletal muscle" Austrian Association of Internal Medicine (40 000 €) "Morbid obesity and weight reduction: Impact on molecular mechanisms of insulin resistance" Austrian National Bank (75 000 €) „Hepatic glycogen metabolism and profiles of glucose and glucoregulatory hormones in patients with type 1 diabetes mellitus after pancreatic transplantation" "Unravelling he pathogenetic mechanisms of fructose consumption in the pathogenesis and progression of non-alcoholic fatty liver disease (NAFLD)." WWTF funded (400 000 €), Co-Pi Unrestricted Grant by Astra Zeneca (100.000) - Acute effects of sodium glucose co-transporter 2 (SGLT2) inhibition on Hepatic glucose and Energy metabolism

Publication summary
as of 5/2021: 116 peer reviewed publications (39 as first/senior author), 13 reviews

Ten most important peer reviewed publications in career relevant to the current research proposal:

1. **Krebs M**, Krssak M, Bernroider E, Nowotny P, Anderwald C, Brehm A, Roth E, Waldhäusl W, Roden M: Mechanism of amino acid-induced skeletal muscle insulin resistance in humans. Diabetes 2002, DOI: 10.2337/diabetes.51.3.599
2. **Krebs M,** Brunmair B, Brehm A, Artwohl M, Szendrödi J, Nowotny P, Roth E, Fürnsinn C, Promintzer M, Anderwald C, Bischof M, Roden M: The mTOR-pathway regulates nutrient sensitive glucose uptake in man. Diabetes 2007, DOI: 10.2337/db06-1016
3. Scherer T, Wolf P, Winhofer Y, Duan H, Gessl A, Luger A, Trattnig S, Hoffmann M, Krssak M, **Krebs M**: Levothyroxine replacement in hypothyroid humans reduces myocardial lipid load and improves cardiac function. JCEM, 2014, DOI: 10.1210/jc.2014-2112
4. Thomas Scherer, Peter Wolf, Sabina Smajis, Melania Gaggini, Martina Hackl, Amalia Gastaldelli, Peter Klimek, Elisa Einwallner, Rodrig Marculescu, Anton Luger, Clemens Fürnsinn, Siegfried Trattnig, Christoph Buettner, Martin Kršśák, **Michael Krebs**: Chronic intranasal insulin does not affect hepatic lipids, but lowers circulating BCAAs in healthy male subjects, J Clin Endocrinol Metab 2017, DOI: 10.1210/jc.2016-3623
5. Peter Wolf, Hannes Beiglböck, Sabina Smaijs, Thomas Wrba, Susanne Rasoul-Rockenschaub, Rodrig Marculescu, Alois Gessl, Anton Luger, Yvonne Winhofer, **Michael Krebs**: Hypothyroidism and hyponatremia – rather co-incidence than causality. Thyroid 2017, DOI: 10.1089/thy.2016.0597
6. Radka Klepochova, Ladislav Valkovič, Thomas Hochwartner, Christoph Triska, Norbert Bachl, Harald Tschan, Siegfried Trattnig, **Michael Krebs**, Martin Kršśák: Differences in muscle metabolism

between triathletes and normally active volunteers investigated using multinuclear magnetic resonance spectroscopy at 7T. Front Physiology 2018, DOI: 10.3389/fphys.2018.00300
7. L. Pfleger, M. Gajdošík, P. Wolf, A. Kühne, S. Trattnig, **Michael Krebs**, M. Krššák, M. Chmelík: Absolute quantification of phosphor-containing metabolites in the liver using 31P MRSI and hepatic lipid volume correction at 7T suggests no dependence on body mass index or age. Journal of Magnetic Resonance Imaging 2019, DOI: 10.1002/jmri.26225
8. Sabina Smajis, Martin Gajdošík, Lorenz Pfleger, Stefan Traussnigg, Christian Kienbacher, Emina Halilbasi2, Tamara Ranzenberger-Haide1, Anna Stangl, Hannes Beiglböck, Peter Wolf, Tanja Lamp,, Astrid Hofer, Amalia Gastaldelli, Chiara Barbierri, Anton Luger, Siegfried Trattnig, Alexandra Kautzky-Willer, Martin Krššák, Michael Trauner, **Michael Krebs**: Metabolic effects of a prolonged, very high-dose dietary fructose challenge in healthy subjects. Am J Clin Nutr, 2020, DOI: 10.1093/ajcn/nqz271
9. Beiglböck H, Wolf P, Pfleger L, Caliskan B, Fellinger P, Zettinig G, Anderwald CH, Kenner L, Trattnig S, Kautzky-Willer A, Krššák M, **Krebs M**; Effects of thyroid function on phosphodiester concentrations in skeletal muscle and liver: An in vivo NMRS study. J Clin Endocrinol Metab. 2020; DOI: 10.1210/clinem/dgaa663
10. Peter Wolf, Paul Fellinger, Lorenz Pfleger, Hannes Beiglböck, Patrik Krumpolec, Chiara Barbieri, Amalia Gastaldelli, Jürgen Harreiter, Sabina Baumgartner-Parzer, Rodrig Marculescu, Siegfried Trattnig, Alexandra Kautzky-Willer, Martin Krššák, **Michael Krebs**: Gluconeogenesis, but not glycogenolysis contributes to the increase in endogenous glucose production by SGLT-2 inhibition: Diabetes care, Epub 2020, DOI: 10.2337/dc20-1983