

Dr Tewodros Debebe Aklilu

Head of Science &
Co-Founder



Dr Tewodros Debebe Aklilu is co-founder and Head of Science at BIOMES. In 2017, he completed his doctorate in Medical Microbiology at the Medical Faculty of the University of Leipzig. His doctorate was awarded the Doctoral Prize and the Dr Margarete Blank Publication Prize of the University Hospital Leipzig as one of the best doctorates of 2017.

After successfully completing his doctorate summa cum laude and gaining practical experience in medical microbiology in both diagnostics and research at the medical faculty of the University of Leipzig, he began his entrepreneurial career as co-founder and scientific director in 2017.

Prior to that, he did his Bachelor's degree at the Faculty of Medicine at Bahir Dar University in his home country Ethiopia, where he also worked as a lecturer in 2010-2012. In 2012, he completed advanced diploma studies in vaccinology at the prestigious Institut Pasteur in Paris.

Dr Debebe has already published more than 15 scientific papers in internationally renowned journals. His great passion is understanding the microbiota in health and disease and how it interacts with our immune system. He researches the microbiota to improve the health, well-being and quality of life of individuals.

Professional experience:

2017

Co-founder and Head of Science of BIOMES NGS GmbH

2016

Scientific Assistant at the University of Leipzig

2010 - 2012

Lecturer at the Faculty of Medicine, University of Bahir Dar

Publications

- Lilja S, Stoll C, Krammer U, Hippe B, Duszka K, Debebe T, et al. Five Days Periodic Fasting Elevates Levels of Longevity Related Christensenella and Sirtuin Expression in Humans. *Int J Mol Sci.* 2021;22(5): 2331.
- Lilja S, Pointner A, Bäck H, Duszka K, Hippe B, Suarez L, Höfingner I, Debebe T, König J, Haslberger A. Fasting and fasting mimetic supplementation address sirtuin expression, miRNA and microbiota composition. *Functional Foods in Health and Disease* 2020; 10(10): 439-455.
- Franke P, Krumbiegel C, Girke B, Hammer P, Frohme M, Debebe T. Diet Type, Antibiotic Intake and Gut Microbiota: A Lesson from a Large Cross-Sectional Study. *Archive of the International Society of Microbiota*, 2019 (pp 1-112).
- Debebe T, Biagi E, Soverini M, Holtze S, Hildebrandt TB, Birkemeyer C, Wyohannis D, Lemma A, Brigidi P, Savkovic V, König B, Candela M, Birkenmeier G. Unraveling the gut microbiome of the long-lived naked mole-rat. *Nature Scientific Report* 2017;7(1):9590.
- Hutschenreuther A, Bigl M, Hemdan NY, Debebe T, Gaunitz F, Birkenmeier G. Modulation of GLO1 Expression Affects Malignant Properties of Cells. *Int J Mol Sci.* 2016; 17(12). pii: E2133.
- Debebe T, Krüger M, Huse K, Kacza J, Mühlberg K, König B, Birkenmeier G. Ethyl pyruvate: An anti-microbial agent that selectively targets pathobionts and biofilms. *PLoS One.* 2016; 11(9):e0162919.
- Birkenmeier G, Hemdan NY, Kurz S, Bigl M, Pieroh P, Debebe T, Buchold M, Thieme R, Wichmann, Dehghani F. Ethyl Pyruvate Combats Human Leukemia Cells but Sparing Normal Blood Cells. *PLoS One.* 2016; 31;11(8):e0161571.
- Debebe T, Holtze S, Morhart M, Hildebrandt TB, Rodewald S, Huse K, Platzer M, Wyohannes D, Yirga S, Lemma A, Thieme R, König B, Birkenmeier G. Analysis of cultivable microbiota and diet intake pattern of the long-lived naked mole-rat. *Gut Pathog.* 2016;8:25.
- Thieme R, Kurz S, Kolb M, Debebe T, Holtze S, Morhart M, Huse K, Szafranski K, Platzer M, Hildebrandt TB, Birkenmeier G. Analysis of Alpha-2 Macroglobulin from the Long-Lived and Cancer-Resistant Naked Mole-Rat and Human Plasma. *PLoS One.* 2015; 23:10(6):e0130470.
- Debebe T, Admassu A, Mamo G, Ameni G. Molecular characterization of Mycobacterium tuberculosis isolated from pulmonary tuberculosis patients in Felege Hiwot Referral Hospital, northwest Ethiopia. *J Microbiol Immunol Infect.* 2014;47(4):333-8.