

PUBLICATIONS

The five works highlighted in green below are those I would particularly like to draw to the committee's attention

*equal contribution

Kaufhold GN*, **Bartolomaeus TUP***, et al. (2025) Microbiota and clinical features predict long-term weight loss in response to prolonged fasting. *Manuscript in preparation*

Jerke U*, Kirchner ML*, **Bartolomaeus TUP***, et al. (2025). Plasma proteome machine learning profiling for biomarker panel development in ANCA vasculitis disease activity. *Manuscript in preparation*

Birkner T*, **Bartolomaeus TUP***, McParland V, Forslund-Startceva SK, Löber U (2025). Effects of Host Contamination in 16S rRNA Gene Sequencing: Bias, Impact, and Mitigation Strategies. *Submitted to Nature Communications*

Schwanbeck J, Stahnke M, Eberlein A, Goeritzer M, Schulze A, Pernitsch D, Kolb D, Grabner GF, **Bartolomaeus TUP**, et. al. (2025). Endothelial deletion of adipose triglyceride lipase protects against heart failure with preserved ejection fraction. *J Clin Invest Insight*. DOI: [10.1172/jci.insight.187145](https://doi.org/10.1172/jci.insight.187145)

Stürzbecher L, Bartolomaeus H, **Bartolomaeus TUP**, et al. (2025). Outer retina micro-inflammation is driven by T cell responses prior to retinal degeneration in early age-related macular degeneration. *Front Immunol*. DOI: [10.3389/fimmu.2025.1520188](https://doi.org/10.3389/fimmu.2025.1520188)

Avery EG , Haag LM, McParland V, Kedziora S, Zigra GJ, Valdes DS, Kirchner M, Popp O, Geisberger S, Nonn O, Karlsen TV, N'Diaye G, Yarritu A, Bartolomaeus H, **Bartolomaeus, TUP**, et al. (2025). Intestinal interstitial fluid isolation provides novel insight into the human host-microbiome interface. *Cardiovascular Research*. DOI: [10.1093/cvr/cvae267](https://doi.org/10.1093/cvr/cvae267)

Wimmer MI, Bartolomaeus H, Anandakumar H, Chen CY, Vecera V, Kedziora S, Kamboj S, Schumacher F, Pals S, Rauch A, Meisel J, Potapenko O, Yarritu A, **Bartolomaeus TUP**, et al. (2024). Metformin modulates microbiota and improves blood pressure and cardiac remodeling in a rat model of hypertension. *Acta Physiologica (Oxf)*, e14226. DOI: [10.1111/apha.14226](https://doi.org/10.1111/apha.14226)

Bischof PSP*, **Bartolomaeus TUP***, Löber U, Bleidorn C, (2024). Microbiome dynamics and functional composition in *Coelopa frigida* (Diptera, Coelopidae): Insights into trophic specialization of kelp flies. *Microbial Ecology*, 87, 91. DOI: [10.1007/s00248-024-02403-1](https://doi.org/10.1007/s00248-024-02403-1)

Cuthbertson LF, Is-Horowicz JS, Olanipekum MT, Forslund SK, Löber U, Birkner T, **Bartolomaeus TUP**, et al. (2024). Genomic attributes of airway commensal bacteria and mucosa. *Communications Biology*, 7, 171. DOI: [10.1038/s42003-024-05840-3](https://doi.org/10.1038/s42003-024-05840-3)

Kayongo A*, **Bartolomaeus TUP***, Birkner T*, Siddharthan T, Markó L, et al. (2023). Sputum microbiome and chronic obstructive pulmonary disease in a rural Ugandan cohort of well-controlled HIV infection. *Microbiology Spectrum*, 11(2), e02139-21. DOI: [10.1128/spectrum.02139-21](https://doi.org/10.1128/spectrum.02139-21)

Samuelsson A, **Bartolomaeus TUP**, Anandakumar H, Thowsen I, Nikpey E, et al. (2023). VEGF-B hypertrophy predisposes to transition from diastolic to systolic heart failure in hypertensive rats. *Cardiovascular Research*, 119(7), 1553–1567. DOI: [10.1093/cvr/cvad040](https://doi.org/10.1093/cvr/cvad040)

Noormohammad M, Ghorbani Z, Löber U, Mahdavi-Roshan M, **Bartolomaeus TUP**, et al. (2023). The effect of probiotic and synbiotic supplementation on appetite-regulating hormones and desire to eat: A systematic review and meta-analysis of clinical trials. *Pharmacological Research*, 187, 106614. DOI: [10.1016/j.phrs.2022.106614](https://doi.org/10.1016/j.phrs.2022.106614)

Ercu M, Mücke MB, Pallien T, Markó L, Sholokh A, Schächterle C, Aydin A, Kidd A, Walter S, Esmati Y, McMurray BJ, Lato DF, Sunaga-Franze DY, Dierks PH, Montesinos Flores BI, Walker-Gray R, Gong M, Merticariu C, Zühlke K, Russwurm M, Liu T, **Bartolomaeus TUP**, et al. (2022). Mutant phosphodiesterase 3A protects from hypertension-induced cardiac damage. *Circulation*, 146, 1758–1778. DOI: [10.1161/CIRCULATIONAHA.122.060210](https://doi.org/10.1161/CIRCULATIONAHA.122.060210)

Holle J, Bartolomaeus H, Löber U, Behrens F, **Bartolomaeus TUP**, et al. (2022). Inflammation in children with chronic kidney disease linked to gut dysbiosis and metabolite imbalance. *Journal of the American Society of Nephrology (JASN)*, Epub 2022 Aug 19. DOI: [10.1681/ASN.2022030378](https://doi.org/10.1681/ASN.2022030378)

Ghorbani Z, Kazemi A, **Bartolomaeus TUP**, et al. (2022). The effect of probiotic and synbiotic supplementation on lipid parameters among patients with cardiometabolic risk factors: a systematic review and meta-analysis of clinical trials. *Cardiovascular Research*, cvac128. DOI: [10.1093/cvr/cvac128](https://doi.org/10.1093/cvr/cvac128)

Zheng Z, Tsvetkov D, **Bartolomaeus TUP**, et al. (2022). Role of TRPC6 in kidney damage after acute ischemic kidney injury. *Scientific Reports*, 12, 3038. DOI: [10.1038/s41598-022-06703-9](https://doi.org/10.1038/s41598-022-06703-9)

Bartolomaeus H, Avery EG, Löber U, **Bartolomaeus TUP**, et al. (2022). Quantifying the impact of gut microbiota on inflammation and hypertensive organ damage. *Cardiovascular Research*. DOI: [10.1093/cvr/cvac121](https://doi.org/10.1093/cvr/cvac121)

Maifeld A, Wild J, Karlsen TV, Rakova N, Wistorf E, Linz P, Jung R, Birukov A, Gimenez-Rivera VA, Wilck N, **Bartolomaeus TUP**, et al. (2022). Skin sodium accumulates in psoriasis and reflects disease severity. *Journal of Investigative Dermatology*, 142(1), 166–178.e8. DOI: [10.1016/j.jid.2021.06.013](https://doi.org/10.1016/j.jid.2021.06.013)

Ercu M, Markó L, Schächterle C, Tsvetkov D, Cui Y, Maghsodi S, **Bartolomaeus TUP**, Maass PG, Zühlke K, et al. (2021). Phosphodiesterase 3A and arterial hypertension. *Circulation*, 142, 133–149. DOI: [10.1161/CIRCULATIONAHA.119.043061](https://doi.org/10.1161/CIRCULATIONAHA.119.043061)

Bartolomaeus TUP, Birkner T, Bartolomaeus H, Löber U, Avery EG, et al. (2020). Quantifying technical confounders in microbiome studies. *Cardiovascular Research*, 117(3), 863–875. DOI: [10.1093/cvr/cvaa128](https://doi.org/10.1093/cvr/cvaa128)

Bartolomaeus TUP, Forslund SK (2020). Hitchhiker's guide to microbiome studies. *Cardiovascular Research*, 116(3), e44–e47. (Review article) DOI: [10.1093/cvr/cvz316](https://doi.org/10.1093/cvr/cvz316)

Bartolomaeus H, Avery EG, **Bartolomaeus TUP**, Kozhakhmetov S, Zhumadilov Z, et al. (2020). Blood pressure changes correlate with short-chain fatty acid production potential shifts under a synbiotic intervention. *Cardiovascular Research*, 116(7), 1252–1253. DOI: [10.1093/cvr/cvaa083](https://doi.org/10.1093/cvr/cvaa083)