

Curriculum Vitae

Christoph Kaleta Professor, Dr. rer. nat.
d.o.b. May 16th, 1983, in Weimar, Germany

University Education

2010 Dr. rer. nat., FSU Jena
2003–2008 Studies of Bioinformatics, FSU Jena

Scientific Career

Since 2017 Head of the Institute of Experimental Medicine, CAU Kiel, Germany
Since 2014 Professor of Medical Systems Biology, CAU Kiel, Germany
2014 Professor of Computational Biology, University of Southern Denmark, Odense, Denmark
2011-2014 Assistant Professor of Theoretical Systems Biology, FSU Jena, Germany
2010-2011 Postdoctoral researcher, Department of Bioinformatics, FSU Jena, Germany
2008–2010 PhD student at the Department of Bioinformatics, FSU Jena, Germany

Awards and Honors

2013 German-Israeli Foundation, Young Investigator Price
2010 Thesis award of the School of Biology and Pharmacy at the FSU Jena

Citation Record

Total citations: 5,389; h-index:41; h-index since 2017: 33 (Google Scholar July 5th, 2024)

Top-10 selected Publications

Olecka M, van Bömmel A, Best L, Haase M, Foerste S, Riege K, Dost T, Flor S, Witte OW, Franzenburg S, Groth M, von Eyss B, Kaleta C, Frahm C, Hoffmann S. Nonlinear DNA methylation trajectories in aging male mice. *Nat Commun.* 2024 Apr 9;15(1):3074. <https://doi.org/10.1038/s41467-024-47316-2>

Marinos G, Hamerich IK, Debray R, Obeng N, Petersen C, Taubenheim J, Zimmermann J, Blackburn D, Samuel BS, Dierking K, Franke A, Laudes M, Waschina S, Schulenburg H, Kaleta C. Metabolic model predictions enable targeted microbiome manipulation through precision prebiotics. *Microbiol Spectr.* 2024 Feb 6;12(2):e0114423. <https://doi.org/10.1128/spec-trum.01144-23>

Zimmermann J, **Kaleta C**, Waschina S. gapseq: informed prediction of bacterial metabolic pathways and reconstruction of accurate metabolic models. *Genome Biol.* 2021, 22(1):81. <https://doi.org/10.1186/s13059-021-02295-1>

Bernardes JP, ..., **Kaleta C**, ..., Rosenstiel P*. Longitudinal Multi-omics Analyses Identify Responses of Megakaryocytes, Erythroid Cells, and Plasmablasts as Hallmarks of Severe COVID-19. *Immunity* 2020 53(6):1296-1314. <https://doi.org/10.1016/j.immuni.2020.11.017>

Zimmermann J, Obeng N, ..., **Kaleta C**, Schulenburg H. The functional repertoire contained within the native microbiota of the model nematode *Caenorhabditis elegans*. *ISME J*, 2020 14(1):26-38. <https://doi.org/10.1038/s41396-019-0504-y>

van Dam E, ..., Franke A, **Kaleta C**, Cochemé HM. Sugar-Induced Obesity and Insulin Resistance Are Uncoupled from Shortened Survival in *Drosophila*. *Cell Metab* 31(4):710-725.e7. <https://doi.org/10.1016/j.cmet.2020.02.016>

Pryor R, Norvaisas P, Marinos G, Best L, ..., Bjedov I, Cochemé HM, **Kaleta C***, Cabreiro F*. Host-Microbe-Drug-Nutrient Screen Identifies Bacterial Effectors of Metformin Therapy. *Cell*, 2019 178(6):1299-1312. <https://doi.org/10.1016/j.cell.2019.08.003>

Aden K, Rehman A, Waschina S, ..., **Kaleta C**, Schreiber S, Rosenstiel P. Metabolic Functions of Gut Microbes Associate With Efficacy of Tumor Necrosis Factor Antagonists in Patients With Inflammatory Bowel Diseases. *Gastroenterology*, 2019 157(5):1279-1292. <https://doi.org/10.1053/j.gastro.2019.07.025>

Aramillo Irizar P, Schäuble S, Esser D, ..., Ruppin E, **Kaleta C**. Transcriptomic alterations during ageing reflect the shift from cancer to degenerative diseases in the elderly. *Nat Commun*. 2018 9(1):327. <https://doi.org/10.1038/s41467-017-02395-2>

Bauer E, Zimmermann J, Thiele I, **Kaleta C**. BacArena: Individual-based metabolic modeling of heterogeneous microbes in complex communities. *PLoS Comput Biol*. 2017, 13(5):e1005544. <https://doi.org/10.1371/journal.pcbi.1005544>