

THEDA U. P. BARTOLOMAEUS

POSTDOCTORAL RESEARCHER

+49 157 71425088
th.bartolomaeus@gmail.com
orcid id 0000-0002-5156-7184

RESEARCH INTEREST

I am a full-stack systems biologist with profound practical experience in both wet lab platforms and bioinformatics, with a special interest in the effects of climate change on environmental microbiomes. I am also very passionate about science communication and public engagement.

SKILLS

Wet Lab (metagenomic sample collection/processing, qPCR, flow cytometry, DNA processing for metagenomic samples, laboratory animal handling and experiments)

Dry Lab (data integration, statistical analysis, and data visualization in R, network co-occurrence analysis, longitudinal modeling, confounder analysis, machine learning)

Grant writing, project development and research collaborations (DAAD, DFG)

Science communication and supervision of Bachelor (4) & Master students (2)

Language:

German (native)
English (C1)
French (B1)
Norwegian (A1)

Programming:

Rstudio (Advanced)
Perl (Basic)
Python (Basic)

EDUCATION

DOCTORAL STUDIES

02/2025

Experimental and Clinical Research Center a joint venture of Max Delbrück Center for Molecular Medicine and Charité Universitätsmedizin Berlin

Submitted in September 2023

Defended 18th of October 2024

Thesis project: Technical confounders in microbiome studies – examples from fecal and sputum microbiome research. Minimizing potential technical biases and facilitating clinical studies by developing new methods and tools.

Supervisors: Prof. Dr. Sofia K. Forslund-Startceva, PD Dr. Enno Klussmann, PD Dr. Lajos Markó

DIPLOM (MSc EQUIVALENT) FOODCHEMISTRY

10/2014 - 07/2019

Technische Universität Berlin, Berlin, Germany

Thesis: Comparison of Different Methods for the Analysis of Gut Microbiome Composition

Appraised: Prof. Dr. Hajo Haase

STATE-CERTIFIED TECHNICAL ASSISTANT FOR CHEMICAL AND BIOLOGICAL LABORATORIES

08/2011 - 06/2013

Lette Verein (Berufsausbildungszentrum, Stiftung des öffentlichen Rechts), Berlin, Germany

CAREER HISTORY

RESEARCHER ASSISTANT

since 06/2024

AG Müller/Dechend

Experimental and Clinical Research Center a joint venture of Max Delbrück Center for Molecular Medicine and Charité Universitätsmedizin Berlin

RESEARCH ASSISTANT/GRADUATE STUDENT

since 07/2019

AG Forslund

Experimental and Clinical Research Center a joint venture of Max Delbrück Center for Molecular Medicine and Charité Universitätsmedizin Berlin

TECHNICAL ASSISTANT

07/2013-09/2014

Bilacon GmbH, Berlin, Germany

INTERNSHIP

01/2013-04/2013

Station biologique de Concarneau, Concarneau, France
Phylogenetic analysis of fish species (Leonardo da Vinci Program der EU)

THIRD - PARTY FUNDING

VasBio - Biomarkers for Vascular Phenotypes CALL

since 09/2024

71.100 Euro

FIRST TRANSLATIONAL STUDY CALL CLINICAL RESEARCH UNIT (CRU)

since 07/2019

50.000 Euro

MEMBERSHIPS

Deutsches Zentrum für
Herz-Kreislauf-Forschung (Young
DZHK)

Scandinavian Physiological Society
Freundeskreis Max-Delbrück-Center
for Molecular Medicine

ALUMNI

Silbersalz - Documenta Campus
trainee

AWARDS & HONORS

Young Investigator Award
Deutsche Hochdruck Liga, Berlin,
Germany

MDC Postdoc Prize 2024

PRESENTATIONS, POSTERS & WEBINARS

The Hitchhiker's Guide to Metagenomics: Computational Paths Through Ecosystems (Lecture)

2024

AG Seminar, Evolution und Biodiversität der Tiere, Georg-August-
Universität Göttingen, Germany

The Microbial Palette of *Coelopa frigida*: A Dive into the Trophic Specialization of Kelp Flies (Poster)

EuroEvoDevo Conference, Helsinki, Finland

Nexus between nutrition, microbiome, immune cells and cardiovascular health (Lecture)

Student lecture, AG Kleinewietfeld, VIB Laboratory for
Translational Immunomodulation, Hasselt, Belgium

Integrative Machine Learning Approach for Identifying Novel Biomarkers Using Multiomics Dataset (Poster)

2023

DHL Kongress, Berlin, Germany

Integrative Machine Learning Approach for Identifying Novel Biomarkers Using Multiomics Dataset (Poster)

DHL Kongress, Berlin, Germany

Overcoming Obstacles in Microbiome Analysis: Lessons from Fecal and Sputum Studies (Poster)

Bacterial Genetics and Ecology (BAGECO) in Copenhagen,
Denmark

Growing Up Microbiologically: Airway Microbiome Changes in Preterm Infants Over Time (Poster)

Cell Symposia: Infection biology in the age of the microbiome in
Paris, France

Renoprotective effect of PDE3a mutation in a rat model of chronic kidney disease (Young Investigator Award), (Presentation)

2022

DHL Kongress, Berlin, Germany

Renoprotective effect of PDE3A mutations in a rat model of chronic kidney disease, (Poster)

ASN Kidney Week, Orlando, USA

Sputum microbiome and Chronic Obstructive Pulmonary Disease in a rural Ugandan cohort of well-controlled HIV infection, (Poster)

Young-DZHK-Retreat 2022, Potsdam, Germany

How to study the microbiome? The confusion with methods, preprocessing and confounders, (Webinar)

AG Seminar, Evolution und Biodiversität der Tiere, Georg-August-
Universität Göttingen, Germany

Quantifying Technical Confounders in Microbiome Studies (Poster)

2020

Next Gen Immunology Conference, Weizmann-Institute, Rehovot,
Israel

Quantifying technical confounders on microbiome studies, Fecal DNA extraction influence microbiota- cardiovascular risk associations, (Webinar)

Epidemiology Seminar AG Pischon, Max-Delbrück-Center for
Molecular Medicine, Berlin, Germany

The COLLECT trial: Quantifying technical confounders on microbiome studies, (Presentation)

2019

Microbiota Club, Deutsches Rheuma- Forschungszentrum
(DRFZ), Berlin, Germany

Quantifying technical confounders on microbiome studies: The COLLECT trial, (Presentation)

Wollenberger seminar, Max-Delbrück-Center for Molecular
Medicine, Berlin, Germany
