Palni Kundra, Dr. sc. Ringstrasse 15 CH-8107 Buchs (ZH)

E-mail: palnikundra@gmail.com

Phone: +41779935899

Prof. Dr. med. Johannes Häberle Head of Metabolic Laboratory University Children's Hospital Zurich

31 October 2024

Dear Prof. Häberle,

I am writing to express my strong interest in the Postdoctoral Researcher position focusing on rare Urea Cycle Disorders (UCDs) in your laboratory. With my PhD in gut microbial biotechnology from ETH Zurich and extensive experience in metabolic research, I am particularly excited about the opportunity to contribute to advancing our understanding of UCD pathology and developing therapeutic strategies.

During my doctoral research at ETH Zurich, I investigated the modulatory potential of dietary and gut microbially produced vitamins B9 and B12 on the adult human gut microbiota and its metabolic activity. I believe these skills would transfer directly to studying metabolic disorders and analyzing clinical and biological data from UCD patients. My key technical competencies include:

- Development of complex experimental designs to understand the role of vitamins on the growth and metabolism of human gut microbes
- Development of advanced analytical methods including liquid chromatography and mass spectrometry to detect and quantify novel vitamin B9 and B12 forms produced by human gut microbes
- Extensive data analysis and interpretation including metagenomic analysis and bioinformatics expertise

My track record of five peer-reviewed publications demonstrates my contributions towards extensive knowledge in protocol development and experimental design, as well as my ability to analyze complex data and communicate findings effectively to diverse audiences. Moreover, throughout my career, I have successfully collaborated with international research teams and mentored students, developing strong communication and leadership skills.

I am motivated in this position because of its unique combination of basic research and clinical applications, offering the meaningful opportunity to improve patients' lives. The position aligns well with my career aspirations of applying multidisciplinary expertise to advance scientific discovery (especially rare disorder) through development, transforming research insights into practical pharmaceutical solutions that benefit patients. The prospect of combining postdoctoral research work with clinical transition is especially motivating to me. I am enthusiastic about working with clinicians, scientists, and patient organizations to advance our understanding of UCDs. While I am new to clinical trials, I have proactively completed training in ICH E6(R2) interpretation and application through the MRCT Center of Brigham and Women's Hospital and Harvard, demonstrating my commitment to understanding clinical research regulations.

I am confident that my strong background in biochemical and analytical methods, combined with my proven ability to lead complex research projects and collaborate effectively, makes me an ideal candidate for this position.

Thank you for considering my application. I look forward to discussing how my skills and experience can contribute to your research program.

Sincerely,

Palni Kundra