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Roche Pharma R&D (pRED) Basel, Switzerland

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Dear Hiring Team,

I am writing to express my strong interest in the Roche Postdoctoral Fellow (RPF) position in *in vitro* models of intestinal inflammation at Roche Pharmaceuticals in Basel. With my Ph.D. in gut microbiology from ETH Zurich and extensive experience in studying the impact of micronutrients on gut microbial communities and inflammation, I believe I am well-positioned to contribute to this innovative research project.

My doctoral research focused on the modulatory effects of dietary and gut-microbially produced vitamins on complex gut microbiota and individual gut bacterial strains. This work has provided me with a deep understanding of mucosal biology and the intricate relationships between gut microbes, micronutrients, and host health. My research experience has highlighted the critical need for advanced *in vitro* models to better understand the complex dynamics of intestinal inflammation and microbial interactions. This background, coupled with my passion for studying and improving gut health, aligns perfectly with the project's goal of creating advanced *in vitro* models of human intestinal inflammation, motivating me to apply for this role.

Key aspects of my experience that are relevant to this position include:

- 1. Extensive work with *in vitro* gut models, including the development of experimental methods to study microbial communities and individual strains.
- 2. Experience in analyzing and interpreting complex data sets, including metagenomic data
- 3. Collaboration with researchers from diverse backgrounds, demonstrating my ability to work in multidisciplinary teams.
- 4. A track record of high-quality scientific publications, showcasing my ability to generate impactful research results.

I am particularly excited about the opportunity to combine primary human samples, organoids, tissue-resident immune cells, and microfabrication technology to recreate the cellular environment of the diseased intestine. While I don't have direct experience with all these techniques, my background in gut microbiology and my proven ability to quickly learn and apply new methodologies make me confident in my ability to master these approaches.

The RPF program's focus on advancing basic science and technologies aligns perfectly with my career aspirations. I am eager to contribute to high-impact, peer-reviewed publications and potentially patentable innovations. Moreover, the opportunity to collaborate with leading Roche scientists and academic research groups is extremely appealing to me as I seek to broaden my scientific network and expertise.

I am available to start this position immediately and am excited about the prospect of relocating to Basel for this opportunity. I am confident that my scientific background, coupled with my proactive mindset and passion for understanding gut biology, makes me an excellent candidate for this role.

Thank you for considering my application. I have enclosed my CV (with publications list), diploma certificates, letter of reference (Arbeitszeugnis) and contact details of three Referees. I look forward to the possibility of discussing how I can contribute to Roche's innovative research in intestinal inflammation models.

Sincerely,

Palni Kundra