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Lonza AG
Rottenstrasse 6,
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Dear Members of the Hiring Organization,

I am genuinely excited to apply for the Associate Principal Scientist, Biologics R&D, Microbial position at Lonza in Visp, Switzerland. With my extensive expertise in gut microbial biotechnology, attained through my doctoral research at ETH Zurich, I am uniquely qualified to drive the development of cutting-edge microbial upstream cultivation processes within your dynamic Microbial R&D team.

Throughout my academic and professional journey, I have consistently demonstrated a strong aptitude for microbial bioprocessing. During my Ph.D., I gained valuable insights into the complex interactions between vitamins B9 and B12, human gut microbial communities, and probiotic gut microbes. This work has given me a deep understanding of microbial growth, metabolism, and nutrient production - knowledge that I am eager to apply in the development of innovative biopharmaceutical solutions.

My research experience has equipped me with a versatile skill set that I believe will be directly applicable to the key responsibilities of this role. I have extensive experience in designing and executing complex experimental protocols, developing and applying advanced analytical techniques such as UHPLC-UV/MS, and analyzing metagenomic and metabolite data to make data-driven decisions. Moreover, my background in maintaining GMP laboratory standards and documenting research findings, including preparing scientific reports for publication and presenting at international conferences, showcases my ability to work diligently and communicate complex scientific concepts effectively. As an English native speaker, I am adept at conveying technical information clearly and concisely.

Notably, my doctoral research has led to several impactful publications that demonstrate my expertise in microbial biotechnology. These include studies on how different vitamin B12 analogues from gut microbes and diet distinctly impact commensal propionate-producing bacteria in the human gut, enhancing propionate production and potentially improving overall health (Frontiers in Nutrition, 2024); how healthy adult gut microbiota can sustain its own vitamin B12 requirement in an in vitro batch fermentation model (Frontiers in Nutrition, 2022); and a review exploring the role of dietary micronutrients on gut microbial dysbiosis and modulation in inflammatory bowel disease (Molecular Nutrition & Food Research, 2021). Additionally, my recent work (submitted to BMC Microbiology, 2024) investigates the effect of microbially-produced vitamin B9 on the growth and metabolism of a butyrate producing beneficial gut bacteria, opening new avenues to produce live biotherapeutics.

During my time as a Scientific Assistant at ETH Zurich, I led the planning and execution of laboratory experiments, developed innovative experimental and analytical methods, and analyzed vast data sets to complete project deliverables. I also mentored Bachelor's and Master's

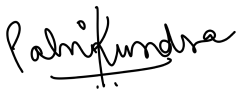
students, facilitating hands-on learning experiences and further sharpening my ability to work collaboratively within an interdisciplinary team.

In addition to my technical expertise, I possess a strong track record in managing scientific development and innovation projects. I am adept at representing R&D initiatives to both internal and external stakeholders, effectively translating complex scientific concepts into actionable insights. As a member of an interdisciplinary team at ETH Zurich, I have developed a lean-agile mindset, which will enable me to seamlessly integrate into Lonza's dynamic work environment.

Lonza's commitment to making a positive impact on millions of people through its products and services is truly inspiring. Furthermore, the company's location in the stunning Swiss Alps is an added bonus that appeals to my adventurous spirit and love for the outdoors. I am eager to align my scientific expertise with Lonza's ethical and sustainable principles, and to contribute to the company's continued success and leadership in the biopharmaceutical industry.

Thank you for considering my application. I am available for interviews and can start immediately. I look forward to the opportunity to discuss how I can leverage my unique background and passion for innovation to drive the development of groundbreaking microbial upstream cultivation processes at Lonza.

Sincerely,



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