## From Master's to PhD: The journeys of two alumni

he transition from a master's degree program to a PhD program is a moment of anticipation and excitement, but also uncertainty and anxiety. It is part of an educational journey that takes many years and a lot of self-discipline and hard work, but promises rewards and satisfaction and usually delivers. This journey is exemplified in the stories of Manushri Pandya from India and Puspa Aryal from Nepal. They are both alumni of our master's degree program in technical communication.

## Manushri Pandya: Embracing a dynamic journey

Manushri Pandya, a dedicated scholar, is on a journey that so far has taken her from India to Missouri to North Carolina. She has been driven by a fascination with the intersection of technology and communication.

Completing a BA in English literature from Gujarat University in India kindled her interest in the connection between language and communication and their potential to shape unique experiences for individuals. She was also interested in technology, so she sought a field that combined technology with communication, setting her on the path to a master's degree.



In the master's program at S&T, Manushri's coursework introduced her to technical communication as a discipline. She chose the thesis track and began an analysis of CDC and WHO COVID-19 infographics distributed during the pandemic. This research experience and an internship convinced her that she should continue her education after graduation in May 2021.

The decision to pursue a Ph.D. came with challenges, such as

finding the best PhD program. She began by shortlisting Ph.D. programs based on their curricula, faculty expertise, and the research undertaken by each department. This process demanded extensive research and communication with potential advisors. Mentors at Missouri S&T provided valuable recommendations that helped her gain admission to several Ph.D. programs, with offers of funding. Ultimately, Manushri chose North Carolina State University, drawn by the multidisciplinary nature of its Ph.D. program in communication, rhetoric, and digital media. She secured a fellowship for the first year, a research opportunity that reinforced her decision.

Comparing her master's and Ph.D. experiences, she noted that the latter demands an even higher level of independence and selfmotivation. "While the master's program was rigorous and prepared students for various communication topics, the Ph.D. program introduced more intensive coursework and allowed for extensive exploration of research areas and methodologies."

"Time and energy commitment emerged as an unexpected challenge in the Ph.D. program," she noted, "particularly the shift from structured guidelines to individual accountability." However, she has found balance through time management, setting clear goals, and building a support network. Mentorship and self-care became vital to sustain her journey.

Manushri's support system extends to her family and close friends, providing security and a sense of belonging during challenging times. She maintains a work-life balance through regular exercise and a positive mindset.

Manushri's research in her Ph.D. program focuses on risk communication frameworks, technical communication, and UX. Her academic and professional aspirations remain flexible, with one foot in academia and one in industry. She embraces the dynamic journey that her Ph.D. has set in motion, ready to navigate whatever path unfolds before her.



## **Puspa Aryal:** A circuitous route to her destination

Puspa Aryal, originally from Nepal, traveled a circuitous route on her academic journey, from a master's degree in chemistry to a master's degree in technical communication to a PhD in chemistry. Although her route was circuitous, she never lost sight of her destination. Her passion was always chemistry.

After completing her first master's degree in Nepal in 2013, she planned to pursue a Ph.D. in

chemistry immediately, a longterm goal she had set for herself. However, this plan was modified when she accompanied her husband for his studies to the United States in 2014. Some of her new Rolla friends were already enrolled in our technical communication program, and their experiences and insights piqued her curiosity about scientific and technical writing. She decided to pursue a master's degree in technical communication, recognizing its potential to enhance her ability to communicate her scientific work effectively.

Following her successful completion of the second master's degree in 2017, Puspa turned her attention back to the goal of a PhD in chemistry, choosing Missouri S&T's chemistry department because of its solid reputation and close proximity. "My Ph.D. research focused on solving real-life problems and contributing to the field of medicinal chemistry," she said. She successfully defended her dissertation, "Design and Synthesis of Purine-Based Neuroprotectors and Novel Synthetic Methods for the Trifluoromethylation of Aldehyde Hydrazones," and graduated in July 2022.

Dr. Aryal's aspirations extend beyond her current duties as Senior Synthetic Chemist at Mallinckrodt Pharmaceuticals in St. Louis. Her long-term career goal is to continue researching drug design and development while documenting her work through journals and patents. Her master's in technical communication has played a crucial role in helping her effectively communicate her scientific contributions.

She attributes much of her motivation to her mentors and advisors. Their guidance and support were instrumental in her academic and professional growth.

With two master's degrees and a PhD to her credit, Dr. Aryal speaks with authority when she says, "A Ph.D. is more about researching and solving real-life problems, whereas a master's degree is more about developing certain skill sets." Communicating scientific information effectively is one of the skill sets she developed in our technical communication program, and it continues to serve her well as a publishing research scientist.



Puspa in Mallinckrodt's R&D lab in 2023