

Dear members of the selection committee,

My name is Francine Mussoi, I'm born and raised in Brazil, with Italian heritages and recently establishing roots in Brussels, Belgium. I'm a pharmacist by training, a decision I during my childhood, I got a magazine signature from "Revista Recreio", which had a specific section for curious scientific facts. Back then, I knew I wanted to be inside a lab wearing a white coat, similar to the Dexter cartoon. During a university open day, I discovered how multifaceted the pharmaceutical profession was and decided to pursue it.

Being born in the south part of the fifth largest country in the world by area, I was always fascinated by different cultures, which I would only see on TV. During university, I applied for the Science Without Borders scholarship and moved across the globe to study during one year at the University of Sydney, in Australia. This year abroad gave me new horizons and fortified my feeling that being in a multicultural environment is a golden opportunity to develop creativity and showed how different people, with different backgrounds can collaborate towards disruptive ideas in a synergy to overcome even the most challenging obstacles.

After graduation, I experienced the pharmaceutical profession in different settings: started from the bottom, as a drugstore pharmacist for two years, where interact and listening to patients was one of the most important skills, moving to a hospital setting in 2020. During the pandemic episode, innovation was not an improvement but a need. Pharmacists had to be creative and again, overcome the most diverse obstacles: there were drug shortage for intubation, pain management, lack of materials and other supplies and even physical space. Not only being able to propose solutions in a fast way, such as a new intubation protocol adapted to the medicines in stock, I needed to ensure there was training and adoption by the medical staff to guarantee patient safety as the main outcome. The need for better IT systems was also very clear, as we were not moving as fast as technology to ensure our systems were delivering the best for us, professionals, but also for our patients.

After an intensive learning and work experience, my desire to live abroad again lead me to Brussels. I put my first feet in the pharmaceutical industry as a Pharmacovigilance Learning Excellence trainee, in 2022. Coming from being the only pharmacist in a hospital during the 12 h nightshift to a traineeship position was not easy in the beginning, but it gave me space I needed to learn and find my way around the industry. I worked in GxP-regulated learning documentation to ensure our staff is adequately trained prior to performing their activities and that our learning systems are compatible with the current regulations and internal procedures. In 2023 and 2024, I participated in the Graduate Development Program at the same company and rotated between Patient Safety and Quality Assurance departments. This period lead me towards another passion: process improvement and documental system. As a pharmacist, I was always surrounded by standard operating procedures and processes and by deciding to study a postgraduation degree in this area.

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After the completion, in 2025, I started a new position within the Quality Assurance team, still working to bring improvement and efficiency by supporting a team of GxP auditors and more than ensuring compliance with regulatory requirements and adherence to our internal procedures, my work support risk mitigation and ultimately, the safety and welfare of patients, protecting public health.

While in the hospital setting the digitalisation is still crawling and can be a challenge, in the pharma industry, technology is used as an enabler for better patient care. The attention to develop new technologies, either when it comes to devices, new apps for patients or for professionals, pharma industries are actively researching and testing new automation of processes, allowing professionals to focus on high-level tasks with informed decision-making, with the data generated with the help of these technologies. In the audit settings, many processes started to be digitalised during the pandemics, but efficiency was not achieved in this scenario. Not only having tools, it is also needed to ensure proper utilization and adoption to extract the best of it.

Considering this undeniable need to digitalise processes and services, I want to combine my past experience with my passion for process improvement, I can see how this masters will allow the creation of the necessary knowledge to evaluate and implement new technologies in many sectors, either if I stay in the pharmaceutical industry, where I can see clearly how the digitalisation could be beneficial to reduce manual tasks related to the audit process, minimize compliance checks, connect inside the organisations to ensure alignment with processes but also allow to reflect to the outside world and how regulations are impacting medicine access in other countries, per example. Also, industries adopt many platforms for different needs that requires workarounds and reduces efficiency, meaning that sometimes a digitalisation process is in place, but it creates more workload. Right now, cybersecurity and integrity of systems are also hot topics in audits and inspections, as not only developing, implementing, adopting and evolving new systems and processes is needed but also monitor how secure they are, topics which will be explored in the interoperability branch during the second semester.

Nevertheless, all these processes could be assisted by technology, if ethical and regulatory aspects are followed and the social approach to leverage this digitalisation is considered, having the patient safety as the ultimate outcome. With all these things considered, I am very excited to learn, and I believe I will be able to contribute with a diverse perspective to the discussions.

Thank you for your time and consideration.

Kind regards,

Francine Cappelli Mussoi