

The professional profile of PhD-holders

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Core business

PHASE 2 Skill development

During my PhD, I structured my professional development by defining clear, achievable objectives while maintaining ambitious scientific goals. I regularly assessed my competencies to identify areas for improvement and proactively undertook targeted training to strengthen my performance. I deliberately expanded my skillset beyond my initial training by working at the interface of chemistry and biology and integrating new experimental and computational tools. I incorporated feedback from my supervisors and mentors to adjust my strategy and improve efficiency.

*Takes a critical look at his skills and experience and regularly fine-tunes his career goals.
Knows how to develop new skills to keep step with changing knowledge and needs.
Relies on advice from competent professionals (coaching) or experienced staff and takes their opinions into account; uses his networks to manage his career.
Is able to evolve gradually from technical expertise to managerial expertise.
Helps his staff develop their skills and networks and assists them in achieving career development goals.*

PHASE 2 Information management

I conducted a comprehensive state-of-the-art analysis to define the scientific context, identify knowledge gaps and position my work. I authored a scientific review article on a specific topic, which required extensive bibliographic research, critical evaluation of sources and rigorous organization of information. I implemented structured methods for data organization, storage and archiving, and paid attention to reproducibility, traceability and data integrity.

*Conducts advanced searches using a range of software solutions, resources and techniques, recognizing the advantages and limitations of each.
Masters the creation, organization, validation, sharing, storing and archiving of information and/or raw data and addresses the associated risks.
Understands the legal, ethical and security requirements of information management.
Is familiar with the value of, and uses, metadata.
Advises and assists his staff using information-gathering and management methods, critiquing sources and evaluating information and data.
Makes his staff aware of information security and legal and ethical requirements.*

PHASE 2 Expertise and methods

I developed this skill by working at the forefront of knowledge in my field, collaborating with experts in GPCRs and photopharmacology. I regularly conduct literature research to stay up-to-

date with the latest advances and strive to apply cutting-edge innovations to my work. This allows me to formulate complex research questions, adapt methodologies effectively, and guide colleagues in using the most relevant techniques to improve their skills and performance.

Is familiar with recent progress in fields related to his own.
Is able to engage in dialogue and collaboration with experts in other disciplines or fields of activity.
Takes ownership of new research methods and techniques.
Is able to document and evaluate his activities using statistical methods where applicable.
Can formulate complex problems that correspond to new challenges.
Is able to develop arguments in support of new projects.
Knows how to adapt his arguments to his audience.
Advises and assists his staff in making appropriate use of investigative methods, improving their performance and enhancing their skills.

Personal and relational qualities

PHASE 2 Communication

I developed a strong ability to adapt my communication to diverse audiences and contexts. I presented my work at international conferences through poster sessions and scientific discussions with experts. I also delivered presentation in front of a multidisciplinary scientific audience. Training in science communication further enabled me to present my research in an accessible way to non-specialists, notably through outreach-oriented publications on professional social media. These experiences strengthened my ability to communicate clearly and effectively with both expert and lay audiences in interdisciplinary environments.

Adapts his register to communicate with experts in other fields at both the national and international levels.
Masters communication techniques for various contexts and media.
Communicates effectively when addressing a diverse and lay audience.
Knows how to address a community of professionals.
Educates and trains his staff in the use of digital communication technologies.
Is able to work and lead a group in at least English and one other world language.

PHASE 2 Collaboration

During my PhD, I developed and maintained collaborative working relationships within multidisciplinary teams, particularly at the interface of chemistry and pharmacology. My research is conducted within a structured international partnership, through a joint PhD between two laboratories in different countries. I actively contribute to collaborative projects by aligning my work with shared objectives while taking into account methodological and organizational constraints specific to each partner. This experience has enabled me to assess the benefits and limitations of partnerships and to adapt my approach to ensure effective and coherent collaboration.

Collaborates with people/teams who play a pivotal role on the global scale.
Leads networks and helps to institute dialogue between different entities.
Knows how to establish partnership relations with people working outside his field.
Has the ability to co-produce results and/or innovations.

PHASE 1 Analysis, synthesis and critical thinking

I regularly analyze my own experimental results as well as data generated by collaborators. I demonstrate strong synthesis skills by identifying and clearly formulating key findings and by prioritizing information according to project objectives. I apply rigorous and non-dogmatic scientific reasoning, critically assessing hypotheses and adapting my viewpoint when data or alternative approaches require it. This ensures robust interpretation of results and sound decision-making

Analyzes his own findings and those of his peers.
Is able to synthesize; expresses key ideas clearly.

*Can sort and rank information according to the goal.
Pursues his reasoning and hypotheses free of dogmatism or ideological bias.
Has the objectivity to consider various schools of thought; is able to modify his point of view.
Demonstrates intellectual rigor.*

PHASE 1 Open-mindedness and creativity

My academic and professional path reflects strong open-mindedness. I have worked across multiple disciplines—from physics-chemistry to engineering and finally biochemistry—and in diverse contexts, including public research, industry, and an international co-supervised PhD in two countries. My experience as a military reservist further exposed me to people from varied social, cultural, and professional backgrounds, strengthening my flexibility to collaborate with different perspectives.

*Demonstrates an ability to acquire knowledge; shows flexibility and open-mindedness. Engages in interdisciplinary activities.
Possesses a constructive style of questioning and scientific doubt.
Develops, takes ownership of and tests new ideas; is clever; seizes opportunities.
Interacts with and seeks the collaboration of professionals of different cultures; knows how to accommodate cultural differences.*

PHASE 1 Commitment

I developed this skill through my long-term commitment to my PhD, maintaining motivation and focus despite the inherent challenges and setbacks of research. At every stage of my academic journey, I have consistently aimed for excellence, learning from mistakes and using feedback from peers to improve. I also demonstrated engagement in collaborative settings, contributing actively while balancing routine tasks with ambitious research goals.

*Recognizes and can clearly identify his sources of motivation.
Is able to sustain his commitment and motivation in the face of setbacks and adversity.
Deals efficiently with the routine aspects of his job.
Strives for excellence; shows determination.
Learns from his mistakes and bounces back from failures.
Relies on the support and assistance of his peers.*

Business management and value creation

PHASE 1 People management

Through my research activities and external engagements, I have gained experience working within teams and supporting others in their tasks. I actively contribute to a positive team dynamic by integrating effectively into collective work and recognizing the contributions of peers. I have experience supporting and assisting others, notably through the supervision and training of junior members (e.g. students and new entrants), and by reporting clearly on my activities to supervisors. My engagement as a reservist has also strengthened my ability to build trust with peers and hierarchy, act responsibly, and respect rules related to safety, equality, and non-discrimination.

*Has experience with teamwork; knows how to encourage, support and recognize the contributions of each player.
Knows how to be a team player.
Is able to win the trust of his peers and his line management.
Can report on his activities.
Supports his peers when needed and can provide assistance.
Understands human resources policies and management tools such as recruitment, evaluation, remuneration and strategic workforce planning.
Takes safety, social responsibility and labor law requirements into account.
Upholds rules on non-discrimination and equal opportunity among employees.*

