













# Golden Rules for PhD Supervision at Institut Polytechnique de Paris

	Thesis Director/Supervisor	PhD Student
Be professional	Be aware that all PhD candidates are different, with their own individual story, ambition, culture and cultural references, skills, and needs.	Remember that all supervisors are unique human beings with their strengths, weaknesses, and individual constraints.
	Being a supervisor is a demanding job that requires your presence. There is no universal template for supervision. Keep an open mind and know how to adapt yourself to each PhD candidate.	Learn the manner in which your professional environment functions and adjust as necessary. Endeavour to understand the personality and operational mode of your supervisor. If something bothers you, communicate, express your-
	Co-supervision can be difficult. Ensure that you reach a shared view on the process so that the PhD candidate is not left in a quandary or dilemma.	
	If you are in difficulty with aspects of thesis supervision, do not hesitate to discuss it with the director of your laboratory or the representative of the doctoral school in your field. Do not be left alone with your worries.	
Be commit- ted	Be aware that preparing a PhD is a lengthy process that requires long-term commitment from both sides.	Be aware that the PhD journey will be lengthy and not always easy, and that your initial motivation can be hard to maintain.
	PhD students need to feel that you care about the project's progress and outcome. Even if the project is meant to develop the candidate's skills and competences, you are also involved in this journey, and your input on the project, topic or execution is essential. Take responsibility for the project. Be up to date and collect material with which you can give your PhD student valuable scientific input.	If things are tough, do not despair. Difficulty is inherent to top-level scientific work. Persevere and talk to your colleagues and supervisors. It is a stage most PhD students go through. Know that moments of doubt and of self-doubt are experienced by most scientific researchers.
	Continue to inquire about the well-being of your PhD student, on site and when he/she is abroad. Even out of sight, the PhD student remains under your responsibility and that of IP Paris.	Talk to and discuss matters with other doctoral students. As soon as you arrive, identify your representatives (e.g. student representatives) and the representative of the doctoral school. They will be resourceful in case of difficulties.
		Seek to create a pair or small group with other students. Do not isolate yourself. Scientific research favors interdisciplinary work, therefore, it is a great idea to meet students from other fields.
Be available	Be aware that your regular availability is key to the success of the project.	Be aware that the success of your project is a joint responsibility.
	As part of your responsibility as a supervisor, you are to take initiative in planning regular supervision meetings. You are also expected to be sufficiently available to the PhD candidate in a way that is mutually beneficial, as well	Be aware that it is your PhD project and it is also your responsibility to arrange meetings with your supervisor.















as professional. You should consider that, due to personal circumstances, individual PhD candidates have different needs and restrictions, e.g., in terms of meeting hours. A PhD candidate's constraints may be related to her or his health, family, national geopolitical situation, financial situation, and so forth.

Be well prepared when meeting with your supervisor and ensure that your supervisor hias all the information allowing her or him to be prepared

Make sure that you obtain the necessary time from your supervisor while being aware of his/her time constraints.

# Be consistent and clear

Be aware that the (perception of) research progress should be addressed. It is crucial to be open about your expectations from each other.

Doing research is, by definition, charting unknown territory. Thus, it is unavoidable that the research evolves, including the supervisor's view of what the next step(s) should be. Be honest about this and show ownership of your changing views. Remember what you say and advise.

Be aware that being honest about your progress and your expectations is key to the success of your project. Use wisdom and tact to address possible issues.

Be clear and honest about your research progress and struggles. For instance, prepare the meeting with your supervisor by sending him/her a list of discussion points beforehand. Do not hide difficulties. Use the meeting with your supervisor to clarify your research problems. Make notes of the discussion and what next steps to take.

# Be time aware

Be aware that realistic planning is essential for a PhD candidate.

Obviously, the plan as initially foreseen will change during the course of the project. Be prepared for a change by thinking about a plan B when the original plan needs revision.

Set short-term goals and celebrate the successes with the PhD candidate. Make certain that the PhD candidate knows what, in terms of thesis content, is sufficient to graduate. Construct, together, a clear and precise skeleton of the thesis, a plan, and a timetable, before starting the writing phase.

Be aware that planning is one of the harder things in research and that the original plan is almost certainly going to change.

Keep track of the time you spend on a particular issue. With your supervisor, discuss this on a regular basis, and, also what next steps are to be taken. Discuss short-term goals with your supervisor and celebrate your successes together.

Train yourself to tolerate a certain level of frustration, so prevalent in the world of research.

Learn to be efficient by reducing your (possible) tendency to be a perfectionist.

# Be willing to receive feedback

Be aware that for any professional relationship to work, feedback must be a two-way exchange.

You should expect feedback from the PhD candidate just | Keep in mind that feedback is there to help you as he or she expects it from you. Be open to the feedback you receive and take it seriously. If no feedback is given, ask for it. You are encouraged to do so a couple of times a year, but in any case, during the yearly progress interview with the PhD candidate.

Remember that your reaction on the feedback will have an impact on the openness and the quality of your future discussions with the PhD candidate.

Be aware that receiving feedback is very helpful for your progress.

and is not targeted against you as a person.

Feedback is necessary to advance your project. If it is not forthcoming, ask for it and use the it to your best advantage. Do not be afraid to ask for feedback in an early stage, this prevents you and your supervisor from going in separate directions. If you experience feedback as unhelpful, reflect on it for a while (with others) and discuss it with your supervisor in a professional and inoffensive way.

When your supervisor has helped you or has been complimentary, show your appreciation.















# Be willing to give feedback

#### Be aware that a PhD candidate needs regular feedback that must be professional, objective, constructive, and balanced.

Feedback may have a large (emotional) impact on the PhD candidate, you should therefore be cautious in choosing where and when to give feedback and how to formulate it, especially when the feedback is person-oriented and would not benefit others.

You should be aware of the cultural, ethnic, gender, and other differences in the research group. You should employ language that is inclusive and does not hurt people with different backgrounds and traditions. Positive feedback is as important as critical comments.

Keep in mind that the humorous reference frame of your doctoral student may be very different from yours.

#### Be aware that feedback on supervision is always helpful.

Supervising a PhD candidate is a hard job. You can help your supervisors by giving open feedback about their supervision, always with respect and consideration.

If you are not satisfied or if you do not understand the feedback from your supervisor, and this on a recurring basis, talk to your doctoral school representative, your student representatives, your laboratory director, or others.

## Be aware of stressors

#### Be aware that as a supervisor you are a role model for Be aware that your life involves more than your the PhD candidate, and that you should set a good example in terms of stress management.

Be aware that your (potentially unhealthy) work attitudes are easily perceived as a professional standard. Stimulate the PhD candidates to take breaks. Be aware that the PhD candidate's personal life story can affect their work.

Respect the legal framework, labour law, and the internal regulations of IP Paris and of your institution.

# work.

Manage your stress level and respect your boundaries. Also talk to your colleagues and peers about their struggles with doing research, sharing the same experience helps to manage the difficulties of life as a PhD candidate.

Maintain the communication with your supervisor and remember that your supervisor has followed the same path before you and can also help you to put things in perspective.

## Be future oriented

#### Be aware that a PhD student might need stimulation to think about his/her career after graduation.

Before their last year, many PhD candidates do not reflect much on their next career step, nor do they know much about possible professional pathways after obtaining their PhD, especially outside academia. Having no prospects for future career development triggers and increases stress. Thus, it is very important to discuss this point with your PhD candidate in a timely manner. It is strongly suggested that you make your professional network available to your PhD candidates. Stimulate the graduate student to make professional presentations of her or his work in international conferences, talks, meetings, workshops, and so forth.

#### Be aware that you need to think about your career after graduation.

There are very few jobs in academia. Take this into account. Most PhD candidates start thinking about their next career step during their 3<sup>rd</sup> or 4<sup>th</sup> year only, which is late. Spend some dedicated time on this issue already in your 2<sup>nd</sup> year.

Your supervisor, who is the person who knows you the best professionally, can advise you. The university regularly organizes events that can provide you with more information.

Work on your network. Let the outside world know who you are. Do not underestimate the time this takes. Take advantage of conferences, summer schools, poster presentations, etc., to create links. Use social networks (e.g., LinkedIn) to keep them. You are a full member of the scientific community/an essential link. Leave any (possible) imposter syndrome behind.

This guide was inspired by the document developed at Leiden University in 2019 [1]. It also takes into account the results of the Nature article [2] on the well-being of doctoral students and it is in perfect agreement with the results we obtained during the doctoral student satisfaction survey carried out in June 2022 at IP Paris.















#### References:

- $\begin{tabular}{ll} $https://www.universiteitleiden.nl/binaries/content/assets/ul2staff/onderzoek/promoveren/golden-rules-phd-supervision \\ \end{tabular}$
- [2] Chris Woolston, (2019) "PhD Poll Reveals Fear and Joy, Contentment and Anguish", Nature, Vol 579, pp 403-406