

2. GOOD MENTORSHIP

Junior researchers usually carry out research under the supervision of a more experienced researcher, namely their supervisor (a postdoc, staff member or professor). Supervising junior researchers is an important part of good scholarship. The duties of someone who is supervising a junior researcher – duties that constitute good mentorship – can be summarized as follows:

- Providing day-to-day guidance and feedback.
- Encouraging the researcher and showing a keen interest in his/her work.
- Supervising the junior researcher's work with the appropriate intensity and respect.
- Supervising the junior researcher in all relevant phases of the research project.
- Monitoring progress and critically reviewing the raw research data together with the junior researcher.
- Monitoring and promoting quality assurance and control.
- Monitoring the researcher's integrity in relation to the studies, data handling and submission of publications.
- Checking whether claims to authorship are justified.

Junior researchers may be Master or even Bachelor students, postgrads or PhD students. They are generally referred to below as 'researchers' as opposed to 'mentors' or 'supervisors'. The following guidelines apply to all forms of mentorship and supervision.

2.1 Duties of all supervisors

The goal of the working relationship between researcher and supervisor should be clear and explicitly agreed upon, as should the tasks of the researcher and the responsibilities of the supervisor with regard to the project.

1. A good supervisor acts as a mentor, a confidante, an advisor and a voice of reason for his/her researcher. Researchers want and need supervisors they can believe in and trust, and whose work they find exciting.
2. The supervisor should ensure that the project is based on a well-defined plan. The supervision may take diverse forms, depending on the stage the research project has reached. The supervisor should give the researcher the opportunity to develop his/her own ideas and plans, within the limitations of any agreements with a funding agency. The supervisor should provide alternative ideas and plans particularly if the researcher gets into a difficult or deadlock situation.
3. In the research project, any special requirements regarding access to research infrastructure and facilities should be taken into account.
4. The supervisor should ensure that the researcher has access to the infrastructure needed to carry out the research project, appropriate backup, adequate physical facilities and, if necessary, assistance from staff from both within and outside the researcher's own department.
5. The researcher should get regular help with, advice on and support for his/her research work. Such can be provided at scheduled times, but there should also be room for ad hoc consultation in the event of unexpected developments.
6. The intensity and form of the supervision may vary widely, depending on the people involved. It should be based on the researcher's level and approach. Mentorship given to a novice, for instance, may well differ in form and intensity from that given to a PhD student who is in the last stage of his/her research.

7. Regular consultations should take place on the progress the researcher is making. Such consultations should cover at least the progress of the project and any problems the researcher has encountered. The next steps in the research may also be discussed during these consultations. The consultations should preferably result in specific agreements on short-term and, if necessary, medium-term goals. During these consultations, the supervisor should go through the raw data with the researcher, so as to ensure that the final data are produced in a fashion that is in accordance with all aspects of the research code, such as proper data acquisition, processing and statistics, proper handling of patient material, etc.
8. The supervisor should set aside time to provide and receive critical feedback. This includes returning within an acceptable time corrected manuscripts, reports, etc. written by the researcher.
9. Feedback benefits from open, clear and structured communication, and from a discussion of both positive and negative elements of the research and the supervision.
10. The supervisor and the researcher should hold a performance appraisal interview at least once a year in order to review their respective performances.
11. The supervisor and the researcher should reach an agreement upon the publication of research findings and/or their presentation in the form of a lecture. As authorship is a particularly important issue, it is advisable to reach explicit agreement upon this in advance.
12. Both supervisor and researcher should have an open, critical attitude – irrespective of the hierarchical relationship between them – towards the academic goals as originally formulated by the supervisor. They should realize that the original hypotheses could turn out to be incorrect on the basis of their own or other people's findings. If this is the case, the supervisor should not push the researcher towards the expected results.

2.2 Specific duties of the PhD supervisor (*promotor*)^{1 2}

A doctorate or PhD is the highest academic degree awarded in the Netherlands. It is proof that the researcher is capable of conducting independent research of a very high standard.

Any researcher who wants to obtain a doctorate must prepare a PhD thesis. He/she will do so under the guidance and supervision of a full professor, who will act as PhD supervisor (*promotor*).³ This professor has overall responsibility for the PhD trajectory and has specific duties pertaining to this role. The regulations stipulate that any qualified researcher can approach a full professor and ask him/her to act as PhD supervisor. The PhD supervisor may

¹ AMC Graduate School

The AMC Graduate School enhances the quality of PhD studies by organizing the doctorate level academic training of AMC PhD students, supporting students and their supervisors. See [AMC Graduate School](#). *Not available in VUmc*

² UvA Doctorate regulations

These can be downloaded from <http://www.uva.nl/en/research/phd/procedure>
Additional specific provisions issued by the AMC can be found on [AMC Graduate School](#).
Not available in VUmc

³ The procedural rules for PhD candidates are laid down in the [Doctorate Regulations \(Algemeen Promotiereglement\)](#) issued by the UvA's Doctorate Board (College voor Promoties). [And for VUmc](#).

delegate his/her duties as a supervisor to one or more co-supervisors, but retains responsibility.

1. It is a personal decision of the professor whether to accept the researcher as a PhD student (*promovendus*).
2. When making a decision about supervision, the professor checks whether the conditions for successfully completing a PhD programme are available. This applies not only to the formal requirements (the PhD student must hold a Master's degree in a subject relevant to his/her proposed research), but also to the conditions for successfully completing a PhD programme of additional training and research.
3. Agreeing to act as PhD supervisor for a young researcher is an important decision that has far-reaching consequences. Both the student and the supervisor must confirm the request and the decision by signing a document.
4. The duty of the PhD supervisor is to supervise the PhD student in his/her research and in all aspects of the training related to that research. The supervisor is also expected to help the student to identify appropriate skills training and to undertake it.
5. After a professor has agreed to act as a PhD supervisor, he/she develops the content of the personal training programme. This programme has two sections: training and research. The PhD supervisor develops a plan and a schedule for coursework, training and other activities aimed at developing the knowledge and skills of the PhD student to the level of that of an independent researcher. The second part of the PhD programme is supervised research. The PhD supervisor creates or facilitates conditions for high quality research and for adequate day-to-day guidance and supervision of the PhD student, as specified earlier.
6. By the end of the first trimester, the PhD student and the PhD supervisor are expected to have reviewed and discussed the student-supervisor agreement and to have a signed training and supervision plan.⁴ The PhD supervisor then ensures that a timetable is in place that will lead to a timely upgrade and progression to completion and submission of the PhD thesis.
7. The PhD supervisor may delegate the day-to-day supervision, or the supervision of specific elements of the PhD programme, to a colleague (e.g. an assistant professor), who may ultimately become a co-supervisor of the PhD student. However, final responsibility for the PhD thesis remains with the PhD supervisor (*promotor*). If PhD supervision is shared, a clear understanding of the allocation of duties (including the procedure to be followed in the case of diverging opinions) must be reached and communicated to the PhD student.
8. The PhD supervisor monitors the progress of both the training and the research part of the personal PhD programme. This is arranged during regular meetings. A PhD supervisor should maintain regular contact with his/her PhD students: it is not unusual in the early and closing stages for a PhD supervisor to meet with his/her PhD student on a weekly basis or even more frequently.
9. It is the PhD supervisor's responsibility to monitor the integrity of the PhD student in relation to performing the research studies, handling the data and submitting manuscripts.
10. In the case of conflicts, the PhD supervisor must ensure that the PhD student has access to an independent and qualified third party. In general, shared supervision (by two supervisors, a supervisor and a co-supervisor, or a supervision team) is

⁴ The AMC Graduate School uses a standard Training and Supervision Scheme (*Opleidings-en Begeleidingsplan*; OBP), which is available on their website www.amc.nl/graduateschool.

preferable, considering the potentially vulnerable relationship between a PhD supervisor and a PhD student.

2.3 Duties and rights of the PhD student

Doing PhD research should be a pleasant and valuable experience. Good mentorship assists PhD students to enjoy their research work and training. A PhD student also has certain primary responsibilities pertaining to the relationship with his/her supervisor, namely:

- To act as a professional and assume responsibility for his/her own scientific work.
- To function as member of a team and to be accountable towards the PhD supervisor.
- To be critical of his/her own work and that of other team members.
- To follow mutual arrangements regarding the design and execution of the work.
- To accept guidance related to the personal PhD programme.
- To follow mutual arrangements related to the organization of the work, including work hours and presence.
- To submit or deliver agreed work packages on time.
- To conduct the research with care.
- To handle data properly (e.g. not to omit or falsify data).
- To check for errors.
- To take great care when dealing with patients and laboratory animals and their data, and to obey the rules such as those stipulated in this Research Code.
- To ensure that his/her reporting is complete and transparent.

The PhD student has the right to consult an independent and qualified third party with regard to the functioning of his/her supervisor.