

### Contents

Preface		3		
1	The Wageningen University PhD Programme  a. Introduction  b. The learning targets for the PhD degree c. Categories of PhD candidates d. Different forms of the PhD degree	<b>3</b> 3 4 4	6	The go/no-go decision Recommendations for the process leading to the go/no-go decision In case of a no-go decision
	a. Director forms of the Fib degree	4	7	Monitoring the PhD project
2	Units involved in PhD projects at WU  a. The Academic Board and The Dean of Research b. PhD Services c. Chair group d. Deputy manager of the chair group/chair group	<b>5</b> 5 5		<ul><li>a. Annual progress meetings</li><li>b. Monitoring by the Graduate School</li><li>c. Confidential advice</li><li>d. Conflict handling</li></ul>
	cluster, Liaison Office (SSG, ASG)	5	8	Finishing the PhD project
	e. Human Resources (HR) f. Graduate Schools	5		<ul><li>a. Administrative steps in the final phase of to project</li><li>b. The thesis</li></ul>
3	Rules and regulations	6		c. Cum laude
	<ul><li>a. The doctoral degree regulations</li><li>b. The Netherlands Code of Conduct for Research</li></ul>	6		d. Religious and political expressions in acknowledgements
	Integrity c. Authorship	6	9	The art of good supervision
	d. Affiliations	6		a. Styles of supervision
	e. Data management	6		b. Coaching
	f. Open access to research results	6		<ul><li>c. Academic freedom</li><li>d. Network and career support</li></ul>
4	Selection, registration and admission of a PhD			e. Authorships
	candidate	7		f. Mental health of PhD candidates
	a. Selection	7	10	Contact
	b. Registration c. Entry requirements	7	10	a. Graduate schools b. Support & Mediation
5	Starting up the PhD project	8		
	a. Submission and approval of the project proposal	8		
	b. Training and Supervision Plan (TSP)	8		

phase of the PhD

### **Preface**

This guide on PhD supervision was developed by the Wageningen Graduate Schools to support supervisors in achieving efficient and effective supervision in current day academic practice. It provides an overview of the WU PhD programme, related terms and regulations, procedures, units involved, and what to do in the event of questions, concerns or complaints. Accordingly, it also provides a set of tips and tools for good supervision and ends with a PhD time table.

### 1 The Wageningen University PhD Programme

#### a. Introduction

The four-year PhD programme largely consists of research (under supervision) and the writing of a thesis (dissertation). Furthermore, up to 15 percent of the time is used for training and education activities, which include courses, competence and skills training, seminars, conferences and working visits. The university's PhD programme has a strong international character. Our PhD candidates come from all over the world. Our PhD graduates represent over a hundred nationalities, and more than 60 percent of our current PhD staff obtained their Master's degrees at a university outside the Netherlands.

Supervising a PhD project is a challenging combination of mentoring, advising, and directing a PhD candidate in the process of obtaining academic independence. Considerable volumes of literature have been written on how to manage the complexities of such a project and how to successfully guide a PhD candidate towards obtaining a PhD degree. The changing academic environment (involving e.g. tenure track, publishing pressure, societal relevance of research, high competition for funding, increased teaching load) has further increased the complexity of PhD supervision. Supervisors have – in general – much less time for their PhD candidates, while they depend to a large degree on the PhD candidates for their scientific output and support in fulfilling tasks such as teaching and student supervision. Supervisors must support the PhD candidate in acquiring skills and competences required to function within and outside of academia. All in all, increased pressure, time constraints and changing academic and societal demands require an effective and efficient form of supervision.

For PhD supervisors at WU the PhD programme has an additional challenge, namely the diversity of PhD candidates. WU has over 150 nationalities in its PhD pro-

gramme and cultural differences can hamper communication and project progress. The WU PhD programme hosts different categories of PhD candidates (employed research assistant, guest PhD, sandwich PhD, external PhD and staff PhD; see Section 1C). The category also determines the way in which the candidate should be supervised.

Many studies have linked success or failure of doctoral candidates to the organisation and quality of supervision. The nature of the relationship between PhD candidates and supervisors, supervision styles, and the organisation of peer and social support directly influence productivity and well-being. Furthermore, problems may arise when contacts with supervisors are limited, when project planning and feasibility are poor. when the work environment is uninspiring, when PhD candidates lack knowledge about the academic institute, and when disagreements are not discussed and solved.

The WU PhD Programme is based on two central elements: Firstly, doing a PhD is a test whereby the candidate can prove that he/she is able to function as an independent scientist. Secondly, the programme supports the candidate to adopt so-called T-shaped skills at three levels:

- In-depth knowledge of the specific research topic that the candidate is working on (vertical bar of the T).
- Specific skills and competences required to function in or outside academia, placing the research in a broader context (horizontal bar of the T).
- Being able to translate the research outcome (vertical bar of the T) into value for society (horizontal bar of the T).

### b. The learning targets for the PhD degree

The <u>WU Doctoral Degree Regulations</u> describe the learning targets for the PhD degree. The recipient of the doctorate

is capable of:

- Functioning as an independent practitioner of science who is able to:
  - Formulate scientific questions, either based on social issues or scientific progress;
  - Conduct original scientific research;
  - Publish articles in peer-reviewed scientific journals, publish books with scientific publishers or make a technical design
- Integrating the research in, or placing it within the framework of, own scientific discipline and against the background of a broader scientific area
- Placing the research aims and research results in a societal context
- Postulating concisely worded propositions in scientific and societal areas, formulated in such a way that they are subject to opposition and defence.

In order to reach these objectives the WU offers a PhD programme consisting of a research component and a training component. The research of PhD candidates is based in one or more *chair groups* and mentored by senior staff. The training component is organised by the six Wageningen graduate schools (see Section 2f).

### c. Categories of PhD candidates

The PhD programme distinguishes five different categories of PhD candidates:

- Research assistants (previously known as AIOs or OIOs) are employed at WU for a period of four years. They do not need to pay a tuition fee.
- Sandwich PhD candidates have a fellowship and are embedded in a local institute in their home country where they perform their research. They spend part of their time at WU (generally the first 6-8 months, the final 6-8 months and intermittent visits). There are two types of sandwich PhD candidates:
  - Sandwich-Fellow PhD candidates have fellowships that are not funded by WU. They are required to pay a tuition fee.
  - Sandwich-Labour PhD candidates are funded by WU and have a formal labour agreement with WU for the time that they are in the Netherlands. They do not pay a tuition fee. NWO funded PhD candidates also fall in this category.
- Guest PhD candidates have a fellowship and are based at WU. The candidate can be affiliated to, or employed by, a local institute that pays the fellowship. Guest PhD candidates are required to pay tuition fees.
- External PhD candidates are employed by an institute/organisation other than WU. Their research is done at this institute/organisation and they do not have a workplace at the university. The main relation with WU is via the supervisor(s).
- Staff PhD candidates are research employees of the University who do not yet have a PhD.

Appointment procedures for *employed* PhD candidates (research assistants and sandwich-labour PhD candidates) are handled by and the responsibility of the Human Resources department. PhD candidates who are not employed by WU receive a contract. For sandwich PhD candidates, the contract should also guarantee that the PhD candidate will have sufficient time for his/her PhD research at his/her home institute. The supervisors must make sure that this document is drawn up and signed, and that the commitment from local institutes (if applicable) in terms of finances, facilities and time allotment is guaranteed. As procedures differ per PhD category, PhD candidates should contact the administrative divisions of their chair group, department or graduate school for advice on how to determine the appropriate category for their PhD project.

Administrative policies for accepting non-employed PhD candidates slightly differ between the five science groups, because some science groups have a liaison office while in other science groups the unit management or the chair group will issue the contract.

### d. Different forms of the PhD degree

The PhD degree can take various forms at WU:

- The WU PhD degree: This is a single degree conferred by Wageningen University.
- Joint, double and dual degrees: Institutes that confer PhD programmes with joint governance, joint admission and joint supervision of PhD candidates, may both issue their PhD degree based on one and the same thesis. These degrees can be referred to as 'joint', 'double' or 'dual' degrees. Such degrees can only be awarded as part of a joint PhD programme that has been approved by the Academic Board of WU. The guiding principle is that the requirements for a joint doctorate programme should meet the requirements of the institutions involved in awarding the doctoral degree. The regulations for conferring such degrees are described in Appendix 8 of the Doctoral Degree Regulations.
- Two degrees with one thesis: WU does not accept PhD theses that already have been successfully defended elsewhere. When two different degrees on the basis of one PhD thesis are conferred outside of a joint PhD programme, the PhD candidate needs to defend the thesis at WU first.
- Second degree: In case someone possessing a PhD degree wants to start a new PhD project, the thesis resulting from that project needs to be substantially different from the previous thesis. Overlap in content is only allowed up to a maximum of 30%. The second thesis should clearly be novel in the sense that it deals with either new research questions or contains a new analysis of existing data.

### 2 Units involved in PhD projects at WU

Various units are involved in the organisation of the PhD programme. This chapter provides an overview of all units, their tasks, and their contact details.

## a. The Academic Board and The Dean of Research

The <u>Academic Board</u> is the university body that confers the doctoral degrees. The <u>Academic Board</u> of WU consists of 12 professors and is chaired by the Rector. The Academic Board determines the quality standards for judging a PhD thesis and the public defence of the work and lays these down in the Doctoral Degree Regulations. Any member of the Academic Board can represent the Rector during a PhD defence as chair of the ceremony.

The Dean of Research has an advisory role in the Academic Board and is responsible for the execution of the policy agreed by the Academic Board.

#### **b. PhD Services**

PhD Services is responsible for the administrative matters at the start and at the end of a PhD project. At the start, the PhD Services team serves as a back office for the graduate schools to validate diplomas and language proficiency. If necessary, the PhD Services team will assist the Dean of Research in the process of admitting candidates without a certified degree. At the end of the PhD project, the PhD Services team handles the logistics for approval of the thesis.

### c. Chair group

The chair group is responsible for:

- The acquisition of research funding and selection of PhD candidates.
- The registration of the PhD candidate at a Graduate School.
- The Go/No-go decision and timely submission of the required documents for final admission to the PhD programme (project proposal and the Training and Supervision Plan (TSP)).
- Annual Performance & Development interviews with the employed and other PhD candidates.
- Embedding of the PhD candidate in the chair group.
- · Sound supervision

### d. Deputy manager of the chair group/chair group cluster, Liaison Office (SSG, ASG)

These units are responsible for the contracts of non-employed PhD candidates (sandwich-fellow candidates, guest PhD candidates and external PhD candi-

dates) and for supporting the acquisition of projects.

### e. Human Resources (HR)

HR is responsible for the initial labour contract of employed PhD candidates (research assistants and sandwich-labour candidates) and the extension of the contracts after 18 months.

#### f. Graduate Schools

The PhD programme is coordinated by six graduate schools:

- Experimental Plant Sciences (EPS)
- Production Ecology and Resource Conservation (PE&RC)
- Food Technology, Agro-Biotechnology, Nutrition and Health Sciences (VLAG)
- Wageningen School of Social Sciences (WASS)
- Wageningen Institute of Animal Sciences (WIAS)
- <u>Wageningen Institute for Environment and Climate</u> <u>Research</u> (WIMEK)

The graduate schools are responsible for:

- The registration of PhD candidates in the PhD registration system (PROMIS).
- The introduction of the PhD candidate to the PhD Programme.
- The evaluation and approval of the Training and Supervision Plan (TSP).
- Peer-reviewed evaluation of the quality and feasibility of PhD projects.
- The procedure for registration with the Student Service Centre (SSC), if the candidate needs to follow Master's courses or needs to access the WU virtual learning environment.
- Monitoring and strengthening the quality of supervision.
- The organisation of PhD training and education activities (courses, symposia, workshops)
- · Advice and counselling
- · Monitoring the progress
- Conferring a Training and Education Certificate of advanced PhD education to the PhD candidate after his/ her successful completion of the TSP.

Supervisors may contact the graduate school confidants for advice on issues of supervision.

Wageningen Graduate Schools (WGS) is the platform where all six graduate schools cooperate and discuss relevant research policy issues.

Contact details for the graduate schools are provided in <u>Section 10</u>.

### 3 Rules and regulations

### a. The doctoral degree regulations

The <u>Doctoral Degree Regulations</u> describe the PhD learning objectives, the degree requirements and the admission criteria. They elaborate on supervision, and on processes related to graduation such as thesis committee composition, thesis format and the public defence ceremony. Both supervisors and PhD candidates have to familiarise themselves with these regulations. The Academic Board regularly amends the Doctorate Conferral Regulations. The Dean of Research has an advisory role in the Academic Board and is responsible for the execution of the policy agreed by the Academic Board.

# b. The Netherlands Code of Conduct for Research Integrity

The <u>Netherlands Code of Conduct for Research Integrity</u> is a key framework for all PhD activities.

All WUR employees are required to act in accordance with the Code of Conduct, which guides choices and practices of all individuals involved in academic research and teaching. It describes ethical guidelines and the societal role of the university in relation to the proper execution of its duties. Integrity is the cornerstone of good academic practice. Supervisors have the responsibility to inform PhD candidates about these guidelines as soon as possible.

The Code of Conduct outlines five principles of proper academic practice: 1. Honesty, 2. Scrupulousness, 3. Transparency, 4. Independence, 5. Responsibility. The Code contains several explicit stipulations about the training and supervision of PhD candidates.

The <u>integrity policy of WUR</u> states that all staff members and visiting researchers are bound by the Code of Conduct and by the principles of the WUR integrity code.

#### c. Authorship

Chapters of the PhD thesis are often not written by the PhD candidate alone, but with one or more co-authors. Supervisors are often co-author of articles of their PhD candidates and also other scientists may appear as co-author on the articles in a PhD thesis. To specify the contribution of a PhD candidate and co-authors to the research, an author statement is added to the submitted thesis to help opponents judge the PhD thesis within the frame of the learning objectives.

WUR has established <u>guidelines for authorship</u> that should be followed by all WUR researchers, including PhD supervisors (see also Section 9e).

Co-authors are all those persons who have made significant academic contributions to the work reported and who share responsibility and accountability for the results. Other contributions should be indicated in a footnote or an 'acknowledgments' section. An administrative relationship to a study or a relationship as supervisor does not of itself qualify a person for co-authorship. The author who submits a manuscript for publication (including unpublished thesis chapters) accepts the responsibility of having included as co-authors all persons appropriate and none inappropriate. The submitting author should have sent each living co-author a draft copy of the manuscript and have obtained the co-author's assent to co-authorship of it.

### d. Affiliations

A number of scientists have more than one affiliation. The quideline for the use of affiliations is:

Handle affiliation similar to co-authorships. There has to be a substantial contribution of the organisation to the research. Scientists with multiple appointments should only mention an institution when it has contributed to the research.

### e. Data management

WUR's research data policy centres around the safety and accessibility of research data, both during and after research. All PhD candidates and chair groups are required to have a Data Management Plan. Visit the <a href="Wageningen Data Competence Centre website">Wageningen Data Competence Centre website</a> for more information.

### f. Open access to research results

WUR's policy is to make research output, whenever possible, freely available via one of the forms of Open Access publishing. Visit the <u>WUR library website</u> for more information.

# 4 Selection, registration and admission of a PhD candidate

### a. Selection

Key to a successful project is the selection of the candidate. Hence supervisors must have appropriate selection procedures in place given the diversity of PhD candidates. High standards are recommended and the entry requirements of the WU programme should be taken into account. Supervisors recruit PhD candidates on the basis of their qualities and added value for the existing research lines. Supervisors interview candidates to test their academic qualities and proficiency in English. They may also test their writing skills by way of an assignment and question potential candidates on motivation and career ambitions.

Furthermore, supervisors are responsible for sufficient funding of the project. The WU PhD programme lasts four years and hence for every PhD project (except external PhD projects) four years of funding need to be guaranteed, either by the funding agency, the PhD candidate or the chair group. The administrative units of the chair group or department can support supervisors in drawing up a budget.

The PhD candidate's supervisory team is registered in PROMIS and agreements on supervision are laid down in the project proposal and the TSP.

### b. Registration

PhD candidates, including external PhD candidates, are registered with the graduate school in which they will participate. Supervisors must submit the following documents to the graduate school:

- Registration form of the graduate school
- Copy of passport
- Diplomas and certificates
- Proof of English proficiency

The Academic Board will assess whether the entry requirements have been met before the start date of the PhD project.

The graduate schools register all PhD candidates in the central registration system <u>PROMIS</u>. The PhD supervisors can inspect the data of their PhD candidates and are able to perform certain actions such as booking the date for a PhD defence. The PhD supervisor can delegate these tasks to another person, e.g. the daily supervisor or the chair group's secretariat. For initial registration, adding or changing information about a PhD candidate, supervisors can contact the office of the graduate school.

### c. Entry requirements

The Academic Board prescribes two basic entry requirements to the WU PhD programme:

- a Master's degree: The candidate must have obtained a Master's degree from an institute of academic education recognised by the Academic Board. This is evaluated via NUFFIC. If a PhD candidate does not have such a degree he/she must present other relevant higher education diplomas and/or proof of expertise. When these are not sufficient or are not accepted, the Academic Board may deny access to the PhD programme or the Academic Board requests the supervisors to propose a qualifying exam to test the academic level of the candidate. In such cases and prior to the starting date, the supervisor informs the PhD candidate about the necessity and content of the qualifying exam; this must be included in the contract received by the PhD candidate.
- **2 English proficiency:** For the accepted English language tests and the entry requirements <u>click here.</u>

All PhD candidates must have passed one of the English language tests before they start their PhD study, except:

- Dutch candidates
- Native English-speaking candidates
- Candidates who can prove that the Master's study programme they took was completely taught in English.

### 5 Starting up the PhD project

Graduate Schools provide PhD candidates with detailed information about the PhD programme as well as the required procedures for them to be admitted to the graduate school. Participation in the graduate school allows the candidate to participate in activities such as courses for a reduced fee. Registration at a graduate school involves the submission and approval of a project proposal and a Training and Supervision Plan (TSP).

# a. Submission and approval of the project proposal

Every PhD candidate submits a research proposal to the graduate school within the first 6 months after the start of the project. Procedures vary slightly between graduate schools but all graduate schools organise peer reviews of the project proposals with regard to relevance, quality and feasibility. The proposal document format and requirements can be found on the site of the graduate school concerned. Note that the use of previously published research is only allowed if the candidate has not used it before to obtain a degree (this includes both Master's and PhD degrees).

### b. Training and Supervision Plan (TSP)

PhD candidates are entitled to training and education, and good supervision. The planning of training and education activities as well as the form and frequency of supervision are formulated in a Training and Supervision Plan (TSP). It provides a detailed four-year raining and supervision programme. The TSP offers PhD candidates the opportunity to take charge of their personal development towards becoming an independent academic with T-shaped skills. Furthermore, the TSP of some graduate schools includes agreements on co-authorship. The TSP must be submitted to the graduate school within 3 - 6 months after the start of the project. After approval of the TSP by the Graduate School, it allows the candidate to participate in training and education activities for a reduced fee and facilitates the candidate's enrolment in the PhD programme.

Each graduate school has its own TSP format but in general it consists of the following components:

Training and education: Training and education
 activities generally consist of PhD courses (topical and
 methodological, skills, competence and career planning
 courses), presentations at (international) academic
 meetings (conferences or seminars), writing the PhD
 project proposal, and teaching activities (see below). All
 graduate schools require PhD candidates to spend 30-32
 ECTS on training and education activities. Obviously, PhD

candidates discuss the activities listed with their supervisor(s). A tool that may support choosing the appropriate skills and competence training is the PhD Competence Assessment. This assessment is specifically developed to support starting PhD candidates in planning their personal development in the four-year period. Wageningen Graduate Schools (WGS), the WU joint graduate school platform, organises an array of competences and skills courses for PhD candidates and postdocs.

Note: Career planning is important for PhD candidates from the start of the PhD programme. Consequently the candidate may adapt the training programme to his/her career ambitions. For PhD candidates who would like to pursue an academic career, involvement in teaching or in supervising Bachelor's or Master's theses may be a valuable activity.

- Teaching activities: For PhD candidates, teaching and supervising Bachelor's or Master's theses can be very rewarding and a good learning experience, especially if the subjects are part of, or very close to, their own research project. Hence supervisors may discuss the possibilities with their candidate. All graduate schools credit teaching activities, provided that the candidate and supervisors set clear learning goals in the TSP. Teaching should not exceed 10% of the four-year workload. If teaching clearly exceeds this limit and becomes more and more a routine job that has no direct link with the PhD candidate's learning objectives or the research project, a clear agreement on compensation for the surplus work is needed. Also note that, regarding teaching duties, there is a distinction between employed and not employed PhD candidates. Click here for more information.
- **Supervision**: Each PhD candidate is guided by a supervisory team, consisting of 2 to 3 supervisors (promotors, co-promotors, daily supervisors), covering the relevant expertise for the content and/or methodology of the PhD research. The composition of the supervisory team should only reflect the interest of the PhD candidate. Financial or personal considerations may never be decisive to limit the number of supervisors or to add an extra supervisor to the team.

The supervision component of the TSP involves a discussion on expectations, the composition of the supervisory team, an agreement on the time investment (guideline is 8 hours per month overall for the supervisory team), the scientific contribution of each

supervisor and/or supervision style. Supervisors make sure that these issues are discussed in an open and frank manner and that the agreements are documented in the TSP. The number of PhD candidates per supervisor should be such that it guarantees appropriate supervision time for all candidates.

WGS has defined minimum qualifications for PhD supervisors. In every graduate school, supervisors are expected to:

- Be a WU graduate school fellow
- Know the prevailing rules and regulations of the WU PhD programme
- Have followed a PhD supervision course
- Attend one <u>WGS PhD supervisor workshop</u> every two

The graduate schools regularly monitor the quality of

supervision provided by their supervisors and take action when needed.

• PhD training and education budget: Once the TSP has been approved, the PhD candidate is entitled to a 'training and education backpack' of €2500, paid by the chair group, which can be used to pay for the activities listed in the TSP. Note that this is generally not enough; supervisors and PhD candidates may need to find additional funding opportunities. The 'backpack' is reimbursed to the chair group via the graduation compensation that the chair group receives upon successful completion of the PhD project and the acquisition of the Training and Education Certificate from the graduate school.

### The go/no-go decision

The criteria for admission to the WU PhD programme are:

- A recognised Master's degree or equivalent as described above
- Proof of proficiency in English as described above
- Approval of the project proposal
- Approval of the Training and Supervision Plan
- A positive go/ no-go evaluation by the supervisors

A go/no-go decision by the supervisors is mandatory for all PhD candidates at WU and must be taken 8-14 months after the start of the project. The decision for a go or a no-go is based on an evaluation of the candidate's performance by the supervisors. After a 'go' decision the university admits the candidate to the WU PhD programme. With a 'go' decision, the supervisors express the expectation that the PhD candidate will be able to obtain his/her PhD degree. Employed PhD candidates need admission in order to receive a contract extension for the rest of the PhD project. A go/no go decision is taken by the supervisors; the candidate does not have the option to discuss but may formulate a response in the go/no go form.

### Recommendations for the process leading to the go/no-go decision

At the start of the PhD project, supervisors inform PhD candidates about the purpose, the criteria, the date for the go/no-go decision, and if applicable, any additional tailor-made requirements. Hence, supervisors clearly communicate about the expected results.

Right from the start the progress should be regularly discussed and evaluated. Record such evaluations and when performance is not up to standard, give clear warnings, a clear plan on how the candidate should improve and the targets that must be reached. Such evaluations must be documented and communicated with the PhD candidate. Go through the go/no go form and terms at least once; preferably a couple of months before the final go/no go.

Tackle possible mismatches between candidate and (daily) supervisor with respect to personality or academic field timely. This may lead to a change of (daily) supervisor.

In case a PhD candidate is going abroad, supervisors should preferably plan the go-decision before the candidate leaves. In any case they should avoid a situation in which they need to announce a no-go decision via e-mail.

The go/no-go form is used for the evaluation and can be downloaded from PROMIS by the intended supervisor (promotor). After evaluation the form is filled in and signed by the supervisors (promotors and co-promotors) and the PhD candidate.

For employed PhD candidates the supervisor sends the form to Human Resources for the final decision of the review authority (questions 11 and 12 on the form) and informs the Graduate School about the final decision.

For sandwich, guest or external PhD candidates the supervisor informs the Graduate School of the outcome of the decision. The supervisors keep the form in their personal file of the candidate.

The Graduate School registers the result of the go/no-go decision in PROMIS.

PhD Services checks whether all necessary conditions for admission to the PhD programme have been completed. If this is the case, the PhD candidate will receive an admission letter from the Academic Board. Employed PhD candidates receive an extension of their initial contract to a total contract period of at least 48 months.

### In case of a no-go decision

A no-go decision means that the PhD candidate cannot continue or re-enter the PhD programme at Wageningen University with a different supervisor. The registration of the candidate at WU will be cancelled. In the case of an employment contract, this contract will not be extended.

If the supervisors foresee a no-go decision they should timely inform the PhD candidate. Supervisors should carefully document all steps in the process, including agreements and correspondence with the PhD candidate. Supervisors should inform the candidate as soon as possible about their intention to decide on a no-go and allow the candidate sufficient time to improve performance.

Within six weeks after a no-go decision, the PhD candidate can submit a request for mediation or complaint handling to the Academic Board. The appeal will be handled according to the procedures described in the Doctoral Degree Regulations of Wageningen University.

Supervisors may contact the graduate school for advice in case of a no-go decision. Supervisors timely inform the graduate school about a no-go decision.

### Monitoring the PhD project

Regular monitoring of progress is an essential component of successful completion in the given 4 years.

### a. Annual progress meetings

Supervisors regularly discuss the progress of the PhD project with their PhD candidate, but a formal evaluation of the performance should be performed at least once a year. The progress meeting should include an evaluation of the past period; the planning of the next phase of the PhD project; adjustment of the planning in case of delay; and personal development related to the PhD candidate's career perspectives.

The advice is to use the graduate school monitoring form (see your graduate school's website). For employed PhD candidates, Human Resources requires a performance and development 'R&O' interview. In this case the graduate school monitoring form can be uploaded to the R&O tool.

### b. Monitoring by the Graduate School

Graduate schools monitor the progress of individual PhD projects to be able to interfere whenever PhD candidates run into problems. They support supervisors to pay attention to the quality and progress of their PhD candidates and to be aware of possible challenges and issues. The graduate schools stay in touch with their PhD candidates about delays or emerging problems. Graduate schools appreciate receiving relevant information with regard to the PhD

candidate on issues such as prolonged illness, pregnancy leave, switch to part-time work, and parental leave.

The graduate schools provide exit interviews or questionnaires on the PhD process and the quality of supervision.

#### c. Confidential advice

Both PhD candidates and supervisors may seek confidential advice on challenges, issues and conflicts related to the PhD project with the graduate school's PhD advisor. In case problems or issues are beyond the graduate school's mandate, for instance (sexual) harassment, undesired behaviour or scientific integrity, supervisors and PhD candidates may contact the HR department, the confidential councillor for unwanted behaviour of the science group, the confidential councillors for scientific integrity or occupational social work.

### d. Conflict handling

If supervisors disagree with their PhD candidate it is important to make and document agreements. Keep correspondence professional and contact your chair holder or unit leader in time and, if needed, supporting services such as the graduate school or occupational social work.

The formal complaint procedures of the Academic Board are described in the Doctoral Degree Regulations.

#### 8 Finishing the PhD project

### a. Administrative steps in the final phase of the PhD project

In the last phase of the PhD project, a number of administrative steps (see also the Doctoral Degree Regulations) need to be taken, some of which should be performed by the PhD supervisor or the delegated supervisor in the central registration system PROMIS.

- The PhD candidate applies for the public defence and requests the official appointment of the PhD supervisor(s) and co-supervisor(s) (letter can be downloaded via PROMIS),
- The supervisors approve the thesis and propositions.
- The supervisor books tentative date and nominates four opponents to the Academic Board (PROMIS).
- The PhD candidate submits a reading version of the thesis together with the required propositions and the author statement.
- The PhD candidate requests an education certificate from the graduate school.
- The PhD candidate submits the cover and the first four pages of the thesis to the Doctorate Secretariat for approval.
- The final date for the public defence is set, the thesis is printed (including a summary of training activities approved by the graduate school).
- The thesis is sent to the graduate school office, the Doctorate Secretariat and to the WUR Library.
  - 15 copies of the thesis to the Doctorate Secretariat of PhD Services
  - 1 copy and 1 PDF file of the thesis and an abstract in Word to the library

For a detailed overview see the Full Timetable

### b. The thesis

A PhD thesis at WU can have different formats: a design, a monograph, or a number of publishable (or published) scientific articles with an introduction and a synthesising/ discussion chapter, the latter being most common.

The introduction and general discussion chapters discuss the common theme/subject and the link with the other chapters. In the introduction, the research questions/ objectives are defined. In the general discussion the candidate must show that the whole is more than the sum of the individual research papers, integrating the outcome of the chapters to reveal new insights. The candidate is not allowed to use material that he/she has already used to obtain another degree, such as a Master's or Bachelor's thesis, as part of the doctoral thesis.

There are no regulations regarding the number of articles that have to be published. There may, however, be 'common practices' within research groups. The PhD candidate will usually be the first author, but he/she is allowed to be the second author on one of the included articles. The articles/chapters can be co-authored with no limitation on the number of co-authors, but the introduction and discussion chapters cannot be co-authored and should be written by the PhD candidate alone. The PhD candidate must hand in a statement on his or her personal contribution to each chapter.

The <u>Doctoral Degree Regulations</u> provide an up-to-date insight into the requirements of a PhD thesis at WU. Please note that the PhD project culminating in the PhD thesis is only a proof of sufficient competencies in the independent practice of science and not an ultimate life's work or magnus opus.

The members of the thesis committee will assess the PhD thesis using a rubric defined in the Doctoral Degree Regulations. Members of the thesis committee should be scientists with a PhD degree working at a university or research institute. At least one of the four opponents in the thesis committee is a WU professor or an associate professor with *ius promovendi*. None of the four opponents of the thesis committee can be a co-author of any of the chapters of the thesis. The opponents must not have a relationship with the PhD candidate (work relations, family, etc.). It is advised that supervisors informally contact opponents to check their availability for the public defence date, prior to officially nominating them to the Academic Board. It is important that all opponents are present during the defence ceremony. PhD supervisors are requested to inform the PhD secretariat when an opponent is not able to attend.

### c. Cum laude

If the PhD candidate has shown exceptional competency in the independent practice of science, the Academic Board may confer the doctorate cum laude (with distinction). Article 18 of the Doctoral Degree Regulations describes the procedure for requesting a cum laude. For the defence of a potential cum laude PhD candidate, all four opponents need to be present. In the event of a cum laude request, two external experts are asked to judge the thesis in addition to the four members of the thesis committee. The cum laude procedure requires at least one of the external experts to rate the thesis as excellent. Candidates should not be informed about a cum laude request.

# d. Religious and political expressions in acknowledgements

It is the responsibility of the supervisor to check the thesis for religious and political expressions. These are not allowed, with the exception of the acknowledgement of the support experienced by the candidate.

### 9 The art of good supervision

The core of supervision is to mentor a young researcher in becoming a knowledgeable, competent and independent academic. Supervisors may make a significant contribution to the contents of the project, but PhD candidates need space to develop their own research ideas as well. In fact, this academic development is needed in order to comply with the learning targets. Good supervisors trust the PhD candidate and acknowledge that a certain degree of academic freedom is indispensable. Supervisors have to be explicit about the limitations of their expertise to the PhD candidate.

In order to become a successful PhD supervisor, reflection on the complexity of the relationship between supervisor and PhD candidate is crucial. This relationship is clearly hierarchical as PhD candidates depend on the assessment of their supervisors. However, supervisors also act as mentors and have to keep an eye on the background, personal development, and well-being of the PhD candidate. They share their own experiences and support the PhD candidate in his or her career.

Moreover, supervisors may be co-author of one or more papers with the PhD candidate as first author, which adds to the complexity of the relationship. In this role, the supervisors act as an academic co-worker of the PhD candidate.

A PhD candidate/supervisor relation will necessarily change over time. It can be intense and time-consuming at the start, while the PhD candidate will gain more and more independence in the course of the project. Some phases in the project may require direct control by the supervisor while at other moments the supervisor retreats and allows the candidate to do the work.

Wageningen Graduate Schools (WGS) offer <u>courses</u> on styles of PhD supervision and peer support groups for supervisors as a mechanism for supervisors to exchange experience and best practices.

### a. Styles of supervision

A lot has been written about the necessity of adapting the style of supervision to the specificities of the relation between supervisor and PhD candidate. The available WGS courses for PhD supervisors pay extensive attention to supervision styles and how the supervisor may adapt his or her style to the needs of individual PhD candidates. Good supervisors adapt their supervision styles, between different candidates and across the four years of the project.

It is important to pay attention to the following while supervising a PhD candidate:

- Develop the skills to adequately deal with cultural differences.
- Make sure that all supervisors involved get along well and discuss the role and expertise of each supervisor
- Discuss mutual expectations with regard to responsibilities and communication.
- Regularly ask your candidate how the project is proceeding and how he/she is doing in general; does he/she feel happy?
- **Show** your commitment and enthusiasm, which will boost your candidate's confidence.
- Discuss the **ethics** of the research, data management and, if applicable, safety protocols.
- Discuss and agree timely on the co-authors and order of authors on a manuscript from the PhD candidate.
- Agree on the nature and organisation of *meetings*: agenda, written minutes or action items, required preparation time.
- Timely inform your candidate about your availability (busy lecturing block, sabbatical leave, travelling).
- Keep a pragmatic eye on the *time schedule*; your PhD candidate has to complete the project in *four years*.
   The supervisor is also responsible for the timely completion of the PhD project. The reading version of the thesis should be completed before the end date of the contract and/or the return of the foreign PhD candidate to his/her home country.

- Organise a daily platform for discussion and peer support for the PhD candidates in your chair group/ section or the graduate school; encourage social interaction with chair group members and prevent that your candidate works day and night, or in the weekends.
- Encourage your PhD candidates to discuss their work in the *outside world*, help them expand their support networks, visit conferences and research groups abroad. Celebrate achievements, such as the acceptance of a paper for publication.
- Realise that the PhD candidate's expectations and goals may differ from yours, e.g. the candidate aims for a doctorate while you want high-impact papers.

### b. Coaching

A PhD project is usually not that straightforward for beginning PhD candidates and they may encounter issues at work or private issues that influence their performance. Daily supervisors are the first point of contact for PhD candidates. When medical problems (partially) cause the problems, don't hesitate to direct your PhD candidate to the general practitioner. To discuss issues with a professional, both PhD candidates and their supervisors can turn to the Occupational Social Work department or the PhD advisor of the graduate school.

### c. Academic freedom

The Doctoral Degree Regulations assign overall responsibility for the supervision and the quality of the thesis to the supervisor(s) and co-supervisor(s). Supervisors safeguard adaptation of the project to the interests of the PhD candidate. PhD candidates may develop their research project in the desired direction, in co-operation with their supervisors, and within the given programmatic and financial constraints. PhD projects can thus be more or less flexible with regard to choice of theme, theory, and method.

#### d. Network and career support

Supervisors coach a PhD candidate in career planning and support the candidate in building international networks. A vast majority of the PhD graduates will not continue in academia, attention to the training of transferable skills is therefore very important.

### e. Authorships

As co-authors of their PhD candidates' articles, supervisors have to avoid certain pitfalls:

- Supervisors should first and foremost be supervisor.
   Co-authorship of a supervisor can be important as part of the PhD candidate's learning process: how to write and how to publish scientific articles.
- The supervisor has a direct interest in becoming co-author of the PhD candidate's papers, when the publications add up to his or her own record. Supervisors should, however, give their PhD candidates enough

- freedom to determine the contents of a paper in such a way that they meet the learning targets of being an independent researcher. Given the hierarchy between supervisor and PhD candidate, the supervisor must act responsibly with regard to his or her authorship.
- The Recommendations for Authorship make clear that supervisors are not automatically co-author of the papers of their PhD candidates. Co-authorship depends on the contents of the paper and the actual contribution from the supervisor to the paper.
- A supervisor may very well be co-author of some of the papers, while not being involved as co-author in other papers. It is also well possible that experts are involved as co-authors, who are not part of the supervisory team. In several disciplines, career perspectives in academia substantially improve if the PhD candidate has written a single author publication or a publication with other co-authors than the supervisors.
- On behalf of the PhD candidate, supervisors must clearly condemn any attempt of other researchers involved to demand co-authorship on incorrect grounds.
- In case of disagreement or uncertainty about authorships or ranking of authorships, consult the graduate school's PhD advisor.

#### f. Mental health of PhD candidates

Recent investigations at other universities show that a large section - about one third! - of the PhD candidates is at risk of becoming over-stressed and clinically depressed, which could lead to a burn-out. The main reasons are conflicts between work and personal life, work pressure and inadequate supervision. This shows that supervisors have an extremely important task to identify stress factors for their PhD candidates and to observe mental health risks timely. Information about activities and facilities that can help candidates to become, and remain, physically and mentally healthy can be found at WUR's <a href="Vital@Worksite">Vital@Worksite</a>.

#### Further reading

http://www.phdcentre.eu/

### 10 Contact

### a. Graduate schools

• Experimental Plant Sciences (EPS)
Executive secretary: Ingrid Vleghels

PhD advisor: Susan Urbanus

• Production Ecology and Resource Conservation (PE&RC)

Executive secretary: Theo Jetten

PhD advisors: Claudius van de Vijver and Lennart

Suselbeek

• Food Technology, Agro-Biotechnology, Nutrition and

Health Sciences (VLAG)

Executive secretary: Anouk Geelen PhD advisor: Yvonne Smolders

• Wageningen School of Social Sciences (WASS)

Executive secretary: Esther Roquas

PhD advisors: Fennie van Straalen and Esther Roquas

• Wageningen Institute of Animal Sciences (WIAS)

Executive secretary: Janneke van Seters

PhD advisors: Marianne Bruining and Geert Wiegertjes

• Wageningen Institute for Environment and Climate

Research (WIMEK)

Executive secretary: Johan Feenstra PhD advisor: Peter Vermeulen

### b. Support & Mediation

See the <u>intranet</u> for the most recent list of confidential councillors for unwanted behaviour, confidential councillors for scientific integrity or occupational social work.