

# ERASMUS MC GUIDELINES FOR PHD PROJECTS

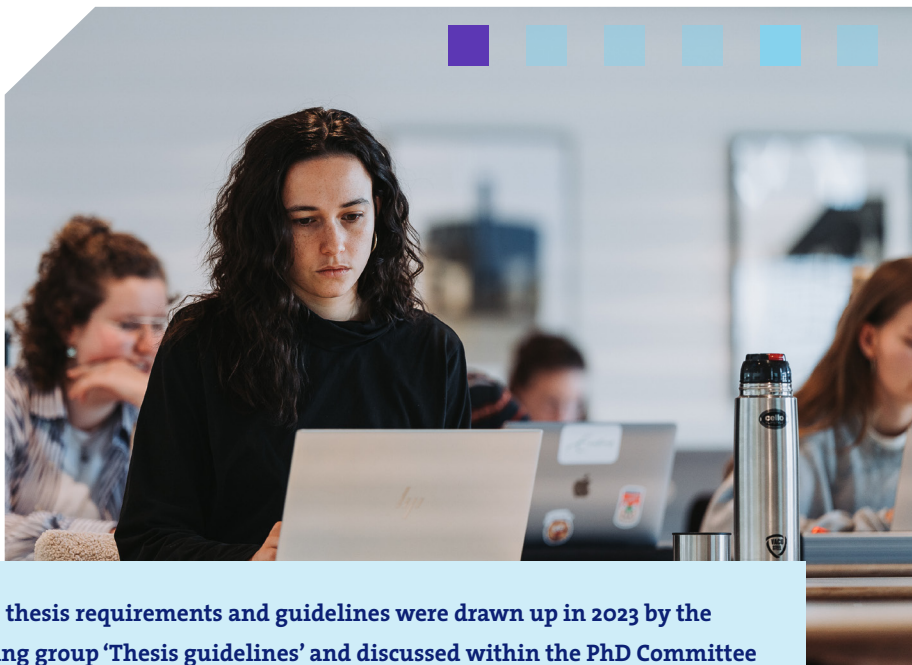


# TABLE OF CONTENTS



<b>Thesis requirements &amp; guidelines within Erasmus MC</b>	<b>3</b>
<b>Erasmus MC supervision guidelines for PhD candidates and supervisors</b>	<b>7</b>
<b>Erasmus MC effective supervisor – PhD candidate interaction: a bidirectional process</b>	<b>20</b>
<b>Erasmus MC policy on digital and printed theses</b>	<b>28</b>
<b>Get in touch</b>	<b>31</b>

# THESIS REQUIREMENTS & GUIDELINES WITHIN ERASMUS MC



These thesis requirements and guidelines were drawn up in 2023 by the working group ‘Thesis guidelines’ and discussed within the PhD Committee and with the vice-deans and dean of Erasmus MC. The requirements and guidelines are approved by the dean of Erasmus MC and the Doctorate Board of Erasmus University Rotterdam. The aim of the thesis requirements and guidelines is to provide PhD candidates and supervisors (i.e. promotor and co-promotor) clarity and direction regarding the requirements and guidelines for the thesis.

## Basis of the thesis requirements/guidelines

- At the **start of a PhD project**, the supervisory team and the PhD candidate should discuss and make **clear agreements** on the content and the number of publications in relation to the complete scientific research cycle. This dialogue should be continued throughout the PhD trajectory. This is to ensure that all parties avoid misalignments in expectations regarding the thesis requirements.
- A PhD trajectory should be regarded as a **research training** and **educational learning process** in which PhD candidates develop themselves into competent and independent researcher. This is demonstrated by crafting a cohesive body of empirical (or conceptual) chapters, along with a comprehensive introduction and discussion. As an integral part of any learning process, there should be space for the presentation of negative results.
- **Recognition and Rewarding (R&R)** is an important pillar within Erasmus MC. Erasmus MC supports the shift from focusing mainly on quantity assessment (e.g. number of publications) to a focus on the quality of the thesis (e.g. creativity, originality) and factors such as social impact and academic leadership. Therefore, **Quality is favoured over quantity**: quality, coherence and specific contributions of the PhD candidate should take precedence over quantity.
- **Collaboration** (between disciplines), for example within the convergence between Erasmus MC, EUR and TU Delft, is highly encouraged. It is acceptable to deviate from the guidelines on the authorship order if this aligns with the nature of the collaboration within the PhD project.



## Status of thesis requirements and guidelines

The Erasmus MC thesis requirements and guidelines are applicable to all types of PhD candidates within Erasmus MC. A distinction is made between requirements and guidelines:

- The requirements are **binding** for all PhD candidates. Supervisors **should not deviate** from these requirements. The thesis requirements set the basis for all theses within Erasmus MC, regardless of the type of PhD research and department.
- The thesis guidelines on the number of publications and authorship are not binding but rather serve as a **framework** that embodies Erasmus MC's stance on theses. We acknowledge that the type of PhD research and what is considered as an acceptable number of publications may differ between departments. Therefore, the supervisory team together with the PhD candidate can deviate from these guidelines, for example based on factors such as the nature or complexity of the PhD research or tasks involved.

### Thesis requirements (binding)

1. The thesis should be coherent and contains chapters with **one overlapping theme**.
2. The PhD candidate should undergo the **complete scientific research cycle at least once** throughout their PhD project. Different steps of the scientific research cycle may be incorporated in different chapters of the thesis. Please find the scientific research cycle below:
  - 1) identifying a gap in scientific knowledge;
  - 2) outlining an approach;



- 3) describing the appropriate collection and analysis of data or existing relevant databases;
  - 4) reflecting on the results in the context of the specific field;
  - 5) writing and submitting a paper to an international peer-reviewed journal;
  - 6) revising a paper;
  - 7) getting the paper accepted and published.
3. The development of a PhD candidate is not limited to the scientific content covered in the research chapters. PhD candidates should elaborate on their **broader personal, professional, and scientific development** in the portfolio chapter of their thesis.

## Thesis guidelines (not binding)

1. The thesis contains **at least three publications** in an international peer reviewed journal (accepted or published upon submitting the thesis to the evaluation committee), of which at least two with (shared) first authorship and one with at least second authorship.
2. The guiding principle is that the thesis should **primarily include chapters in which the PhD candidate holds (shared) first authorship**. However, second authorship may be included. The inclusion of chapters that do not have first or second authorship is discouraged.
3. The candidate should explicitly outline their **significant contribution to each respective chapter** in the thesis, while ensuring it aligns with the overlapping theme.

# ERASMUS MC SUPERVISION GUIDELINES FOR PHD CANDIDATES AND SUPERVISORS



The Erasmus MC guidelines for supervision give a clear description and mutual understanding of the roles and responsibilities of both the supervisory team and the PhD candidates in the PhD trajectory. Adhering to these guidelines is considered essential for a successful doctoral trajectory. The guidelines are not strict 'rules', but give PhD candidates and supervisors a framework for the basis of 'good supervision and teamwork'. The guidelines are based on various sources, including the results from the PhD survey (conducted in 2021), insights drawn from experiences within Erasmus MC Graduate School, and guidelines set forth by other University Medical Centers (UMC) and TU Delft. Several of these guidelines derive from existing relevant guidelines for PhD candidates and supervisors, specifically the EUR Doctorate Regulations version 2020, EUR PhD Policy 2020-2025.

## Supervisors

According to the EUR doctoral regulations 2020, the supervisory team must consist of at least two supervisors. This means that, in addition to the first supervisor (the promotor), a second supervisor (promotor) or co-supervisor (co-promotor) is appointed. The supervisor is a full professor appointed at Erasmus MC or a qualified, doctoral associate professor at Erasmus MC who has been granted the *ius promovendi* by the EUR Doctorate Board. A co-supervisor must have already obtained his PhD degree and be entitled to use the title 'doctor'.

The Doctorate Board may appoint three supervisors if they come from at least two different disciplines. If a PhD candidate has three supervisors from the same disciplines and/or department or four or more supervisors, an exemption procedure will be initiated via *Hora Finita*. The first supervisor will then submit a motivated request to deviate from the standard rule.

The guidelines are classified into four themes based on the PhD journey:

1. Preparation (before the PhD candidate starts)
2. Start – first three months (registration phase in *Hora Finita*)
3. Research phase
4. Final phase (completion of the doctoral thesis and assessment)

Each guideline specifies the intended recipients as follows:

1. ■ PhD candidate,
2. ■ Supervisor(s) or (co)supervisor(s)
3. ■ Entire supervisory team





# 1. THEME: PREPARATION

## Before the PhD candidate starts

### Supervisory team

The supervisory team preferably informs the PhD candidate prior to the employment contract/engagement, but no later than the start of the doctoral trajectory, about the principles of a doctoral trajectory, the project plan, and the requirements placed on the doctoral thesis the end of the trajectory.

### Supervisory team and/or other responsible individuals outside the immediate supervisory team (e.g., secretary)

The supervisory team (if applicable, through the department head and/or secretariat) ensures that the PhD candidate is registered as PhD candidate with PSA (Personnel and Salary Administration) as early as possible, but no later than three months after the start of the trajectory, so that they are enrolled in Hora Finita.

### Supervisory team and/or other responsible individuals outside the immediate supervisory team (e.g., secretary)

The supervisory team ensures the registration of the PhD candidate with Erasmus MC Graduate School, utilizing this registration form, as early as possible but no later than three months after the start of the trajectory. International candidates are preferably registered with Erasmus MC Graduate School prior to the start of the doctoral trajectory to initiate pre- and onboarding processes in a timely manner.

## Supervisory team

The supervisory team ensures that the PhD candidate gains a clear understanding of the funding for the complete doctoral trajectory as soon as possible, but no later than three months after the outset. This depends on the type of PhD candidate according to the UNL classification. If there is insufficient funding available for the entire doctoral trajectory before its commencement, the PhD candidate, with the exception for UNL type 4, is not responsible for acquiring the additional required funding.

In the case of UNL type 1A (employee PhD candidates) and 1B (employees pursuing a PhD), the responsibility for funding lies with the supervisory team.

For type 2 (fellowship PhD candidates) and three (externally funded PhD candidates), the supervisory team discusses funding for the entire doctoral journey with the fellowship provider or external party.

UNL type 4 PhD candidates (external PhD candidates using personal resources) assume responsibility for securing their own funding.

## 2. THEME: START

### First three months

#### Supervisory team

As early as possible, but no later than three months after the commencement of the PhD trajectory, the members of the supervisory team are appointed, with their roles and responsibilities aligned. Within the initial three months of the PhD trajectory, the PhD candidate will gain clarity regarding their daily supervisor(s) and the distribution of their tasks.

#### Supervisory team

#### PhD candidate

The supervisors and the PhD candidate establish agreements regarding the number of meetings during the PhD trajectory, taking into account the phase of the trajectory as well as the composition of the supervisory team. It is possible that more or fewer meetings are necessary depending on the phase. The recommended meeting frequency with the co-supervisor(s) is at least once every two weeks, whereas meetings with the primary supervisor should occur no less than once every two months. If possible and preferably, meetings are conducted in person.

#### Supervisory team

The supervisory team engages in a discussion with the PhD candidate regarding the subject of the doctoral thesis, the framework of the doctoral research, and doctoral thesis requirements, particularly concerning the number of articles.

### Supervisory team

The supervisory team informs the PhD candidate about the Erasmus MC Research Codes, including data management, research integrity, and open science. The supervisory team informs the PhD candidate about the importance of completing the mandatory scientific integrity course as soon as possible.

### Supervisory team

The supervisory teams provides a startup package with which the PhD Candidate can begin their work. This depends on the type of research (literature, protocols, etc.).

### Supervisory team

### PhD candidate

The supervisory team assists the PhD candidate in drafting the initial version of the Training and Supervision Plan (TSP), including research questions, courses selections, conference plans, and task distribution. The initial version should aim to include as many planned courses and conferences as possible. The TSP is a flexible document and can be supplemented later in the trajectory.

### Supervisory team

### PhD candidate

The PhD candidate and the supervisory team establish and sign the TSP as early as possible, but no later than three months after the start of the doctoral trajectory. The PhD candidate is responsible for uploading a TSP version signed by the entire supervisory team within three months of the start.

### **Supervisory team and/or other responsible individuals outside the immediate supervisory team (e.g., secretary)**

The department ensures the organization and availability of the necessary facilities for the research of the PhD candidate.

### **PhD candidate**

The PhD candidate uploads their relevant diploma, Training and Supervision Plan (TSP), and enters the names of the supervisory team into Hora Finita as early as possible, but no later than three months after the start of their PhD trajectory.

### **PhD candidate**

The PhD candidate attends the Graduate School introductory session for new PhD candidates as early as possible, but no later than three months after the start of their PhD trajectory.

### 3. THEME: RESEARCH PHASE

#### PhD candidate

The PhD candidate takes the lead in the PhD trajectory and demonstrates ownership of the research.

#### Supervisory team

If there is no research proposal at the start of the PhD trajectory, the supervisory team guides the PhD candidate in crafting the research proposal, including the development of the research design, experiment setup, data collection, and analysis.

#### Supervisory team

The supervisory team assists the PhD candidate in creating a realistic schedule and its follow-up. When creating the schedule, consideration must be given to the timely completion of the doctoral thesis. The guiding principle is that the PhD candidate completes the doctoral thesis within the contract period.

#### PhD candidate

The PhD candidate is responsible for scheduling meetings with the supervisory team and preparing for these meetings in a timely manner.

### Supervisory team

All supervisors in the supervisory team ensure sufficient availability in their schedules for the PhD candidate.

### PhD candidate

The PhD candidate is responsible for promptly informing the supervisory team if there are scheduling issues.

### Supervisory team

### PhD candidate

The GO/NO GO meetings at six and nine months involve the PhD candidate, the daily supervisor, and the first promotor. If there are more than two supervisors, it is preferable to hold the meeting with the entire supervisory team.

### Supervisory team

The supervisory team ensures that there is ample space for discussing the mental health and well-being of the PhD candidate with them, such as during the meetings and annual appraisal. If desired, the candidate is free to seek support through other means, such as consulting the confidential counsellors.

### Supervisory team

The supervisory team provides the PhD candidate with ample space and time to pursue education and attend conferences. If the PhD candidate is involved in teaching students themselves, they will receive thorough guidance and preparation from the (co)supervisor.

### Supervisory team

The supervisory team guides and supports the PhD candidate in publishing and presenting the data both within and outside of Erasmus MC.

### Supervisory team

The supervisory team and the PhD candidate establish agreements for the approach for data archiving. The PhD candidate is responsible for diligently archiving the data and syntax of their own research component and for transferring its management upon completion of the research. Support for meticulous archiving can be sought from Research Suite.

### (Co)supervisor(s)

The (co)supervisor may only withdraw as (co)supervisor in exceptional circumstances, providing reasons for doing so. The (co)supervisor shall promptly notify the PhD candidate, the other (co)supervisors, and the dean of this decision.



## 4. THEME: FINAL PHASE

### PhD candidate

The PhD candidate is responsible for writing the introduction and discussion in the doctoral thesis.

### PhD candidate

### First supervisor

The PhD candidate presents the entire doctoral thesis or sections of it to the first supervisor, incorporates any changes agreed-upon with the supervisor, and subsequently submits the doctoral thesis for approval.

### First supervisor

The first supervisor ensures that the doctoral thesis complies with the requirements established by generally accepted academic standards for a doctoral thesis.

### Supervisory team

The supervisory team examines the content of the doctoral thesis, evaluates the entire submitted doctoral thesis or its sections, and assesses its alignment with the requirements for a doctoral thesis as established by the first supervisor for the purpose of obtaining the doctoral degree.

### First supervisor

The first supervisor, either alone or in collaboration with the (co)supervisor(s), submits a proposal for the of the assessment committee and doctoral committee members to the dean.

### First supervisor

The first supervisor assesses the results of the plagiarism scan on the doctoral thesis conducted by the Medical Library.

### (Co)supervisor(s)

The (co)supervisor(s) support(s) the PhD candidate in preparing for the defense.

## SUB-THEME: PROPOSITIONS

### PhD candidate

The PhD candidate is responsible for formulating the propositions in the doctoral thesis.

### PhD candidate

The PhD candidate promptly submits the propositions to the first supervisor as soon as possible after the doctoral thesis is approved as a doctoral thesis.

### First supervisor

The first supervisor assesses the quality of the propositions and determines whether they are defensible.

### First supervisor

The first supervisor informs the PhD candidate in writing whether they consider the propositions defensible and notifies the Doctorate Board at Erasmus University Rotterdam.

# ERASMUS MC EFFECTIVE SUPERVISOR – PHD CANDIDATE INTERACTION: A BIDIRECTIONAL PROCESS



## BE PROFESSIONAL



### Supervisors

All PhD candidates are different, with their own individual story, cultural background, competences and needs. Being a supervisor is a demanding job. There is no fixed template for supervision and it is important to develop your supervisory skills, for example by means of a supervision course (for example, Starting supervision in science) Keep an open mind and try to adapt to the needs of the PhD candidate. Take into consideration that the PhD candidate may be dependent on the supervisor for his/her/their future career. Co-supervision can be challenging. Ensure that roles and responsibilities with respect to supervision are properly defined and that you come to a joint view on the process so that the PhD candidate is not left in a quandary.



### PhD candidate

All supervisors are unique with their strengths and weaknesses and supervision style. Consequently, you may need to keep an open mind and try to adapt to the needs of your supervisor. If something bothers you, address it to your supervisors. Being a PhD candidate can be hard. Networking and learning from your peers can help you develop your skills and competences.

## BE COMMITTED



### Supervisors

Doing a PhD project is a lengthy process that requires long-term commitment from both sides. PhD candidates need to feel that you care about the project's progress and outcome. Even if the project is meant to develop the candidate's competences, you are also involved in this journey, and your input on the project, topic or execution of the research is essential. It is necessary that you take responsibility for the project. Be up to date and collect material with which you can give your PhD candidate valuable scientific input. Make sure that the number of PhD candidates that you supervise is feasible. The number of PhD candidates you can actively supervise is limited by your own availability.



### PhD candidate

The PhD journey will be lengthy and not always easy. Your PhD journey will have ups and downs and your motivation may fluctuate. During your journey it is important to stay committed to your goal. If things are tough, always remember that you don't have to do it all on your own. Carry on and don't hesitate to talk to your peers, colleagues or your supervisors. You could also consider talking to someone at Erasmus MC Graduate School or Promeras.

## BE AVAILABLE



### Supervisors

Being available regularly is key to the success of the project. You are expected to be sufficiently available to the PhD candidate. Make sure to be well prepared when meeting the PhD candidate. Regularly talk to the PhD candidate to check how he/she/they are doing and if they need your support on a certain matter. Consider that, due to personal circumstances, individual PhD candidates may have different needs/ restrictions, e.g., in terms of meeting hours. Please note that contact moments with a PhD candidate should be limited to office hours, unless you have discussed and agreed otherwise.



### PhD candidate

The success of your project is a joint responsibility. It is primarily the responsibility of the PhD candidate to take initiatives in planning meetings. Since it is your PhD project, you are going to be the first author in (at least some of) the articles in your thesis. Therefore, it is also your responsibility to take the lead in certain activities, e.g., arrange meetings with your supervisors, and actively contribute to the decision-making within your project. Being well prepared when meeting with your supervisor, and ensuring that your supervisor is prepared too, will have a positive impact on your collaboration. Make sure that you get the time you need from your supervisor, but be considerate of the restrictions and needs of your supervisors, e.g. in terms of meeting hours. Only contact your supervisor within office hours, unless you have discussed and agreed otherwise.

## BE CONSISTENT AND CLEAR



### Supervisors

Consistency and clarity are important factors in the PhD journey. For example, the research progress and planning should be frequently addressed. In addition, it is crucial to be open about your expectations regarding mutual roles and responsibilities. Doing research is, by definition, chartering unknown territory. Thus, it is unavoidable that the research evolves, including the supervisor's view of the next step(s). Remember what you say and advise and make sure that important decisions, agreements or topics are being documented by either you or the PhD candidate.



### PhD candidate

Being honest about your progress and expressing your expectations openly to your supervisors is key to the success of your PhD project. It is important to be transparent and honest about your research progress and struggles. For instance, prepare the meeting with your supervisor by sending him/her/them a list of discussion points beforehand. 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



### Supervisors

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.

Ensure that the PhD candidate knows what, in terms of thesis content, is sufficient to graduate, and that the writing of the chapters / articles is realistic within the designated time / contract period. Reviewing articles and the thesis timely will be appreciated.



### PhD candidate

Planning is one of the more challenging things to do in research and the original plan is almost certainly going to change. Make sure to start early, within the first 3 months of the project, to prepare your training and supervision plan (TSP). Regularly discuss the TSP and what steps next to take with your supervisors. Discuss short-term goals with your supervisor and adjust the TSP if necessary. And don't forget to celebrate your successes, small or big.

## BE WILLING TO RECEIVE FEEDBACK



### Supervisors

In order for any professional relationship to work, feedback must be bidirectional. You should expect feedback from the PhD candidate just as the latter expects it from you. Be open to the feedback you receive and take it seriously. If no feedback is given, ask for it. What does the candidate need or like to change? You are encouraged to do so a couple of times a year, but in any case, during the yearly progress meeting with the PhD candidate.



### PhD candidate

Receiving feedback and implementing it accordingly will help your progress. Remember that feedback is meant to help you and is not targeted against you as a person. Feedback is needed to advance your project. If it is not forthcoming, ask for it and use the feedback to your best advantage. Don't be afraid to ask for feedback early; this prevents you and your supervisor from going in separate directions. Annual appraisals are ideally suitable for feedback, but of course it can also be asked for in between. If you experience the feedback as unhelpful, reflect on it for a while (with others) and discuss it with your supervisor in a professional way.

## BE WILLING TO GIVE FEEDBACK



### Supervisors

A PhD candidate needs regular feedback that must be professional, objective, constructive, and balanced. Feedback may have a significant (emotional) impact on the PhD candidate. Thus you should be cautious in choosing where, when, and how to give feedback, especially when the feedback is person-oriented and would not benefit others. 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. When providing a PhD candidate with feedback, it is important to consider the cultural/ethnic/gender/etc. variation in the research group and employ language that is inclusive and not hurtful to people with different backgrounds and traditions. Positive feedback is as important as critical comments.



### PhD candidate

In addition to being willing to receive feedback, giving feedback is also important. Positive feedback is as important as critical comments. You can help your supervisors by giving open feedback about their supervision, always with respect and consideration. Feedback may have a significant (emotional) impact on the receiver of the feedback. Thus you should be cautious in choosing where, when, and how to give feedback, especially when the feedback is person-oriented and would not benefit others. Annual appraisals are ideally suitable for feedback, but of course it can also be given in between. Make sure that you are well prepared when you provide your feedback, explain your points and give examples.

# ERASMUS MC POLICY ON DIGITAL AND PRINTED THESES



**Sustainability is becoming increasingly important within Erasmus MC. In this context, Erasmus MC has drawn up a policy regarding paper and digital theses and the reimbursement thereof. The policy below applies to all types of PhD candidates.**

## Mandatory rules

- The PhD candidate provides a minimum of 22 paper dissertations:
  - 7 paper copies for the Beadle's Office;
  - 1 paper copy per Doctoral Committee member, consisting of a minimum of 5 members. The PhD candidate is required to provide each committee member with a paper copy of the thesis;
  - 10 paper copies to bring to the defense ceremony.

## Guidelines

- The PhD candidate shall provide each member of the supervisory team with a paper version of the thesis, unless other arrangements are made between the PhD candidate and the supervisory team.
- The PhD candidate makes 1 paper version of the thesis available to the department and sends a digital version to the entire department. The paper version is intended as a viewing copy for all colleagues. The PhD candidate, in consultation with the supervisory team, determines whether specific colleagues in the department should receive a paper version.
- Colleagues from other departments within Erasmus MC and peers outside Erasmus MC will receive a digital version of the thesis, unless the PhD candidate and/or supervisors deem it necessary to provide a paper version to specific individuals. Supervisors cannot oblige PhD candidates to provide a paper thesis to third parties; this takes place in consultation with the PhD candidate.
- The PhD candidate decides on the number of printed theses for his/her social network (family, friends, acquaintances).

## Thesis reimbursement

- All PhD candidates are eligible for reimbursement of their thesis production costs up to 750 euros (lumpsum). The reimbursement applies to both the design and production costs of a digital version and the printing costs of paper versions.
- The reimbursement can only be used for the design and production of a digital version or the printing costs of paper versions. It cannot be used for other purposes.
- Any additional printing costs for the required minimum number of paper theses will be reimbursed by the department at all times.
- If the supervisory team or the department head requests the PhD candidate, on top of the mandatory minimum paper versions, to provide the thesis in paper version to third parties, the department is responsible for reimbursing any additional costs.
- The PhD candidate is responsible for additional printing costs of paper versions of the dissertation intended for his/her social network.
- The reimbursement must be submitted within three calendar months of the promotion date.
- Information regarding the dissertation reimbursement procedure is available on STiP (Student Information Portal).

# GET IN TOUCH



Do you have a question? Don't hesitate to see or contact us:

✉ [graduateschool@erasmusmc.nl](mailto:graduateschool@erasmusmc.nl)

**Walk-in hours for PhD candidates and supervisors:**

Do you have a question and can't you find the answer on the website, STiP or Agora? Visit us during the Walk-in hours for advice.

Every Monday from 10am - 12pm in NA-2016.