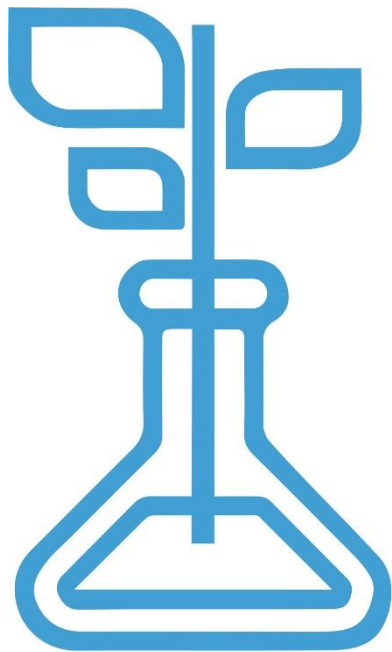


Research Internships (Medical) Biology

Guide for Supervisors



EDUCATION
iNSTITUTE
BiOSciENCES

Education better, together

Radboud University



Content

1. General information	3
2. Internship	4
3. Internship coordinators and study advisors.....	6
Appendix 1: Table 1: Overview number of EC and length per internship	7
Appendix 2: Non-disclosure agreement	8
Appendix 3: Template internship proposal	9
Appendix 4: Preliminaries	11
Appendix 5: Dutch grading system	13
Appendix 6: Mails sent when thesis is uploaded by student.....	14

1. General information

Radboud University offers a three-year Bachelor programme in Biology, which can be followed by a 2-year Master programme in Biology or Medical Biology; all offered and organized by the education institute Biosciences. During the above-mentioned programmes, students have to do several internships, i.e. one Bachelor internship and two Master internships. The current guide provides supervisors with an overview of the rules and guidelines for internships falling under one of the Bachelor ([Bachelor course guide](#)) or Master programmes ([Master course guide](#)) offered by the education institute Biosciences.

An internship aims to strengthen the qualifications of the candidate in the area of independent academic research and to prepare the candidate for a future professional career. During an internship, a student learns how to answer a (medical) biological research question by performing scientific research, e.g. consisting of labwork, fieldwork and/or data analyses. Mandatory products of these internships include a written report and an oral presentation, providing details on the problem definition, research methods, results, conclusions and a discussion putting the results in the context of relevant scientific and societal developments. The Bachelor internship takes approximately 2 months (12 EC), and the two Master internships take approximately 6 months each (36 EC). This period includes theoretical and practical work, and the writing of the report. A Master research internship can be expanded with an extra 6 EC (or for two internships, 3 EC each) without permission of the examination board, provided that the examiner and daily supervisor agree. The Bachelor internship can be expanded with a maximum of 3 EC.

There are three exceptions in the length and the number of EC of Master internships ([Appendix 1](#)):

- The first research internship of the specialisations *Science in Society* (SiS) and *Science, Management and Innovation* (SMI) are 5.5 months (33 EC);
- The research internships for the education specialisation and for the specialisation *Transnational ecosystem-based Water Management* are 5 months (30 EC);
- In the specialisation *Human Biology*, the two Master internships can be merged into a single internship of 10 months (60 EC), which cannot be expanded with 6 EC.

2. Internship

Students have to search a fitting internship themselves, based on their interests in the Biology programme. Once a research topic and/or supervisor is identified, students will contact the potential supervisor, optionally supported by [internship coordinators](#) and [study advisors](#). Two types of internships are distinguished, i.e. either an *internal* internship at the Radboud campus (e.g. Radboud, FNWI, RadboudUMC, RIBES, Donders Institute), or an *external* internship at an institute, company or another university in The Netherlands or abroad.

In the first meeting with the student, it is essential to discuss their internship proposal ([Appendix 3](#)) and preliminaries ([Appendix 4](#)). Upon agreement of the internship, students have to hand in an internship proposal in Osiris Case. The internship coordinators will assess the internship proposal based on four criteria laid down the Education and Examination Regulation ([EER](#)):

- The project answers a research question in the field of (medical) biology;
- The project includes fieldwork, labwork and/or data analyses;
- The project covers a specified amount of time justified by the number of EC applicable;
- The project results will be described in an individual report and presented in an oral presentation.

The report should be written individually in one of the following two formats: 1) a report-format or 2) an article-format that is commonly used for scientific papers in your field. In principle, the report should contain a/an:

1. Summary;
2. Introduction;
3. Materials and methods;
4. Results;
5. Discussion;
6. Literature.

As a bare minimum, the student has to write a first version of the report and a revised (second) version. General guidelines how to write a report and prepare an oral presentation are available via this link: <https://www.ru.nl/courseguides/science/bachelor/bachelor-biology-0/general-information/skills-guidelines-rubrics/>.

In some cases, the student has to work with confidential data or material. In such a case, the institution that offers the internship can request the student to sign a non-disclosure agreement. More information on non-disclosure agreements can be found in [Appendix 2: Non-disclosure agreement](#).

Researchers can be involved in different ways in the guidance and supervision of an internship. According to the policy of the Faculty of Science (FNWI), two examiners must always be involved in the evaluation of an internship. Below is an overview of the different roles and levels of guidance.

Role	Who?	Tasks	Indicative contact frequency		
			BSc	MSc 1	MSc 2
Daily supervisor	PhD student, (senior) technician, postdoc, assistant, associate or full professor	Providing instructions regarding experiments, methods, techniques and analyses. Global instructions report and presentation	Daily	2-3 days a week	Weekly
First examiner ¹	FNWI approved examiner ²	Finalizing analyses, report and presentation. Grading internship, report and presentation	Weekly	Bi-weekly	Monthly
Second reader	Portfolio mentor, FNWI approved examiner ²	Grading report and presentation	2-3 hours	2-3 hours	2-3 hours

¹: The first examiner can be the same researcher as the daily supervisor, provided that the daily supervisor is registered as an FNWI approved examiner. Assistant, associate and full professors employed at another Dutch university can act as first examiner of external internships, provided they have a UTQ. The first examiner always consults other (external or daily) supervisors before grading the internship.

²: FNWI approved examiners are assistant, associate or full professors approved by the examination board Biology. In exceptional cases, postdocs with a UTQ can be approved as FNWI examiner.

Of note, when you are approved as an examiner and are not listed in Osiris Case, please contact edu.coord-science@ru.nl. If you want to know whether you are an approved examiner at FNWI or if you have any other questions regarding your role as external supervisor, please contact the internship coordinators (internship.biosciences@ru.nl).

Half-way through the internship, a midterm evaluation should be scheduled with the daily supervisor and/or first examiner to evaluate the student's progress. During this meeting, the supervisors must give an indication of the performance of the student. For example, the supervisors can identify techniques or academic skills the student should improve during the last period of your internship. The internship grading form in the course guide ([Form Bachelor](#) and [Form Master](#)) can be used as a guideline for the mid-term evaluation.

At the end of the internship, a student should deliver a written report and an oral presentation. These two products and the student's research must be graded using the RU-grading form ([Form Bachelor](#) and [Form Master](#)) by the first examiner. The first examiner can be advised by the daily supervisor and/or external supervisor. When the student submits their final report in thesissubmission, the first examiner will receive four emails within 24-48 hours ([Appendix 6](#)):

1. An email of 'Onderwijscentrum FNWI' containing the student's final report (PDF) and testimonial.
2. An email of 'Onderwijscentrum FNWI' containing a plagiarism check of the student's final report.
3. An email of 'Onderwijscentrum FNWI' referring to a survey-link for the first examiner to evaluate the student's internship, report and presentation.
4. An email of 'Onderwijscentrum FNWI' referring to a survey-link for the second reader to evaluate the student's report and presentation.

Importantly, the first examiner has to forward two emails, i.e. numbers 1 and 4, to the second reader. The first examiner grades the student's research, report and oral presentation via the link in mail 2 ([Appendix 5](#) & Internship Forms: [Form Bachelor](#) and [Form Master](#)). The second reader independently grades the student's report using the link in mail 4. If the 2nd reader attended the oral presentation, the presentation can also be graded (optional). The grades of the examiner and second reader cannot differ by more than 1.0 point, else the first examiner discusses with the second reader to reach a consensus.

3. Internship coordinators and study advisors

Internship coordinators

Laura Vermeulen and Tina Reilink are the internship coordinators of the education institute Biosciences. You can contact us if you have any questions regarding:

- Internships or internship proposals.
- Procedural issues, e.g. concerning non-disclosure agreements, internship proposal approval, the mid-term evaluation or the grading process;
- The examiners-list in Osiris Cases.
- Suggestions or ideas to improve the organisation or provision of information concerning bachelor or master internships.

When you have an internship vacancy which you want to place on the [Biosciences posterboard](#), contact us (Tina Reilink & Laura Vermeulen) by sending a mail to: internship.biosciences@ru.nl

Study advisors

You can contact one of the study advisors in case of concerns about the student's wellbeing.

Bachelor

-Sanne Vosters (Sanne.Vosters@science.ru.nl)

-Nol Vermeulen (Nol.Vermeulen@science.ru.nl)

Master Biology

-Conny Mooren (Conny.Mooren@science.ru.nl)

Master Medical Biology

-Monica Terhal (Monica.Terhal@science.ru.nl)

Appendix 1: Table 1: Overview number of EC and length per internship

Study programme	Course code	ECS	Hours	Weeks (fulltime 40 hours a week)	Specialisation
Bachelor (medical) Biology	NWI-BB-STAGE	12	336	8-10	All Bachelor students (Medical) Biology
Biology	NWI-BM-STAGE1, MSc Bio research internship 1	36	1008	25.2	1 st research internship for specialisations: Adaptive Organisms; Conservation and Restoration Ecology; Microbiology; Water and Environment
	NWI-BM-STAGE2, MSc Bio research internship 2	36	1008	25.2	2 nd research internship for specialisations: Adaptive Organisms; Conservation and Restoration Ecology; Microbiology; Water and Environment
	NWI-TWM22, Master Thesis	30	840	21	Transnational ecosystem-based Water Management. Enrol via Osiris Cases if your first examiner is from the Radboud University.
Medical Biology	NWI-BM-STAGE1, MSc (Med) Bio research internship 2	36	1008	25.2	1 st research internship for specialisations: Human Biology; Medical Epigenomics; Neurobiology
	NWI-BM-STAGE2, MSc (Med) Bio research internship 2	36	1008	25.2	2 nd research internship for specialisations: Human Biology; Medical Epigenomics; Neurobiology
	NWI-BM-STAGE-HB	60	1680	42	MSc Human Biology internship (Pilot 2021-2022)

Appendix 2: Non-disclosure agreement

When an internship and/or the thesis is confidential, the content cannot be shared by other parties and therefore the student must have signed a Non-Disclosure Agreement (NDA). When the student needs to upload the internship report/thesis, they can select in the submission whether the report/thesis is part of an NDA or not. If yes, the report/thesis is stored confidentially on the faculty servers and no plagiarism check is performed.

When the company/university at which the student is doing their internship/thesis does not agree with storage on the faculty servers, a 'Declaration of storage of thesis for Review committee' must be uploaded instead of the report/thesis. In this form, the company/university declares that the thesis/report will be stored for 5 years and will only be (confidentially) shared for possible review by the Examination Board. This declaration can be found under 'Forms' on Radboudnet, FNWI, or you can ask the internship coordinators to send you a copy (internship.biosciences@ru.nl).

Appendix 3: Template internship proposal

Template internship proposal (maximum: 2-A4)

Title of your internship:

Student name:

Student number:

Department:

ECs:

Start date:

End date:

Examiner*:

Email:

Phone number:

Daily Supervisor:

Email:

Phone number:

Second reader*..

Email:

*Definitions of an examiner, second reader and daily supervisor

Examiner (first supervisor in Osiris Cases)	<i>(Assistant/Associate) Professor, who is involved in the supervision and guidance of your complete internship and is an examiner associated with the (Medical) Biology programme of the Radboud University.</i>
Second reader (second supervisor in Osiris Cases)	<i>An examiner associated with the (Medical) Biology programme of the Radboud University, and who will read and grade your report and presentation.</i>
Daily supervisor (External supervisor in Osiris Cases)	<i>A post-doc, scientific staff member and/or PhD-student involved in the supervision and guidance of your internship.</i>

Introduction

Type a short introduction: what, why, context.

Research question(s)/hypothesis(es)

Question/hypothesis 1 (&2, 3 etc.)

Methods

Describe your methods (Will you use existing data (how)? Will you completely create your own data (how)?

Special agreements (optional)

(For instance, health and safety (e.g. protective clothing), courses, leave etc.)

Global Time schedule:

Date	Description of activities
Xxxxx	Start internship
XXXXX	Mid-term evaluation
Xxxxx	Handing in 1 st draft of report
Xxxxx	Handing in final version of report
Xxxxx	Presentation

Appendix 4: Preliminaries

1. Content of the research

- What is the core question of the research within the internship?
- In which way is the internship part of the ongoing research of the department?

2. Research methods

- Which research techniques will be used?
- Which other specific research methods will be used?

3. Duration of the internship

- What is the time span of the practical work?
- What is the time span of the theoretical work?

4. Schedule

How much time is reserved for:

- studying literature and preparations;
- practical work;
- writing your report?

5. Time for supervision

- How intensive and in which way will the student be supervised?
- If there is more than one supervisor: how are the tasks divided?

6. Progress consultations

- How often will there be discussions between the student and the supervisor on the student's progress?
- What is discussed exactly?
- When will there be a mid-term evaluation?

7. Evaluation of the practical component

- Which items make up the practical component of the internship?
- How is the assessment of the practical work incorporated in the final mark?

8. Working hours

- What does a typical day in the lab look like?
- Are the working hours fixed or flexible?

9. Working environment and facilities

- Will the student have a workplace?
- Are there any risks or safety issues that should be kept in mind?
- Can the student use computer facilities?

10. Completing the report and final presentation

- How much time is available for the completion of the report once the student has finished the practical work?
- When will the final presentation take place?

Appendix 5: Dutch grading system

The Dutch grading system differs from international standards. More information about the conversion can be found on the website of the RU:

<https://www.ru.nl/english/education/masters-programmes/international-masters-students/admission-and-enrolment/conversion-international-grades/>

Appendix 6: Mails sent when thesis is uploaded by student

Mail 1

Dear XX,

Student XX (sXX) has uploaded the final report for the internship (or thesis) with course code NWI-BM-STAGE1, under the name "XX".

According to our administration you act as the examiner of this internship (or thesis). Today you will receive 3 more emails to start the evaluation of this internship (or thesis). In this email we will explain the actions that should be taken. Since the process is automated it is crucial that all steps in the process are followed.

Email subject: Action to be taken:

Evaluation process 2 -

Documents Three documents are attached to this email; the internship report (or thesis), the plagiarism report, and the testimonium for the registration of the grade. If the attachments are too large for your inbox, this email will not reach you.

In that case please access the file via

<https://thesissubmission.science.ru.nl/>

Evaluation process 3 -

Link evaluation form

examiner Use the link in this email to the online form to evaluate the student's internship (or thesis). The link will expire after one month, after which you will receive a reminder with a new link.

Evaluation process 4 -

Link evaluation form

second/external reviewer Forward the link in this email to the online evaluation form to the second reviewer. Attach the internship report (or thesis). In case you do not know who the second reviewer is, please ask the student.

Copy of evaluation Once you have determined the final grade, please include it in the testimonium and hand it in at the Student Information Point (HG00.832) or via email (onderwijsadministratie@science.ru.nl).

Copy of evaluation

AND

Copy of evaluation

second reviewer If your own assessment deviates from that of the second reviewer by 1 grade point or more, please contact the second reviewer to discuss your evaluations. Once you have determined the final grade, please include it in the testimonium and hand it in at the Student Information Point (HG00.832) or via email (onderwijsadministratie@science.ru.nl).

Kind regards,

The Education Centre

You can access all forms and documents regarding an internship through one of the following ways:

- the web: <https://dossiers.science.ru.nl> . Log in using your Science account. Then go to workspace spibdossier (left menu).
- the network drive: [\\spibdossier-srv.science.ru.nl\spibdossier](https://wiki.cncz.science.ru.nl/Netwerkschijf) . For instructions on accessing a network drive, see <https://wiki.cncz.science.ru.nl/Netwerkschijf>

Both routes are only available from the RU-network (on campus or via VPN).

Visit Radboudnet for a complete overview of the SPIB internship procedure.

Mail 2

Dear XX,

Please find attached to this email the internship report (or thesis), the plagiarism report, and the testimonium for the registration of the grade.

Once you have determined the final grade, please include it in the testimonium and hand it in at the Student Information Point (HG00.832) or via email (onderwijsadministratie@science.ru.nl).

Kind regards,

The Education Centre

You can access all forms and documents regarding an internship through one of the following ways:

- the web: <https://dossiers.science.ru.nl/> . Log in using your Science account. Then go to workspace spibdossier (left menu).
- the network drive: `\\spibdossier-srv.science.ru.nl\spibdossier` . For instructions on accessing a network drive, see <https://wiki.cncz.science.ru.nl/Netwerkschijf>

Both routes are only available from the RU-network (on campus or via VPN).

Visit Radboudnet for a complete overview of the SPIB internship procedure.

Mail 3

Dear XX,

Please use the link provided below to evaluate the research internship of student XX (sXX). The link will expire after one month, after which you will receive a reminder with a new link. The assessment will be saved automatically after submission in the student's spib dossier and you will receive a copy via email. This may take up to 24 hours.

Evaluation form of student XX (sXX) for the research internship with course code NWI-BM-STAGEX:
<https://s7.survey.science.ru.nl/index.php/XX>

You can access all forms and documents regarding the research internship through one of the following ways:

- the web: <https://dossiers.science.ru.nl/> . Log in using your Science account. Then go to workspace spibdossier (left menu).
- the network drive `\\spibdossier-srv.science.ru.nl\spibdossier` . For instructions on accessing a network drive, see <https://wiki.science.ru.nl/cncz/Netwerkschijf>

Both routes are only available from the RU-network (on campus or via VPN). Visit Radboudnet for a complete overview of the SPIB procedure: <https://www.radboudnet.nl/fnwi/education/practical-matters/internships/spib-procedure/>

Kind regards,

The Education Centre

Mail 4

Dear XX,

Please forward the link to the evaluation form, provided below, to the second reviewer and attach the thesis. The link will expire after one month, after which you will receive a reminder with a new link. The assessment will be saved automatically after submission in the student's spib dossier and you will receive a copy via email. This may take up to 24 hours.

Evaluation form of student XX (sXX) for the research internship with course code NWI-BM-STAGEE1:
<https://s7.survey.science.ru.nl/index.php/865439?token=S7HoauC8rFTOrLf&lang=en>

You can access all forms and documents regarding the research internship through one of the following ways:

- the web: <https://dossiers.science.ru.nl/> . Log in using your Science account. Then go to workspace spibdossier (left menu).
- the network drive `\\spibdossier-srv.science.ru.nl\spibdossier` . For instructions on accessing a network drive, see <https://wiki.science.ru.nl/cncz/Netwerkschijf>

Both routes are only available from the RU-network (on campus or via VPN). Visit Radboudnet for a complete overview of the SPIB procedure: <https://www.radboudnet.nl/fnwi/education/practical-matters/internships/spib-procedure/>

Kind regards,

The Education Centre

