



# Individual study plan for postgraduate studies

Reference number

ISP 2022/xxx

Agreement doctoral student

Xxx

Date

2023-08-21

Agreement principal supervisor

Yyy

Date

2023-08-21

Established by Director of third cycle education

Svein Helge Kleiven

Date

2023-10-23

## 1. Basic information

### Doctoral student

Name

Xxx

Civic registration number

XXXXXX-XXXX

Phone number

+XXXXXX

Email address

XXX

Home address

Xxxx

### Organisation

Faculty

KTH Royal Institute of Technology

School

CBH/School of CBH

Specialisation

-- value missing --

Participating departments and/or divisions

Department of Biomedical Engineering and Health Systems, division of Biomedical Imaging, KTH

Department of Clinical Science, Intervention and Technology (CLINTEC), unit of Obstetrics and Gynecology, Karolinska Institutet

Other participating institutes of higher education and organizations

Karolinska Institutet

Utbildningssamarbete/Joint Doctoral Programme:  
MDTE01

### Education

Subject

Medical Technology (MEDICINT)

Admission applies to

Doctoral degree

Date of commencement of studies

20xx-yy-zz

Permanent leave from studies

-- value missing --

Doctoral programme

Joint Doctoral Programme in Medical Technology

Intending to obtain licentiate degree

No

Intending to obtain doctoral degree

Yes, 20xx Autumn

Information about the general study syllabus

KI dnr: 5-58/2020 och 3-225/2017

KTH dnr: V-2020-0695

<https://www.kth.se/ki-kth-doktorand/dokument/blanketter-och-dokument>

The doctoral student has read the general study syllabus

Yes

## 2. Degree of activity and Funding

### 2.1 Time plan

Current rate of study (from Ladok)

Year	Semester	%	Comment
20xx	Autumn	27	The doctoral student has 27% activity at KI beside the 27% activity at KTH, so a total of 54% during Autumn 20xx (= in total 80% activity from 1st of Sept when Xxx started his/her PhD studies).
20xx	Spring	40	
20xx	Autumn	40	

Work achieved so far in % of the requirements for the degree (filled in by the principal supervisor)

Approximately 2.5%

Comment

Courses partly finished, literature study initiated

Total current study period used (%) - Ladok

13.38

Comment

"Total current study period used" does not account for the entire study period since data from KI's Ladok is not included.

## Planned degree of activity

Year	Semester	%	Comment
20xx	Autumn	80	80% starting from 1st of September 80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Spring	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Autumn	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Spring	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Autumn	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Spring	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Autumn	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Spring	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Autumn	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Spring	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring
20xx	Autumn	80	80% project activity divided in two (40% at KTH and 40% at KI) 20% institutionstjänstgöring

## 2.2 Funding

### Current funding (from Ladok)

Year	Semester	%	Form	Comment
20xx	Autumn	100	Doctoral studentship	
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	

### Planned funding (to be filled in by the principal supervisor)

Year	Semester	%	Form	Comment
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	
20xx	Spring	100	Doctoral studentship	
20xx	Autumn	100	Doctoral studentship	Planned PhD defense before September 1.

## 2.3 Departmental duties: to date and planned

Year	Semester	%/days/hrs	Task
20xx	Autumn	20%	Responsible for the laboratory exercise testing the basic principles of Xxx Physics with a simple xxx setup in a xxx for the course xxx Xxx.
20xx	Spring	20%	Responsible for the laboratory exercise testing the basic principles of Xxx Physics with a simple xxx setup in a xxx for the course xxx, and xxx.
20xx	Autumn	20%	Responsible for the laboratory exercise testing the basic principles of Xxx Physics with a simple xxx setup in a xxx for the course xxx Xxx.

## 2.4 Past and present leaves/assignments that constitute grounds for extensions/special reasons

Year	Semester	%/days/hrs	Reason	Description

## 2.5 Available fixed resources

Office space

Yes

Computer

Yes

Other available fixed resources

Access to KTH and KI e-mail, copiers, xxx lab with programmable equipment, mechanical workshop, IT-support, mechanical testing lab, SNIC (Swedish National Infrastructure for Computing), GPU-clusters, 3D-printers.

Comment

## 3. Courses and conferences

### 3.1 Planned courses

Compulsory courses within third-cycle studies

Course code	Course	Comment	HEC	Level	Year	Semester
3134	Basic course in Medical Statistics		3	Third Cycle	20xx	Autumn
C7F5511	Introduction to Doctoral Education at KI		1	Third Cycle	20xx	Autumn
2964	Medical Research Ethics		1.5	Third Cycle	20xx	Spring
FLH3000	Basic Communication and Teaching		3	Third Cycle	20xx	Spring
FAK3137	Theory of Science and Research Method, Technological and Natural Sciences		7.5	Third Cycle	20xx	Spring

Course code	Course	Comment	HEC	Level	Year	Semester
FHN3014	Medical Technology	or FCH3101- Technology and Health for 7 HEC Need to be decided later based on what is interesting for the project	3	Third Cycle	20xx	Autumn
3220	Basic Human Neuroscience		10	Third Cycle	20xx	Autumn
FHK3007	Seminar Course in Technology and Health	The evaluation of this course is based on the participation in scientific seminars which is performed on a continuous basis. The registration period may be changed depending on seminar participation linked with the PhD project.	2.5	Third Cycle	20xx	Spring
Total			31.5			

### Elective courses within third-cycle studies

Course code	Course	Comment	HEC	Level	Year	Semester
CM2019	Ultrasound		7.5	Third Cycle	20xx	Autumn
5255	Early Child Development: Extended Interactions Between Neural Networks, Body and Environment		1.5	Third Cycle	20xx	Spring
FDS3102	Writing Scientific Articles	To be taken during the writing period of the first study. Time period to be defined depending on the progress of the project.	5	Third Cycle		
FLS3104	Visualize your Science	Time period to be defined depending on the progress of the project.	4	Third Cycle		
Total			18.0			

## 3.2 Completed courses

Course code	Course	HEC	Date	Course examiner
FAK3137	Theory of Science and Research Method, Technological and Natural Sciences	7.5	20xx-yy-zz	Till Grüne-Yanoff
FLH3000	Basic Communication and Teaching	3.0	20xx-yy-zz	Ernest Ampadu
Total		10.5		

### 3.2.1 Credited courses

Decision on credited courses equals	Decision on credited courses made by	Decision date	
Course	Crediting based on	Education level	University

Credited as

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Total points credited courses: 0.0

### 3.2.2 Higher education qualification on research level exists

No
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### 3.3 Planned and completed participation at conferences

Year	Date	Name and location of the conference	Type and/or title of any contribution
20xx	xxth July -xxrd August	xxx Congress of International Society of Biomechanics (ISB) and of Japanese Society of Biomechanics (JSB), xxx, Japan	Method to...
20xx	September	20xx IEEE International xxx Symposium   IEEE UFFC, xxx, xxx	Application of...
20xx	July	World Congress of Biomechanics	
		The International Society...	Development of...
		Swedish Society of Biomechanics SSB annual conference	

### 3.4 Planned and completed activities, including international participation

Year	Date	Information
20xx	xxth October	Virtual short course on...

Type of mobility abroad	Country	Duration of stay in weeks

Year	Date	Information
20xx		The Mayo-KI Annual Scientific Research Meeting Two days conference

Type of mobility abroad	Country	Duration of stay in weeks
	Sweden	

Year	Date	Information
		Collaboration with Xxx at...

Type of mobility abroad	Country	Duration of stay in weeks

### 3.5 Planned and completed seminars

Year	Date	Type of seminar
20xx	xxth December	ISP start seminar at KI
20xx	xxth-xxth October	Science in Collaboration, CIMED, KI
20xx	October	Yearly seminar at the School of Engineering Sciences in Chemistry, Biotechnology and Health (CBH)
20xx	December	Half-time review

## 4. Supervision and examination

### 4.1 Principal supervisor (to be filled in by the principal supervisor)

Name	Title
Yyy	Professor
School	Section, unit or equivalent
CBH/School of CBH	Division of...
E-mail	Docent (Reader)/equivalent
x@kth.se	Yes
Completed formal training in supervision/equivalent	
Yes	
KTH does not use this field	

#### Forms of supervision/Plan for supervision

Responsible supervisor at home university. Day to day supervision and weekly supervision meetings. Responsible for updating and follow up of eISP together with the student and co-supervisors. Providing feedback on oral and written work, experimental design, data analysis, ethics approval, and study design. In addition, available for administrative issues and discussion about Master Thesis supervision. Yyy's time expected to be devoted to supervision of Xxx is 6 h / week.

#### Other planned commitments limiting the Principal supervisor's availability

No other planned commitments limiting the supervisor's availability.

### 4.2 Assistant supervisor (to be filled in by the principal supervisor) 1

Name	Title
Yyy1	MD, PhD, Docent
School	Section, unit or equivalent
CBH/School of CBH	Dept. of...
E-mail	Docent (Reader)/equivalent
x@ki.se	Yes
Completed formal training in supervision/equivalent	
Yes	
Current position and employer	
Senior consultant and Medical manager at the...	

Forms of supervision/Plan for supervision

Responsible supervisor at partner university. Regularly planned supervision meetings with all supervisors and Xxx - approximately 2 meetings/semester. Contributing with clinical expertise and guiding Xxx's project (e.g. study design, data analysis) from a clinical perspective with extensive experience in obstetric research. Providing feedback on oral and written work. Yyy1's time expected to be devoted to supervision of Xxx is 0.5 h/week.

Other planned commitments limiting the assistant supervisor's availability

### 4.2 Assistant supervisor (to be filled in by the principal supervisor) 2

Name	Yyy2	Title	MD, PhD, Assistant Professor
School	CBH/School of CBH	Section, unit or equivalent	Center for...
E-mail	x@ki.se	Docent (Reader)/equivalent	No
Completed formal training in supervision/equivalent	Yes		

Current position and employer

Center for...

Forms of supervision/Plan for supervision

Regularly planned supervision meetings with all supervisors and Xxx - approximately 2 meetings/semester. Contributing with clinical expertise and guiding Xxx's project (e.g. study design, data analysis) from a clinical perspective with extensive experience in xxx xxx research. Providing feedback on oral and written work. Yyy2's time expected to be devoted to supervision of Xxx is 1.5 h/week.

Other planned commitments limiting the assistant supervisor's availability

### 4.2 Assistant supervisor (to be filled in by the principal supervisor) 3

Name	Yyy3	Title	Associate Professor
School	CBH/School of CBH	Section, unit or equivalent	Division of...
E-mail	x@kth.se	Docent (Reader)/equivalent	Yes
Completed formal training in supervision/equivalent	Yes		

Current position and employer

Associate Professor,...

Forms of supervision/Plan for supervision

Regularly planned supervision meetings with all supervisors and Xxx - approximately 2 meetings/semester. Contributing with expertise on ... of ... and guiding Xxx's project (e.g. study design, data analysis). Providing feedback on oral and written work. Yyy3's time expected to be devoted to supervision of Xxx is 1 h/week.



Other planned commitments limiting the assistant supervisor's availability

### 4.3 Programme director/Director of studies

Name	Title
Yyy4	Professor
School	Section, unit or equivalent
CBH/School of CBH	Xxxx
E-mail	
olav.rooyackers@ki.se	

### 4.4 Additional persons

Name	Title
Yyy5	Assistant Professor
E-mail	Phone
x@kth.se	xxxxx
Current employment and employer	
Assistant Professor (tenure track) in...	
Role and availability	
Mentor	

### 4.5 Allocation of supervisory contribution

Person	Year	Semester	% of total contribution
Yyy	20xx	Autumn	70
Yyy1	20xx	Autumn	15
Yyy2	20xx	Autumn	10
Yyy3	20xx	Autumn	5

## 5. Thesis

### 5.1 Title of the thesis or doctoral project

Biomechanical modelling and imaging for safer vacuum assisted delivery

### 5.2 Description of thesis or doctoral project

Xx xxxxxx-xxxxxxx xxxxxxxx (XXX), xxxxxxxxxxx xxxxxxxxxxx xx xxxxxxxx xx xxx xxxxxxxxxxx xxxxx xxxxxxxx xx xxxxxxxxxxxxxx xxxxxx xxx xxxxxxx xxxxxxxx. XXX xx xx xxxxxxxxxxxxxx xxxxxxx xxxxxxxx xxx xxxxxxxx xx xxxxxxxx, xxxxx xxxxxxx

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The following studies are planned:

The first study xxxxx xxxxxxx x xxxxxxxxxxx xxxxxx xx xxx XXX xxxxxx, xxxxxxx xxx xxx xxx xxxxxxxxxxx xxxxxxx xx  
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The fourth study xxxxx xxxxx xx xxxxxxx xxxxxxxxxxx-xxxx xxxxx xxxxx xxxxxxxxxxxxxx xx xxxxxx xxxxxx xxxxx xxxxxx  
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Xxxxxxxx (XX, XXXXXX) xx xxx xx xxxxxxxxxxxxxxxx xx xxxxxx xxxxx xxxxxx xxxxxxxx.

### 5.3 Planned form of thesis

Compilation thesis

### 5.4 Research plan for the next 12-month period

Different milestones are planned for this PhD project in the next 12-month period.

Firstly, a context and background study will be completed by the end of October 20xx on the general topic fields of the project (xxx,...).

A literature study of the XXX method will be performed and completed in March 20xx.

Afterwards, a feasibility study of the deformation of the xxx under traction force is performed and an experimental setting is developed building a xxx model of the xxx. This project part will allow the submission of the abstract of the first study for the ISB 20xx by the end of January. The aim is to complete the first study within the first year.

In parallel, the literature review and the discussion around the feasibility and assessment method of xxx xxx damage can be initiated. The goal would be to implement the method for measuring the biomechanical properties of the xxx by performing the first lab tests.

In addition, some discussions with involved researchers can be conducted for the xxx of the xxx and the

strategy for the in silico simulations.

## 5.5 Thesis work in progress

## 5.6 Parts of the thesis/component papers completed

## 5.7 Deviations from previous study plan

# 6. Meetings

## 6.1 Progress meetings

Date	Participants	Comment
20xx-yy-zz	Supervisors + invitation to MTH-email.	Yearly seminar at the School of Engineering Sciences in Chemistry, Biotechnology and Health (CBH)

## 6.2 Supervisory meetings

Date	Participants	Comment
20xx-yy-zz	Yyy2, Yyy1, Yyy, Xxx	Meeting with the clinical team. Separate meeting with the co-supervisors of the clinical team and neuronics team will be organized regularly based on the ongoing stage of the project.
20xx-yy-zz	Yyy, Xxx	Weekly meeting will be organized between the PhD student and the supervisor to keep track of the ongoing work, activity, organization and support.
20xx-yy-zz	Yyy, Yyy3, Yyy2, Xxx	One planned meeting with all the co-supervisors and the supervisor of the PhD project will be organized around two times/semester in order to keep update about the ongoing of the different parts of the project and sharing questions and ideas about the different aspects of the project each one within its expertise field and bringing support to the global PhD project.

# 7. Comments

## 7.1 Doctoral student comments

## 7.2 Principal supervisor comments

## 7.3 Programme director/Director of studies comments

## 7.4 Administrator of third-cycle education comments

## 8. Approvals

8.1 Permits required

Yes

Experiments on animals will be included

No

Ethical trial required

Yes

Experiments on humans will be included

Not specified

Notification of processing of personal data (GDPR) required

Yes

Indicate which approvals have been applied for and granted

*Comment on the form: Enter the approval authority and the registry number of the approval. Add the approval as an attachment.*

## 9. Degree objectives

### Degree of Doctor

**Scope:** A Degree of Doctor is awarded after the third-cycle student has completed a study programme of 240 credits in a subject in which third-cycle teaching is offered.

General Qualifications: Degree of Doctor, The Higher Education Ordinance, Annex 2, Qualifications Ordinance (2006:1053): The connection between the third-cycle studies and the objectives of the Higher Education Ordinance are documented here together with the particular activities planned and realized in order to fulfil each objective. See also the aims stated in the general study syllabus for the third-cycle subject. On each occasion for revision new realized activities should be entered.

### A. Knowledge and understanding – for the Degree of Doctor the third-cycle student shall

A1. Demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field.

#### Activities realized in order to fulfil the objective

Background study and theoretical knowledge on the topics of the research project:

- Basics principles of the xxx physics
- Reading of the reference book xxx
- State of the art of XXX method

Participation in lab meetings for the course of xxx, aiming at using xxx machines in a laboratory or in a clinical environment.

Participation to the Jonasson seminar and Collaboration in Science seminar at KI to get broad knowledge about Medical Technology projects and clinical research thanks to presentations by experts.

**Activities planned in order to fulfil the objective**

Conducting a structured literature study of the XXX method and writing a summary of the relevant studies on XXX which could help the safety assessment.

Conducting a background study on xxxx by discussing with experts (xxx course presentation, meetings with Yyy and short course at the IEEE IUS conference) and on xxx floor dysfunction (literature review and meetings with the KI team).

Writing the first abstract and the first study on the feasibility and the assessment method of xxx deformation by implementing a....

Participation in the Virtual short course on xxx: Basic Principles and Applications with xxx at the 20xx IEEE International xxx Symposium to get knowledge of an expert in the xxx field, especially for...

Taking part in journal clubs at KI related to my own research and the research of others on the clinical side.

Demonstrating broad knowledge and a systematic understanding of the research field when conducting the half-time seminar and thesis defence.

Demonstrating up-to-date knowledge about the focus areas of the research when writing scientific papers and the thesis as well as during the thesis defence.

A2. Demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.

**Activities realized in order to fulfil the objective**

Becoming familiar with the relevant methodologies through discussions with the supervisor and the co-supervisors and research group members (supervisory meetings, Jonasson seminars and KI/KTH activities such as the Collaboration in Science Conference or thesis defences).

Taking a course in xxx to get familiar with the methods of a major part of my research project including lab methodology and clinical safety.

Learning the basic xxx working principles, B-mode and xxx techniques during xxx course labs.

Discussing the methodology used in the writing and the defence of the thesis by attending the thesis defence rehearsal and the real defence of xxx and by attending the seminar lectures on Information searching and source evaluation by the KTH Library.

Participation in the Collaboration in Sciences Conference where researchers and clinicians sum up their general research in a 10 min presentation providing a good idea of scientific methodology.

Attending a seminar from KTH library on how to conduct and write a literature review.

**Activities planned in order to fulfil the objective**

Taking courses in the area of Research Methodology in Technology and Health, Statistics, Medical Technology, Medical Research Ethics, Brain Development and Neurosciences.

Learning ... by Yyy and xxx.

Participation to the Virtual short course on xxx: Basic Principles and Applications with xxx at the 20xx IEEE International xxx Symposium to get the latest knowledge of an expert in the xxx field, especially for...

Laboratory explanation sessions with Yyy about xxx development and xxx method.

Attending the 20xx IEEE International xxx Conference and the XXIX Congress of International Society of Biomechanics (ISB) to learn about the latest methodologies and developments in xxx and yyy.

Discussing the methodologies used in the writing and the defence of the thesis.

**B. Competence and skills – for the Degree of Doctor the third-cycle student shall**

B1. Demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically.

**Activities realized in order to fulfil the objective**

Discussing with the supervisor and the co-supervisors to target the different parts of the project, analyzing the current situation of xxx dysfunction studies and xxx model and proposing a methodology to conduct the research.

Taking part in the laboratory sessions in the xxx course and thereby critically analysing and discussing issues related to my own research and the research of others.

**Activities planned in order to fulfil the objective**

Writing a literature review of XXX safety, providing relevant analysis and drawing a conclusion to be included in the first manuscript.

Taking part in the Seminar Course in Technology and Health to critically analyse and discuss issues related to my own research and the research of others.

Taking part in journal clubs at KI related to my own research and the research of others on the clinical side.

Preparing the start ISP presentation at KI summarizing the overall PhD project and the first ideas.

Writing the abstract and the manuscript of the first study within one year about the feasibility of xxx deformations during the XXX procedure.

Learning to draw relevant conclusions from the research results for the xxx xxx, the xxx FEM and the xxx experimental setting in dialogue with the supervisor and other colleagues.

Writing a literature review of the research field for the half-time review and the thesis defence.

Planning and conducting the Mid-year seminar in 20xx.

B2. Demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work.

**Activities realized in order to fulfil the objective**

Discussing with the supervisor and the co-supervisors to target the different parts of the project, formulate research questions, hypotheses and make methodological choices for each part of the project.

Creating a Gantt chart of the first year of the PhD project and discussing the entire project goal and milestones.

**Activities planned in order to fulfil the objective**

Taking an active part in as many phases of the research project phases as possible: planning, execution, analysis, and writing.

Developing project leadership skills by supervising a master's thesis on a part of the PhD project about the feasibility of pelvic floor damage assessment using xxx.

Critically reviewing earlier studies in the field (especially in XXX) when writing manuscripts (particularly the first study) and the thesis.

Learning peer-review from the supervisor and co-supervisors, the ISP starting presentation and courses work including part of the thesis project.

B3. Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research.

**Activities realized in order to fulfil the objective**

**Activities planned in order to fulfil the objective**

Contributing significantly to the formation of knowledge about the safety of the XXX process and the simulation and imaging tools in xxx through my research.

Contextualizing my own research within the field when writing and defending the thesis.

B4. Demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general.

**Activities realized in order to fulfil the objective**

Being able to lead a meeting with the supervisor and the co-supervisors to draw a plan for the PhD project and being able to express my opinion on the different parts of the thesis.

Attending a seminar from KTH library on how to conduct and write a literature review.

**Activities planned in order to fulfil the objective**

Presenting my research at the start ISP presentation at KI.

Presenting my research at the ISB Conference in August 20xx.

Teaching xxx laboratory sessions to different groups of students (Bachelor's and Master's degree students).

Supervising a master's degree student for a master's degree project on the feasibility of the xxx damage assessment using xxx.

Producing Conference posters on my first study.

Presenting my research at supervisor and co-supervisors meetings.

Attending courses about how to write scientific articles and how to present scientific results.

Writing manuscripts about the research.

B5. Demonstrate the ability to identify the need for further knowledge.

**Activities realized in order to fulfil the objective**

Having dialogues with other researchers in the field during the Collaboration in Sciences Conference at KI.

Having weekly dialogues with the supervisor, co-supervisors and other group members.

Attending Jonasson seminars about current research within the medical imaging field.

**Activities planned in order to fulfil the objective**

Having dialogues with other researchers in the field during Conferences.

Having weekly dialogues with the supervisor, co-supervisors and other group members.

Planning meetings with all the co-supervisors and the supervisor approximately twice every semester to present the work done so far in the different parts, to discuss perspectives and to identify possible help and collaboration between the different competencies.

Writing and defending the thesis.

Attending doctoral courses in Medical Statistics, Early Child Development, Medical Research Ethics, Theory of Science and Research Method, Medical Technology and Neurosciences.

Planning annual follow-ups and revisions of the individual study plan.

Conducting the half-time seminar when presenting and discussing plans for remaining studies.



B6. Demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

**Activities realized in order to fulfil the objective**

Actively contributing to discussions during co-supervisors and supervisor meetings

Actively contributing to discussions during Jonasson seminars and the Collaboration in Sciences Conference.

Demonstrating social commitment and an awareness of sustainable development.

**Activities planned in order to fulfil the objective**

Taking a course in Basic Communication and Teaching.

Teaching the laboratory sessions in ultrasound imaging at bachelor and master levels.

Discussing future career plans with the mentor.

Interacting with students to recruit a master's degree student for a master's thesis within the PhD project and collaborating with this student during the master's thesis time.

Actively contributing to discussions during Conferences, research seminars and journal clubs at KI.

Demonstrating social commitment and an awareness of sustainable development.

Attending the Digitalize in Stockholm annual Conference.

**C. Judgement and approach – for the Degree of Doctor the third-cycle student shall**

C1. Demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics.

**Activities realized in order to fulfil the objective**

Following the seminar from KTH Library about conducting and writing a literature review (database, how to manage references, how to select relevant sources,...).

Starting using EndNote

Taking the course Ultrasound with an introduction to quality assurance with medical imaging tools.

Having dialogues with the supervisor and other collaborators on the ethical aspects of the research.

**Activities planned in order to fulfil the objective**

Taking the course Introduction to Doctoral Education at KI with one part on reference management and plagiarism.

Taking the course Medical Research Ethics and Theory of Science and Research Method, Technological and Natural Sciences.

Developing an open-minded, investigative, and inquisitive approach through discussion with the supervisor and colleagues.

Discussing with the supervisor about the application for ethical approval of study 1 on the feasibility of xxx xxx deformation assessment with the xxx xxx.

Developing critical reflection and creative thinking skills by discussing with other researchers during meetings and Conferences.

Demonstrating intellectual independence by writing and discussing the thesis.

C2. Demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

**Activities realized in order to fulfil the objective**

Attending the Jonasson seminars.

Attending the thesis defence rehearsal and the real defence of Mehdi Astaraki.

Attending the Collaboration in Sciences Conference (talks on "Creativity" and "How to be successful").

**Activities planned in order to fulfil the objective**

Taking the course Medical Research Ethics, Theory of Science and Research Method, Technological and Natural Sciences and Seminar Course in Technology and Health.

Attending group meetings and activities with the division of medical imaging.

Attending the Digitalize in Stockholm annual Conference.

Discussing with the supervisor and the mentor about research and industry world and global societal challenges.

Attending journal club at KI and discussing current society challenges.

Discussing and reflecting on the responsibility of researchers regarding research findings and the interpretation and dissemination of those when writing and defending the thesis.

**KTH sustainability goal**

Demonstrate the ability to contribute to a sustainable societal development toward a gender equal, inclusive and climate neutral society with knowledge and skills.

**Activities realized in order to fulfil the objective**

Attending the conference Collaboration in Sciences at KI focusing on diversity in collaborations and acting for sustainable societal development.

**Activities planned in order to fulfil the objective**

Taking the course Medical Technology with a module about Sustainability in technology & health and a workshop on JML

Following the recruiting process of a master's degree student for a master's thesis applying the gender equality, diversity and equal conditions policy of KTH.

PhD project oriented towards a sustainable society paying attention to clinical personal data collection, use and storage, gender equity, and inclusion in knowledge sharing. This PhD project is oriented on improving the quality of ...

Attending seminars and Conferences paying attention to the sustainability aspects of the talks and ideas as well as sharing ideas about sustainable societal development during those events.

## 10. Attachments

Finansieringsplan xxx