



This document is a translation from Swedish. In the event of any discrepancy, the Swedish version has preferential interpretation.

COLLABORATION AGREEMENT ON DOCTORAL EDUCATION LEADING TO A JOINT DOCTORATE IN MEDICAL TECHNOLOGY

This agreement (“**the Agreement**”) has been entered into between

Karolinska Institutet, org.no 202100-2973, 171 77 Stockholm, (“**KI**”), and

The Royal Institute of Technology, org.no 202100-3054, 100 44 Stockholm, (“**KTH**”).

KI and KTH are herein under referred to individually as “**Party**” and jointly as “**the Parties**”.

The agreement derives from the Higher Education SFS 1992:1434 and the Higher Education Ordinance SFS 1993:100 and the Parties’ steering documents on doctoral education.

1 Background

Both Parties perform research in medical technology, but with different profiles, and have existing research collaborations. The parties have identified the need for collaboration on doctoral education in the field of medical technology and have decided to offer a joint programme towards a joint doctorate (“**the Programme**”) in accordance with the terms and conditions as set forth in this Agreement.

The parties have a joint responsibility for all components of the Programme, besides the courses that according to Annex 1 should be organized by either KI or KTH.

2 Definitions

The terminology used in this Agreement is that as defined in the Higher Education Act (1992:1434) and the Higher Education Ordinance (1993:100). In addition, the Agreement uses the following term as defined below:

Home University

Refers to the Party that has recruited a doctoral student and that has arranged funding for the project to which the student has been admitted under the Programme. The Home University has coordinating responsibility for the student.

3 Programme conditions

The Parties have given a guarantee that all parts of the Programme will be based on science and tried and trusted experience, and that the education and training offered will be of a high standard throughout.

3.1 Credits

The programme comprises a total of 240 HE credits, of which at least 60 will be courses and other credit-bearing activities.

3.2 Content

The content of the Programme has been drawn up jointly by the Parties. Each Party has produced its respective content in accordance with the templates and principles annexed to the Agreement. **Annex 1** details the obligatory courses and credit-bearing activities of the Programme and which Party is to arrange each.

3.3 Financing

Each Party has responsibility for its part of the Programme. The intention is for there to be no transfer of monies.

4 Steering group

4.1 Structure

The Parties shall jointly appoint a Programme Steering Group comprising six (6) members, whereof four faculty representatives and student representatives.

The Steering Group shall prepare common Programme-related matters.

KTH and KI shall appoint two members each to the Steering Group. Each respective student organisation shall appoint student representatives. The members shall choose a chairperson from amongst their number.

The Parties shall jointly ensure administrative support for the Steering Group.

4.2 Role

The roles of the Steering Group are:

- to prepare project proposals and texts for the advertisement of places on the Programme;
- to propose amendments to the present collaboration Agreement on doctoral education in the field of medical technology; and
- to oversee the quality evaluation of the Programme.

Decisions are made in each Party's regular organisations.

5 Admission and registration

5.1 Establishment of doctoral position

Before a doctoral position can be advertised or a doctoral student recruited through other means, an assessment shall be made of the possibility of offering high-standard doctoral education. See **Annex 2**.

5.2 Advertisement

A doctoral position shall be openly advertised at the Home University following its rules and procedures. Advertisements shall include information about how to apply and shall make clear that the Programme is a collaboration between the Parties aiming towards a joint doctoral degree.

The exemptions from the advertising requirement provided in the Higher Education Ordinance (Chapter 7 Section 37) also apply to these doctoral students.

5.3 Eligibility

The general entry requirements are stated in the Higher Education Ordinance (1993:100). Over and above these requirements, there are specific entry requirements in the form of English skills equivalent to a passing grade in Engelska B/Engelska 6 and for the doctoral subject in question as per the relevant general study plan.

5.4 Admission

Decision on admission is made by both Parties jointly after the eligibility has been assessed and selection been made among eligible candidates.

The Home university handles the eligibility assessment and the result of this assessment shall be documented and appended to the admission decision. A student is selected by the Parties in consultation from amongst the applicants who meet the entry requirements and who are otherwise judged able to benefit from the Programme with regard to their maturity and capacity for independent judgement and critical analysis. The applicants' study results from master's courses, independent papers, documented subject knowledge and other documented skills/experience of significance to benefitting from and completing the Programme shall also be taken into account.

Doctoral students shall be LADOK-registered at both Parties.

6 Supervisor and mentor

6.1 Supervisor

Each Party appoints a supervisor in accordance with its own particular rules and procedures.

At least one supervisor per Party is to be appointed for each doctoral student, with one supervisor from the Home University being appointed as principal supervisor. The principal supervisor shall have completed the basic course in doctoral supervision or have the equivalent competence. Ideally, all supervisors shall have this competence.

6.2 Replacement of supervisor

A decision to replace a supervisor in accordance with the Higher Education Ordinance is made by the Party that appointed the supervisor to be replaced. The Parties shall undertake to consult with each other before such a decision is made. When a supervisor is replaced, the individual study plan shall be revised accordingly.

6.3 Mentor

As a complement to the supervisors, doctoral students shall choose an independent person to serve as a mentor during the Programme. Mentors may come from the academic, healthcare, industrial or other sector and shall support the students whenever they require the advice of an independent person.

Doctoral students must choose a mentor within one year of admission, which is to be noted in their individual study plans.

7 Study plans

7.1 General study plan

Doctoral students follow the general study plan for medical science at KI and the general study plan for medical technology at KTH, with the exception of any departures from this principle as per the Agreement.

7.2 Individual study plan (ISP)

7.2.1 Responsibility

After admission to doctoral education, an ISP shall be drawn up for each doctoral student by the principal supervisor at the Home University in consultation with the other supervisors. The ISP shall then be approved by both Parties.

The ISP shall define each Party's commitments and responsibilities.

7.2.2 Study schedule

A proposal for an ISP shall be submitted by a doctoral student and his/her supervisor no later than one month after the commencement of studies. All doctoral students shall have an approved ISP within three months of the commencement of studies.

7.2.3 ISP Seminar

Before a student's ISP can be approved, he/she shall hold an ISP seminar at which he/she presents the research project from his/her own perspective and obtains feedback. The seminar may be held at either KI or KTH in accordance with local procedures.

7.3 Follow-up, update and revision of ISP

7.3.1 Follow-up and update

A student's ISP shall be followed up at least once a year at the initiative of the principal supervisor, at which time his/her study results shall be evaluated by each Party. The ISP shall then be updated.

7.3.2 Revision

Should an ISP require revision, the Parties undertake to consult with each other before an adjustment of the ISP is approved.

7.3.3 Approval

The updated and, if relevant, revised ISP shall be approved by both Parties.

7.4 Half-time review

A half-time review shall be held for each doctoral student preferably two years after the commencement of studies and when the equivalent of two years of full-time doctoral study has been completed. Before his/her half-time review, a student shall have achieved a pass on 30 HE credit courses, including all compulsory basic general science courses.

The half-time review shall be conducted in accordance with the rules and procedures for such at KI.

On completion, the record of the half-time review shall be signed by the director of doctoral studies at the relevant KI department and by the head of doctoral education at the relevant KTH school, with a copy being sent to the other Party in each case. The report of the completed half-time review is made at both KI and KTH in either the LADOK documentation system or digital ISP.

8 Courses and thesis

8.1 Courses

Programme courses are examined by the arranging Party and passing grades are accredited to the student by the other Party without separate examination.

8.2 Accreditation

Courses from the higher education institution may be accredited under the Programme and factored into the joint degree. A position on accreditation shall be initiated by the principal supervisor, with the final decision made by the Home University.

8.3 Thesis

8.3.1 Format

Theses produced under the Programme shall be of the compilation kind. The constituent papers shall derive from both Parties and at least half shall have been accepted for publication in peer-reviewed journals.

8.3.2 Accessibility

Theses shall be uploaded to both Parties' thesis database.

8.3.3 Graphic profile – Template

Each Party has its own graphic profile guidelines for use in collaborations between equal entities. The graphic profile of a thesis is decided separately by both Parties in agreement.

9 Defence

9.1 Initiation

Pre-review, decision on examination board, opponent (examiner), time, venue and other matters related to the public defence of a doctoral thesis shall comply with the rules and procedures in effect at the Home University. Copies of decisions made by the Home University and their underlying documentation shall be sent to the other Party well in advance of the defence date.

9.2 Review of papers and ethical permits

Before any decision on the public defence is made, the constituent papers and any relevant ethical permit shall be sent to KI's dissertation committee for review. Constituent works requiring but lacking an ethical permit may not be included in the thesis.

9.3 Plagiarism check

Before the defence, a plagiarism check is to be made of the thesis in accordance with the Home University's procedures.

9.4 Examination board

The Examination Board shall comprise three or five experts, at least one of whom shall come from a higher education institution other than the two Parties. Medical and technological scientific competence shall both be represented on the Examination Board.

9.5 The Examination Board's decision

After completing his/her defence, a student is given one of two possible grades: Pass or Fail.

The record of the Examination Board is documented as two originals, one for each Party, using the form provided by the Home University.

In the record it should be stated that the defence took place under this Programme leading to a doctoral degree awarded jointly by KTH and KI.

A pass grade is reported in LADOK at both KI and KTH.

10 Degree

10.1 Degree requirements

In addition to meeting the requirements of Annex 2 of the Higher Education Ordinance (Qualifications Ordinance) and the Parties' local degree regulations, a student seeking to obtain a doctoral degree must have:

- been admitted to doctoral education by both Parties under the Agreement;
- had supervisors from both Parties;
- completed and passed courses equivalent to at least 60 HE credits in accordance with **annex 1** of the Agreement; and
- undergone his/her half-time review.

The Agreement applies only to a joint doctoral degree, not a licentiate degree.

10.2 Degree title

A degree from KI is normally awarded as a Degree of Doctor of Medical Science; a degree from KTH is normally awarded as a Degree of Doctor of Philosophy in Science. Students who would like a different degree title from both or either one of the Parties may apply for this. Decisions are made by both Parties separately in accordance with their own specific rules and procedures.

10.3 Application

Degree applications are to be made to KTH, which has responsibility for the administration of degree-related matters.

10.4 Diploma

Each Party shall issue its degree on one and the same document in both Swedish and in English. Diplomas shall state the following: each Party's degree title, the doctoral subject, level, date of issue of diploma, thesis title and a statement to the effect that the degree has been awarded under this joint doctoral degree Agreement. A more detailed description of the diploma including supplements is given in **Annex 3**.

10.5 Diploma Supplement

The diploma is accompanied by a diploma supplement describing the Programme and its place in the Swedish education system.

11 Disciplinary matters

Disciplinary matters are administrated and decided by the Party arranging the component of the Programme in which an incident has occurred that warrants possible disciplinary action. This Party undertakes to inform the other Party when a complaint is made and an inquiry launched and shall promptly inform the other Party of its decision.

12 Withdrawal of the student's right to supervision and resources

Matters concerning the withdrawal of a doctoral student's right to supervision and resources are administrated and decided in accordance with the rules in effect at the Party arranging the component of the Programme under which the right to supervision and resources are to be withdrawn. This Party undertakes to inform the other Party when a complaint is made and an inquiry launched and shall promptly inform the other Party of its decision.

13 Expulsion

Matters concerning the expulsion of a doctoral student are handled in accordance with prevailing legislation. Each Party undertakes to inform the other of a proposal to expel a doctoral student.

14 Logotypes

Each Party's communication department decide together how logotypes may be used under the Agreement. Such decisions shall be based on each Party's guidelines for the handling of logotypes during a collaboration between two equal parties.

15 Validity

The Agreement shall come into effect when it has been signed by both Parties and remains valid until terminated, with six months' mutual notice. Terminations shall be made in writing. If terminated, the Parties undertake to jointly produce the necessary transitional provisions to ensure that doctoral students who have already been admitted to the Programme are given an opportunity to complete their studies and obtain a degree in accordance with the Agreement. Each Party shall ensure that students are given adequate opportunity to complete the part of the Programme for which it has responsibility.

16 Full regulation

The Agreement comprises this Agreement and its annexes, constitutes the Party's full regulation of all matters relating to the Agreement, and replaces all previous written or oral measures and pledges.

To be binding, any amendments or addenda to the Agreement shall be made in writing and signed by the Parties' authorised representatives.

Should any provision of the Agreement or any part thereof be found to be invalid, a reasonable adjustment shall be made insofar as said invalidity significantly affects either Party's ability to benefit from or perform in accordance with the Agreement.

17 Dispute

The Parties are aware that any dispute arising from this Agreement may not be settled by a civil court and therefore agree that in the event of a dispute that cannot be settled at a management level between the Parties, the Parties shall request settlement by the government.

Annexes:

Annex 1: Courses and credit-bearing activities

Annex 2: Establishment of doctoral position

Annex 3: Diploma format

This Agreement has been drawn up in duplicate and one copy assigned to each Party.

Solna, [date]

Stockholm, [date]

Karolinska Institutet

Royal Institute of Technology

[Signature]

[Signature]

[Title]

[Title]

[Name in block capitals]

[Name in block capitals]

Translation of enclosure #1 to Agreement between KI and KTH for joint doctoral programme in Medical Technology

Courses and credit-bearing activities

For or a joint degree to be issued the doctoral student must have earned 60 HEC at a minimum. Below is a list of courses and other credit-bearing activities that form part of this programme. "Max hp" is the number of HE-credits (hp) that can be counted as part of the mandatory 60 HEC.

At halftime review the doctoral student should have earned 30 HEC, including all obligatory courses.

Obligatory general science courses

Description	Min hp	By
Research ethics	1,5	KI
Medical technology	3,0	KI alt. KTH
Basic statistics or statistic medical trial planning	1,5	KI alt. KTH
Basic communication and teaching or pedagogy/didactics/presentation technique	1,5 (13,0) (max 7,5)	KI alt. KTH

Obligatory courses for some doctoral students

	Obligatory for:	Min hp	By
Human biology or pathology	Students lacking basic education in Medical	3,0	KI
Basic course in technology within the scope of the thesis	Students lacking basic education in Technology	3,0	KTH
Quality assurance of clinical research	Students who are to conduct clinical research ²	1,0	KI
Laboratory animal science	Students who are to use laboratory animals in their research. Species-specific competence as required by Swedish law.	Depends on species	KI
Laboratory safety	Students who are to conduct all or part of their research in a laboratory	1,5	KI

Obligatory credit-bearing activities	Min hp
Participation in research seminars, journal clubs, etc. (1-1,5 hp/term)	1,5 (max 6)
Participation in international conferences with own presentation (1,5 hp per conference)	1,5 (max 3)

Optional credit-bearing activities	Max hp
Visit to a research group at another university (1,5 hp/week)	6
Teaching in own research field for practical pedagogical training (1,5 hp = 40h incl. preparation)	4,5
Literature studies – as a selective course (1,5 hp/week)	15

Introduction

Besides the list above, all new doctoral students should take part in an introduction to doctoral studies at both universities.

Selective courses

Relevant courses from either university's course catalogue. Relevant courses from other universities can also be chosen where after a decision of accreditation must be done.

¹ For doctoral students who teach

² Definition clinical research: Research on living humans or research requiring the handling of sensitive personal data. For students conducting research on human biological material only, this course is recommended but not obligatory.

Establishing the doctoral position

Before a doctoral education project is initiated and a doctoral student recruited, a doctoral position must be established. The purpose is to ensure at an early stage that all doctoral students will have the opportunities and resources needed to pursue quality doctoral education.

Both Parties must approve the establishment of a new doctoral position. The person deciding on admission to doctoral education at each Party is the person approving the establishment of a new doctoral position.

The following must be assessed before a doctoral position is established:

- Supervisors:
 - KI assesses the intended KI supervisor and for a Green Light. When KI is the Home University, this applies to the principal supervisor. In other cases, this applies to a co-supervisor. The normal procedures of Green Light at KI should be followed.
 - It is recommended that KTH makes a similar assessment of the supervisors from KTH.
 - The supervisor constellation should be relevant for the project.
- The scientific project
 - The steering group decides whether the project lies within the research area of Medical Tehcnology and is suitable for the joint programme.
 - Both Parties assess if the project is viable and suitable as a doctoral project
- Funding
 - The Home University is responsible for the funding and financial support of the doctoral student (for example whether there are enough funding, employment and salaries etc) and the need for extra resources.
- Doctoral education environment
 - The doctoral student is offered a sound doctoral study environment to pursue quality doctoral education.
- Ethical permits (if required) are in place or planned