

KISS: KI Summer School in Medical Research.

The KI Summer School in Medical Research (KISS) is a research-introductory school for students enrolled in first-cycle study programs (undergraduate studies) at Karolinska Institutet. The Summer School is hosted by the Department of Microbiology, Tumor and Cell Biology (MTC), and financed by the Committee of Research Education at KI. The Summer School was given for the first time in 2018. It is based on the discontinued course Sommarkurs i medicinsk forskning 10.5 hp/Summer Course in Medical Science, 10.5 credits (1QA017).

Eligibility.

The student must be enrolled in a first-cycle (undergraduate) study program (nybörjarprogram) at KI and have at least 30 credits (30 högskolepoäng) from KI at the time of submission of the application. Students that have taken the Summer School are not eligible to participate a second time. Students from the study program in Medicine which have taken Forskningsintroducerande kurs för studenter på läkarprogrammet (FOLÄK) are not eligible. The Summer School is not open to students outside of KI.

Objectives.

To introduce students to research early during their education at KI, by performing a research project at KI under professional supervision.

After completing the Summer School, the student should be able to:

- Understand basic research methodology
- Apply basic research methodology to a research project of choice at KI
- Handle research material/data in a safe and orderly manner
- Present research data in a poster, a written report and an oral presentation
- Understand collegiality and good research practice

Content.

The Summer School begins with an introductory week of lectures covering hypothesis testing, statistics, ethics, presentation techniques, research documentation, description of Doctoral education at KI, and how to write a scientific manuscript. Thereafter, students take part in a 6-week research project at a department of their choice at KI.

The project should be defined and designed together with a main supervisor. The main supervisor is responsible for the student during the project period. The main supervisor should have a PhD and be a principal investigator or group leader at KI. The research project must be done under supervision. PhD students can function as co-supervisors in the laboratory.

The project should be performed during approximately 6 weeks. Projects that require the student to perform laboratory work are preferred. The workload put into the project must correspond to a minimum of 6 weeks of full-time studies (40 hours per week). At the end of the project, the student must give a brief presentation of their project and of the obtained results, in the form of a poster and an oral presentation. Approximately 1 week of the project time may be needed for preparing the poster and the oral presentation. The student must also submit a written report of the project in the format of a scientific manuscript.

Project presentation and other requirements for passing.

The summer project and obtained results must be presented in the form of a poster, an oral presentation and as a written report.

The student must attend the following *mandatory* events:

- The introductory week
- The research project
- The presentation days

The Summer School Coordinator decides if and how absence from participation in mandatory events can be compensated. Students that do not participate in mandatory events, or that do not provide compensation as per the instructions of the Coordinator, will not have fulfilled passing criteria for the Summer School. Students that do not submit the written report before the deadline will be withheld 3000 SEK from their final scholarship payment and will not be issued a Certificate

of Participation. If the written report needs revision, the student will be given one opportunity to revise the report in the same year that they took the Summer School. Additional revisions or missed deadlines will only be considered the following year, when the next class submits their reports.

After the report has been approved and provided other requirements for passing are met, the student will receive an original printed *Certificate of Participation*. The certificate can be used as a merit in future applications.

Other directives.

An evaluation is performed at the end of the Summer School and submitted to the Committee for Research Education at KI.

The Summer School is given in English.

Applications are submitted to KI via PRISMA.