



# Semester for Medical Research Aachen



SEMERA  
Medical Faculty

RWTHAACHEN  
UNIVERSITY

# Welcome

A warm welcome to our virtual international program: SEMERA!

SEMERa stands for Semester of Medical research in Aachen. We designed this program for students of all health professions, with a strong interest in science.

We are pleased to offer you a unique opportunity where you can learn and work in a digital environment. Classes and activities will focus on scientific competencies in health science research.

You can check out possible career paths that may lead you in the health sector for science and research. By using the SEMERA virtual learning platform, you can easily access our program from any electronic device and an internet connection.

Meet health profession students and international lecturers from all over the world!

# Highlights

## Scientific Skills

Health science research is the prerequisite for solving global health challenges. By imparting scientific skills in the scientific language English as the focus, the students will be trained and participate in a wide range of digital classes. Students can apply the learned skills during SEMERA in the Milestones 1 and 2.

## Keynotes

Lectures by international experts on current, global research questions are made available to a large audience via livestream. A Q&A afterwards offers you the opportunity to interact with these experts.

## Intercultural Social Program

SEMERa is accompanied by digital collaborative, fun activities for intercultural exchange which helps to strengthen international relations. The farewell days are hybrid: It will take place in Aachen and virtually. The students will get to know Aachen and its unique university clinic and engage in a variety of exciting activities.



# Our University

# RWTH Aachen University

(Aachen, Germany)

The program is hosted by the Faculty of Medicine at RWTH Aachen University. In 2022, the Faculty of Medicine was recognized by the national CHE University Ranking as one of the leading universities in the field of medical education in Germany. The students are particularly satisfied with the general study situation. Top scores were reached regarding the courses offered, their scientific relevance, supervision by teaching staff and the study organization among others. Our university is ranked among the 100 best universities in Times Higher Education World University Rankings 2023.

The Faculty of Medicine cooperates closely with the University Hospital which is one of the largest hospital buildings in Europe. It is composed of 27 institutes, 31 clinics and four dental clinics. RWTH Aachen University has more than 47,000 students, about a third being international students, and is a German University of “Excellence”





# Concept and structure

Learn more about our program and apply now!

# Teaching and Learning Methods

The asynchronous classes are one of the most important aspects of SEMERA. This means, the classes within SEMERA will be pre-recorded, ready for you to watch and complete the tasks in your own pace. This allows you a maximum of flexibility, enabling you to complete SEMERA and parallel continue your studies and other responsibilities. Some few events will be live and mandatory, like the Welocme Day, or the science POL sessions, some other few events will be live but not of mandatory attendance, such as the keynotes.

The lecturers will offer their content in a variety of forms, like videos and reading material, but also tasks that you will complete either individually, like a quiz, or in a group. We will set up the groups, so that you all get to work with students from other countries. You will find all classes and materials in the SEMERA virtual campus.

We designed SEMERA to combine the asynchronous classes, to offer you the flexibility you need, and plenty of opportunities for interaction and engagement with peer students and lecturers throughout the program.

# Learning Outcomes

## After completing SEMERA, you will...

- be able to recognize the benefits of research and science in daily medical practice
- have learned to use tools to conduct research
- have insights in scientific publishing
- have acquired abilities to conduct independent research
- be encouraged to think and act scientifically independently in the language of science, English
- consider a career in health sciences research
- create your own network of international students and lecturers
- There will be two defining milestones in the program, and you will be given the necessary tools and knowledge to complete these two milestones during SEMERA.





# Milestones

Milestone 1

## Literature Review

After you have participated in the virtual courses on literature research, you will conduct a systematic literature research on a specific research question. As part of the first milestone you will have to submit a short summary about these results.

This milestone will be graded.

Milestone 2

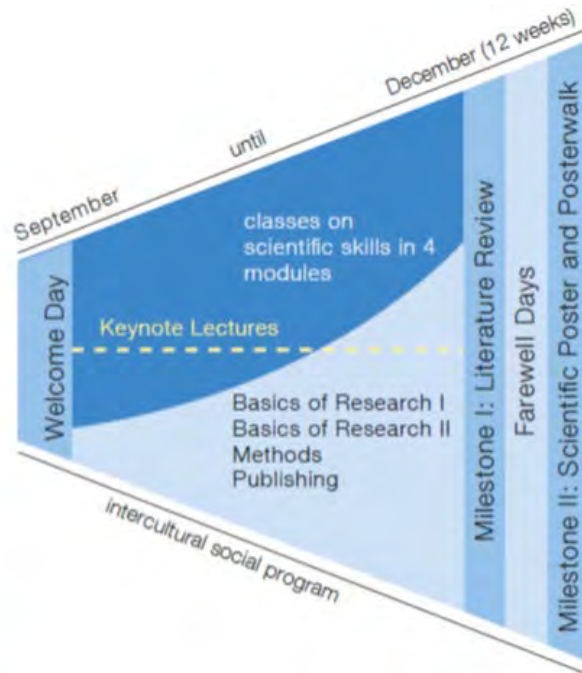
## Scientific Poster and presentation at SEMERA poster walk

Posters are widely used in the academic community, and most conferences include poster presentations in their program. Research posters summarize information or research concisely and attractively to help publicize it and generate discussion.

You will design your digital poster before the farewell days. You will present it to your fellow students during SEMERA poster walk, on the last day of the program. Each poster presentation takes about 4-5 minutes. After each presentation there will be a couple of minutes for questions. The poster presentation will take place in Aachen, but also online for those of you who cannot attend the farewell days physically in Aachen.

Both milestones will be graded. The average grade of both milestones will be the final grade on your transcript of records.

# Structure and courses (List as of April 2023)



- Research Data Management
- (Systematic) Literature Research
- How to read and evaluate scientific papers
- How to write a research proposal
- Statistical Competences
- Creation of Figures and Tables
- A self-guide to use SPSS for your doctoral thesis
- How to design a scientific poster and present it at a poster walk
- General laboratory practice for translational medicine
- Cell Culture Models in Cancer Research
- How scientific is nutritional science really?
- How to run a research project
- Good Scientific Practice
- Scientific publishing from the viewpoint of a journal editor?
- Protect Your Ideas- Introduction to IPR and Patent Search!

# Requirements & Credits

SEMERa has a workload of 5 ECTS, meaning around 150 hours during 12 weeks. In order to successfully complete SEMERa, you will need to watch and complete all tasks specified in all asynchronous courses, during the given time. There is a mandatory attendance to few live events (like Welcome Day, Science POL sessions and the poster walk).

Upon successful completion, all participants obtain a transcript of records including a comprehensive list of the courses. Medical students of the RWTH Aachen University receive an additional certificate in compliance with the mandatory electives (Qualifikationsprofil).



# Application

Please visit this [link](#) to apply. We will need around 4-6 weeks to process the applications and issue the letters of acceptance.

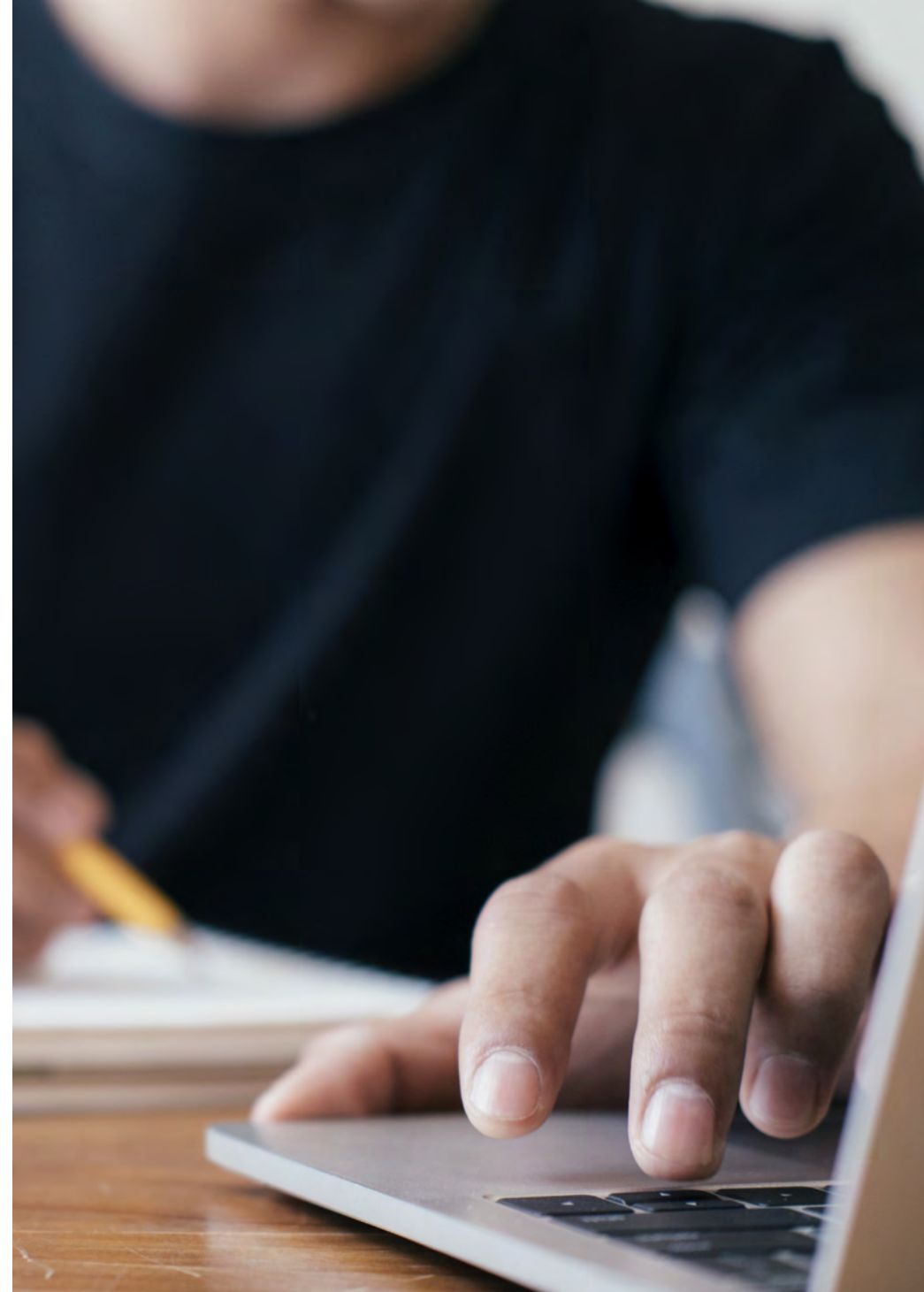
The required application documents are:

- B2 level English language certificate
- CV in English
- current transcript of records in English issued by your home university
- letter of motivation

Please answer these three questions in your letter of motivation:

- Which aspect or characteristic of SEMERA interests you the most? (500 characters max)
- Considering your experience in science and research so far, what do you expect to get out of SEMERA? (1000 characters max)
- How do you imagine your career in science and research? (500 characters max)

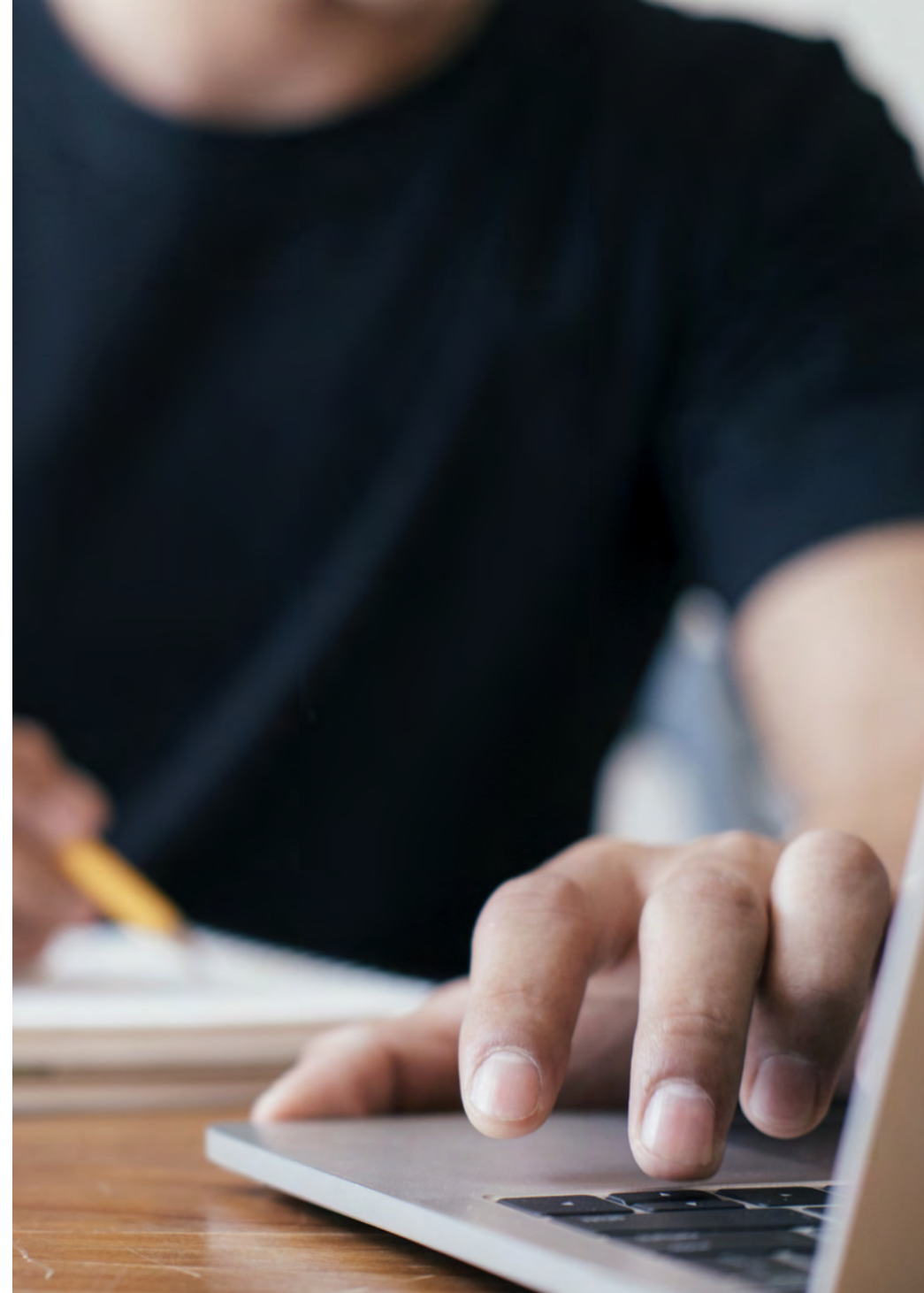
**Application deadline: June 30**



# FAQ (application)

We listed the most frequently asked questions regarding the application:

- I am an English native speaker, do I need a certificate? No
- I am studying my course of study in English, do I need a B1 certificate? No
- Can I use my Abitur Zeugnis as a certificate? Yes
- I have an IELTS English Certificate, what is the equivalent to B2? Please check: <https://www.ielts.org/-/media/pdfs/ielts-and-the-cefr.ashx>
- What is a transcript of records? A transcript of records is an official document issued by your home university. It is a list of all the courses taken, all of the exams you have passed and all of the credits that you have gained during the course of your studies. Please ask your home university. If they do not issue the document in English, please have it translated by a certified translator.



# Contact

Do you have any questions regarding SEMERA? Feel free to contact us for more information at [semera@ukaachen.de](mailto:semera@ukaachen.de).

Follow us on Instagram!



@semera\_rwth





# We are waiting for you!

Apply now and join the innovative SEMERA program.

## Project Funding



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



Bundesministerium  
für Bildung  
und Forschung

## Media Creation and Design



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