

## **Research strategy for the Research Unit for Clinical Microbiology**

The research in the Department of Clinical Microbiology is consolidated in the Research Unit for Clinical Microbiology under the Department of Clinical Research at University of Southern Denmark:

[https://www.sdu.dk/en/om\\_sdu/institutter\\_centre/klinisk\\_institut/forskning/forskningsenheder/kliniskmikrobiologi](https://www.sdu.dk/en/om_sdu/institutter_centre/klinisk_institut/forskning/forskningsenheder/kliniskmikrobiologi)

### **Mission (The purpose of the Research Unit)**

The research at Clinical Microbiology aims to fight infectious diseases in humans by creating tools and knowledge in order to prevent, diagnose, and treat infectious diseases.

The research at Clinical Microbiology supports OUH's general and highly specialized treatments as well as the general practice sector in the area. The research will ensure diagnostic microbiology and infection control to be of the highest possible quality at all levels.

Our work aims to procure new knowledge which immediately or in the long run will be of benefit to individuals and to society locally and globally.

Our research aims to treat and prevent infectious diseases in hospitals and in the community and contributes to create an inspiring working environment which is able to attract and keep competent employees in the department. Our research contributes to ensure high quality performance of the Department of Clinical Microbiology and makes the department an attractive collaborator to other departments and institutions.

### **Vision**

We expect our research to be innovative and productive focusing on performance and interdisciplinarity.

### **Research areas**

The Research Unit has various research areas which can be found on our home page along with information on contact persons.

[https://www.sdu.dk/en/om\\_sdu/institutter\\_centre/klinisk\\_institut/forskning/forskningsenheder/kliniskmikrobiologi/forskningsomraader](https://www.sdu.dk/en/om_sdu/institutter_centre/klinisk_institut/forskning/forskningsenheder/kliniskmikrobiologi/forskningsomraader)

### **Research aims**

#### **Primary aims**

- On an annual basis to increase the number of
  - Original publications in internationally acknowledged journals with peer review and high impact factor.
  - Original articles with a high number of citations.
  - Talks and posters at international conferences after peer review.
- To ensure a minimum of three active PhD students at all times.
- To promote active research in all staff groups by having a minimum of three projects each year involving staff with a professional bachelor's degree.
- To create at least one new consortium collaboration a year lead by the Research Unit.
- To participate in a minimum of three additional consortium collaborations each year.
- To continuously participate in at least three interdisciplinary centre constructions.
- To contribute in improving or implementing at least five functions in clinical microbiology each year in the fields of diagnostics, treatment, surveillance and infection hygiene.
- To succeed receiving funding of at least four million DKK a year.

#### **Secondary aims**

- Publishing articles in other journals.
- Communicate science through talks, daily papers and media, inclusive social media.

### **Research committee**

In compliance with the directions from OUH and SDU the department of Clinical Microbiology has established a research committee, who's task – among other things – is to draw up the research strategy of the department and to contribute to the implementation of this. The tasks of the committee are:

(LINK Missing)

## Implementation of OUH's and KI's specific research strategy aims

### Involvement of patients and their relatives in research

- The research committee will have patients or relatives participating in the work of planning, prioritizing, and developing research projects to the greatest extent possible.
- Selection of patients and relatives can be done via OUH's patient panel.

### Research within all staff groups

- The department offers ISA-, bachelor-, master- and pregraduate studentships within a broad range of professions, including microbiology, pharmacy and molecular biology.
- The department participates in interdisciplinary project collaborations including collaboration with private companies. During such collaborations we offer short- or long-term stays in our department for industrial researchers and students.
- Medical laboratory technician students will be offered research assignments during their training period.
- We will consider active research during development interviews among all staff groups.
- The department aims to get funding for research driven by medical laboratory technicians and nurses.

### Research within interdisciplinary and highly specialized functions

- The Research Unit conducts research on Interpretation and advising regarding infections in transplant recipients, which is one of the only highly specialized functions within Clinical Microbiology.
- The Research Unit conducts research on microbiological issues within highly specialized treatments (e.g. patients suffering from infectious endocarditis, complications in alloplastic treatment, etc.).
- The Research Unit is part of research centres within highly specialized functions in other areas of specialization (e.g. CENTRA).

### Interdisciplinary collaboration and clusters

The Research Unit collaborates with other departments at OUH to a great extent.

**Clusters: Extensive research collaboration with clinical departments.**

**Centres: Centre for biomedical materials research, part of Center for Translational Microbiology, CENTRA, the Regional Centre for Bacterial Genomics, Centre for vector Bourne infections.**

### Fundraising

- The Research Unit is continuously planning on which funds to apply for. Also, the department has a growth rate plan concerning external funding.
- The researchers of the Research Unit have an overview of relevant funding possibilities and make sure to establish appropriate consortia in good time in order to apply for these.
- The department focuses on industrial collaboration and on establishing innovation projects.

### International research

- The Research Unit is continuously planning on developing and establishing new research collaboration including multi center studies.
- The Research Unit intends to affiliate additional international adjunct professors and fellowships in our core research areas e.g. infection control and antibiotic resistance.
- The Research Unit is working on establishing exchange stays and joined PhD courses with international research institutions.

## Special focus

- International collaboration.
- Involvement of non-academics in research.