

# Nordic 1-year master: Prevention and Control of Communicable Diseases and Health Care-Associated Infections – starting September 2019!



The spread of infectious and antibiotic resistant microbes is a threat to health and medical progress. Healthcare-associated infections cause suffering as well as considerable costs. Preventing infections is an important task for the health care system, as well as for society in large.

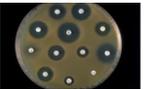
A 1-year master program in Prevention and Control of Communicable Diseases and Health Care-Associated Infections (“Smittskydd och Vårdhygien”) will start in Gothenburg in September 2019. You are welcome to attend this program if you have an education within healthcare, like doctor, nurse or biomedical laboratory technician, and at least two years of working experience.

The program consists of half-time studies during two years. Approximately one week per month takes place at the Gothenburg campus with lectures, group work, seminars and practical exercises. Accommodations close to the campus will be available. Between these visits, home work corresponding to about one week’s studies per month will be required. The program gives a total of 60 ECTS, which corresponds to one year of full-time studies.

**The program includes four part-time courses, one per semester:**

## **Semester 1: Transmission of microbes and antibiotic resistance (15 ECTS)**

You will gain a basic understanding of the spread of infectious microbes – through contact, sex, blood, air or through water and food. You will also learn about the structure and functions of microbes, their pathogenicity and interaction with the immune system. Antimicrobial drugs, development and spread of resistance, as well as modes to combat such resistance, will be covered. You will acquire a basic understanding of techniques for disinfection and sterilization as well as other measures that may prevent spread of infectious microbes.



## **Semester 2: Infectious disease epidemiology and vaccinology (15 ECTS)**

You will learn infectious disease epidemiology, including the relevant statistical methods and handling of databases where infections and antibiotic resistance are registered. You will compile and calculate epidemiological statistics and present the results in class. You will learn the immunological basis of vaccines, discuss the pros and cons of different vaccine types and reason about how to design vaccine programs that effectively promote public health.

## **Semester 3: Prevention and Control of Communicable Diseases and Hospital-Acquired Infections (15 ECTS)**

The third semester will be devoted to hands-on aspects of communicable disease prevention and control, as well as prevention of infections within health and social care systems. Nordic legislations that regulate these aspects will be detailed. You will gain the tools to surveil notifiable and hospital-related infections and antibiotic-resistant bacteria, and to prevent and control infectious disease outbreaks. You will also work on your skills to communicate, initiate and manage improvements



## **Semester 4: Master project (15 ECTS)**

During the last semester you will work on your own scientific project, which may focus on any relevant area within communicable disease control or infection prevention and control. You will be tutored by a supervisor during this work. In addition, you will gain basic tools for scientific research and publishing. You will present your thesis to fellow students and teachers. You will also critically evaluate and discuss a fellow student’s thesis.

**You may either apply for the entire program (60 ECTS) or any of the 15 ECTS courses. Note that specific background knowledge is required for each course, if you wish to take separate courses.**

***This program will start in September 2019.***

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