



# BERLIN SCHOOL OF PUBLIC HEALTH

## Intensive Short Course Medical Informatics

05 - 09 August 2019 | 9am - 5pm

### Lecturers

Berlin Institute of Health  
BIH-Core-Unit eHealth und Interoperabilität (CEI)  
**Prof. Dr. Sylvia Thun**

Charité – Universitätsmedizin Berlin  
Anesthesiology and Intensive Care Medicine  
Data Science in Perioperative Care  
**Prof. Dr. Dr. Felix Balzer**  
**PD Dr. Falk von Dincklage**  
**Dr. Gregor Lichtner**  
**Dr. Johannes Starlinger**

Charité – Universitätsmedizin Berlin  
Institute for Radiology  
**Dipl.-Ing. Andreas Kofler**

Free University Berlin & Zuse Institute Berlin  
Medical Bioinformatics  
**Prof. Dr. Tim Conrad**

Technical University Berlin  
**Dr. Martin S. Haase**

The intensive short courses at BSPH are organized by the Institute of Public Health.

### Institute of Public Health

Prof. Tobias Kurth, MD ScD, Director

### Venue

Charité – Universitätsmedizin Berlin  
Campus Charité Mitte  
Seminarroom 03.006  
Virchowweg 24

### Course Information

Course language: English  
ECTS points: 3  
Course fees: 510€ for students  
750€ for other participants

### Registration Information

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Alice Salomon Hochschule Berlin  
University of Applied Sciences





## Course Description

The aim of this intensive short course Medical Informatics is to enhance students' abilities to assess and classify data-driven solutions for healthcare. Despite the fact that large amounts of data are produced routinely in clinical settings and stored in electronic health records, the subsequent usage of these data in everyday practice, e.g. for AI-powered clinical decision support systems, is still in its infancy.

In this course, we will introduce students to health information technologies and large healthcare data-bases. Students will learn to assess electronic health records, to extract data from them, to work with these datasets, to recognise patterns, and to better understand data protection and regulatory aspects.

Graduates of this course should be able to assess opportunities and risks presented by data-driven healthcare approaches. They should be able to readily apply their learned skills and knowledge in healthcare institutions for procurement analysis or change management, in research organisations for identifying an innovative focus, or in industry for leading a health data science team.

### Audience

The course is suited for clinicians, researchers, public health professionals, and engineers who are interested in pursuing careers within the medical informatics and/or health data science domains.

### Course Pre-requisites

Basic analytic background (statistics, epidemiology), basic computing skills.

## Program

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### Monday, August 05

am Introduction to Health Information Technology  
pm Information Extraction from Electronic Health Records

### Tuesday, August 06

am Terminologies and Ontologies (Part 1)  
pm Terminologies and Ontologies (Part 2)

### Wednesday, August 07

am Introduction to programming  
pm Medical imaging, pattern recognition

### Thursday, August 08

am Analysis of large data-sets (Part 1)  
pm Analysis of large data-sets (Part 2)

### Friday, August 09 (ends 13:00)

am Data protection and regulatory aspects