# ABOUT THE WINTER SCHOOL

The International Winter School "Clinical and Genetic Epidemiology – Strategies to Drive Personalized Medicine" is a training course offered by the Institute for Medical Information Processing, Biometry, and Epidemiology.

Enrolment is open to experts and students in the fields of epidemiology, biostatistics, bioinformatics, medicine and health sciences (Ph.D., MSc and MPH)

# **Prerequisites**

This course shows new paradigms to understand and treat complex diseases by combining genetics, biology, medicine, and statistics. Therefore, advanced knowledge in at least two of these disciplines is required.

#### **Tuition** fees

Commercial sector - EUR 1000
Academic sector - EUR 600
Students - EUR 400
The tuition includes instruction, course materials, and use of computing centre facilities.

Early bird registration by January 21st, 2019 receives a 20% discount.

LMU students can apply for a partial fee waiver.

# **Application**

The number of participants is limited to 20 persons. The application deadline is February 18th, 2019.



# **CONTACT US**

#### PROGRAM DIRECTORS

Prof. Dr. Ulrich Mansmann
Institute for Medical Information
Processing, Biometry, and
Epidemiology
(IBE)
University of Munich

Prof. Dr. Konstantin Strauch Institute of Genetic Epidemiology Helmholtz Zentrum München University of Munich

#### COORDINATING STAFF





# CLINICAL & GENETIC EPIDEMIOLOGY

Winter School March 18-29, 2019

Strategies to Drive Personalized

Medicine

Institute for Medical Information Processing, Biometry, and Epidemiology

University of Munich

# ABOUT CLINICAL AND GENETIC EPIDEMIOLOGY

Revolutionary findings in genomic research constantly provide new insights into disease susceptibility genes. These new discoveries provide the basis for further advances in the field of personalized medicine, which need to be translated into clinical practice. However, the translation from genetic findings into clinical pathways remains difficult.

In this course you will get acquainted with new paradigms in clinical and genetic epidemiology to understand complex diseases and treatment strategies as well as the use and misuse of biomarkers.

# **TOPICS INCLUDE:**

- CANCER GENOMICS
- PREDICTIVE MEDICINE
- PREDICTION MODELS
  - METABOLOMICS
- BIOMARKER DRIVEN CLINICAL TRAILS
- BASIC NGS DATA PROCESSING EXCERCISE
  - ETHICAL ASPECTS OF CLINICAL & GENETIC EPI
  - CLINICAL STUDIES AND

TRANSLATIONAL MEDICINE

- STATISTICS FOR
- HIGH-DIMENSIONAL DATA
- PHARMACOGENOMICS
- HEALTH ECONOMICS
  - DATA SHARING

# **LECTURERS**

Prof. Dr. HDR Anne-Laure Boulesteix
IBE, University of Munich

#### Prof. Dr. Ingolf Cascorbi

Institute of Clinical and Experimental Pharmacology, Christian Albrechts University Kiel

#### **Dr. Christine Fischer**

Institute of Human Genetics, University Hospital Heidelberg

#### Dr. Christian Gieger

Research Unit of Molecular Epidemiology,
Institute of Epidemiology, Helmholtz Zentrum München

#### Prof. Dr. Stefan Kääb

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#### **Aarif Mohamed Nazeer Batcha**

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#### **Dr. Anne Quante**

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#### **Brigitte Strahwald**

IBE, University of Munich cognomedic GmbH, Erlanger

#### Prof. Dr. Konstantin Strauch

IBE, University of Munich

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# **TEACHING METHODS**

The course contains introductory lectures, computer classes, seminars, individual consultation and assignments.

### LANGUAGE

The course will be taught in English.

## **CERTIFICATE**

All participants who successfully complete the programme will be awarded a Certificate of Participation issued by the IBE, University of Munich. Students can get a certificate of 3 ECTS after completing an assigned presentation.

