

Founded in **1388**, the University of Cologne is one of the oldest universities in Europe and with almost 50,000 students one of the largest in Germany. The **Status of Excellence** was awarded in 2012.

The Cologne Summer Schools Program offers courses in various university disciplines, all desi-gned to broaden basic and advanced knowledge.

Additionally, you are able to gain insight into the general academic program of the University of Cologne.

Regardless of the course of study, you benefit from an intercultural and intereducational expe-rience in the vibrant city of Cologne at one of the oldest and most renowned German universities. The result? Expanding personal horizons and a boost for your career. We exclusively invite stu-dents from our partner institutions all over the world to take part in this special experience.

We look forward to seeing you next summer!

# Cologne Summer School on Personalized Medicine

## Cologne 5July - 19July, 2019

#### What is Personalized Medicine?

Personalized and precision medicine is "an emerging approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person." This approach will allow doctors and researchers to predict more accurately which treatment and prevention strategies for a particular disease will work in which groups of people. During the CSS in Personalized Medicine 2019 in Cologne, we are going to give participants an introduction into the basic concepts, methoologies and applications of personalized Medicine.

#### Challenges

The journey of personalized medicine faces ethical and legal challenges of different steps such as research, prevention, diagnosis and treatment by discussing paradigmatic examples including biobanks, genetic tests and gene therapy. Scientific progress in the area of genetics, the completion of the Human Genome Project and the ability to sequence genomes at competitive prices have offered the promise of revolutionizing healthcare and raised important challenges to classical paradigms in the biomedical law and ethics fields. Issues such as informed consent, privacy and confidentiality, and discrimination require particular analysis in this context. In the last years the concept of personalized medicine has been a source of considerable hype and hope. Law and ethics should be important allies to limit the former and potentiate the later.

During our Cologne Summer School program, participants will have the chance to delve into an ocean of personalized medicine taught by scholars of the the University of Cologne and other specialists. The course work will be complemented by social events and activities which give students an insight into German culture.







Kindly supported by Santander Universitäten

### **Enjoy classes with these professors:**

- Univ.- Prof. Dr. med. Dr. h.c. J. Hescheler, Director of the Institute for Neuropysiology, University of Cologne Personalized Cell Therapy, Personalized Drug Screening, Personalized Cell Medicine (https://bit.ly/2QF4yPo)
- Prof P. Nürnberg, Ph.D., Cologne Center for Genomics Technology Plattform of Personalized Medicine (http://ukoeln.de/2DTKK, http://ukoeln.de/NB5WV)
- Univ.-Prof. em. Dr. med. Dr. phil. K. Bergdolt Ethical aspects of personalized Medicine (http://ukoeln.de/J7009)
- Prof. Dr. K. Nayernia, International Center for Personalized Medicine, Düsseldorf
   Precision Medicine und Personalized Molecular Medicine, Personalized Cancer Medicine, Personalized Reproductive Medicine (www.icpm.center)
- Legal aspects of Personalized Medizine
- tba
  Technological aspects of Personalized Medizine

Who are we looking for?

Students of the University of Cologne and international students of partner universities of the University of Cologne and Santander Universities.

Disciplines and study level: advanced students in Medicine, Biological Sciences (Animal Biology and Physiology, Molecular Biology and Genomics), or Life Sciences.

Apply now via this online form:

https://form.jotform.com/83514503049958

by 31 March 2019 and be part of this unique experience! We look forward to getting to know you next summer!