New tools & research strategies in personalized health

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Summary
We will define the concept of personalized health, describe the underlying technologies, the technological, legal and ethical challenges that the field faces today, and how they are being met.

Content
Under supervision of a coach, you will tackle a specific problem, evaluating its basis and proposing solutions. The output will be a short report and an oral defense of your project.

Learning Prerequisites
Required courses
None

Learning Outcomes
By the end of the course, the student must be able to:
• Understand the tenets of personalized health
• Discuss new technologies within the context of personalized health

Transversal skills
• Continue to work through difficulties or initial failure to find optimal solutions.
• Summarize an article or a technical report.
• Make an oral presentation.
• Write a scientific or technical report.
• Manage priorities.
• Take feedback (critique) and respond in an appropriate manner.
• Use a work methodology appropriate to the task.
• Assess progress against the plan, and adapt the plan as appropriate.
• Collect data.
• Use both general and domain specific IT resources and tools

Teaching methods
Ex-cathedra lectures, discussions, coaching, preparation of a grant proposal, oral defense of the proposal.

**Expected student activities**
Preparation of project  
Oral defense of project  
Active participation to discussions  
Work in small groups

**Assessment methods**
Oral: quality of slides, clarity and content of presentation, ability to answer questions  
Project: relevance to personalized medicine, explanation of relevant background, explanation of research strategy  
The student's contribution to discussions will contribute to the final evaluation

**Supervision**
Assistants  No  
Others  Coach and contact persons for project

**Resources**
Bibliography  
No prerequisite

**Notes/Handbook**
When possible, copies of the slides will be provided