3 Graduate Programmes of excellence in Lille

- Precision Health
- Science for a Changing Planet
- Information and Knowledge Society
Strengths of the programme

• The Graduate Programme ‘Precision Health’ offers a unique training to excellence research to form students (Master and PhD) to the innovative concepts that will drive tomorrow’s research and health management.

• It is open to talented Biologists, MD and PharmaD from national and international origin, to form the next generation research leaders for academia, industry and biotech.
Objectives of the graduate programme

Advances in biology, technology and information technology now make it possible, in particular through the analysis of large amounts of data (patient characteristics, omics, social and environmental data), to refine nosographic frameworks by identifying more homogeneous groups of patients whose care would be personalized because it is more precise, with the aim of improving the benefit/risk ratio. Although much is said about this precision medicine, few healthcare professionals are trained in it and few non-medical disciplines, which must participate in its development through research, have the specific knowledge required.

The aim of the Precision Health training is therefore to provide integrated training on this issue, open to students from different disciplinary backgrounds, by combining a good balance between medical/biological issues and the other disciplines necessary to understand and address the challenges of precision healthcare. Its differentiating feature will be to draw on examples taken from the flagship themes of the health sector, which cover different types of chronic diseases that justify a precision approach over the long term, from screening to the prevention of complications.
Precision health

From OMICS to systems biology
Imaging
Molecular basis of diseases and treatments
Artificial Intelligence
Mathematical modeling of living organisms

Novel Mode of actions for personalized drugs
Medical devices
From cohorts to cutting-edge researches
Public policy and health economics
Ethic, health and society

DIABETES CARDIOMETABOLIC DISEASES
CANCER
NEUROSCIENCES
INFECTION IMMUNO-INFLAMMATION

Graduate Programme – Precision health
Advantages

- **International course** open to students from **scientific, medical/pharmaceutical and (bio)informatics education**

- **10 interactive and interdisciplinary seminars** given by national or international experts in the fields of **multi-OMICS, artificial intelligence, mathematic modelling of biological systems, state-of-the-art therapies** (medical devices and personalized drugs), **cohort management, healthcare economics and ethics**

- Application examples from the **leading themes of the research sector**, **cancer, diabetes, neurosciences, infection/immuno-inflammatory**, justifying a precise approach over the long term, **from screening to the prevention of complications**

- Training **in research through research** in

  - internationally recognized laboratories with a personalized preparation

  - **Study Lab**, innovative training to develop a research project

  - **International mobility / merit fellowships** for M2 students

  - A particular focus towards the **business world and bioentrepreneurship**, particularly for the preparation to job integration

  - **PhD fellowships** for students motivated to pursue their research training

  - **International mobility** for PhD students
Opening to the socioeconomic world

- DU Health Entrepreneurship
- Courses given by industry experts
- Visit of companies
- “Club des industriels” PreciDIAB
- Help PhD for their future integration into professional life
32 Laboratories
united towards a competitive scientific and training environment.

All students are specifically prepared to raise the main scientific challenges of our time

(2) catalysing the digital revolution in biomedical research

(1) promoting systemic biology and precision medicine

(3) optimising impact for the patient and society

The Graduate Programme is part of the PreciDIAB project, a collaborative venture between Lille world-class scientists, multidisciplinary clinicians, health industry and innovative start-ups, patients and professional diabetes associations, to develop innovative therapeutics and managements of patients. (https://www.precidiab.org/)
Financial supports for Master students

- **Scholarships for the academic year**
  - Criteria: to be registered to Master 2 Biology-Health – Precision health
  - Deadline for registration: june 17 2021
  - Amount: 3 500 euros /year

- **International relocation grants**
  - Criteria: student newly arrived in Lille and coming from another country than France and registered to Master 2 Biology-Health – Precision health
  - Deadline for registration: june 17 2021
  - Amount: 3 500 euros /year
Highlights

- 81 teams in 32 laboratories
- 409 PhD students
- 592 permanent researchers
- International environment
- 900 publications per year
- Cutting-edge equipments in biology, chemistry, bioinformatics... State of the art imaging and OMICS facilities
- Industrial partnerships: Industrial chairs, Eurasanté, PreciDIAB Initiative...
More info - Contact

https://www.precidiab.org/

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