

Systems Medicine

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<http://bio3.giga.ulg.ac.be/>

Where can you find me?

in Liège



GIGA – B34, Floor +5
(Scriptorium)
Quartier Hôpital
Avenue de l'Hôpital, 11
4000 Liège, Belgium

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Subject title: “Bioinformatics applications”

Course themes

I: Genome-wide association studies

- Components of GWAS
- Case studies via assignments
- Assignment I: GWAS
 - different disease traits -- infectious disease, cardiovascular ..., intermediate phenotype;
 - different genetic info -- rare variants;
 - different software tools;
 - different study designs incl. families, meta-analysis, replication, ...

Course themes

II: Systems medicine

- Interactions
- Patient-to-patient heterogeneity
- Case study on pancreatic cancer
- Assignment II: Systems medicine / Precision medicine
 - Translational aspects of GWAS;
 - Individual heterogeneity;
 - Subnetwork discovery;
 - Omics integration tools;
 - Disease subtyping (omics, missingness, ...)

Classes & evaluation

http://bio3.giga.ulg.ac.be/archana_bhardwaj/?Courses

Supporting docs to each class

- Course notes
- Materials replacing “course book”
- Homework assignment
- Critical reading