

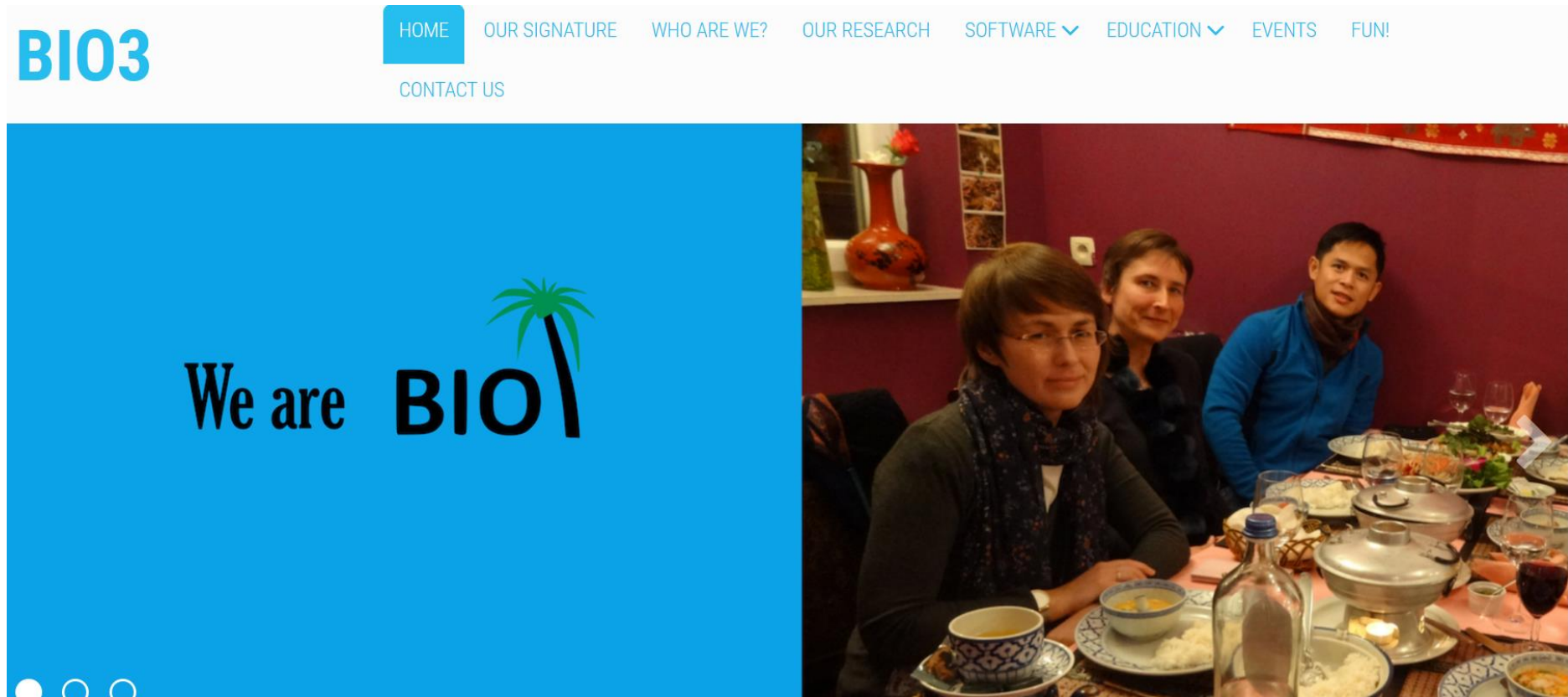
# Systems Medicine

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## Who am I?



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

## Where can you find me?



in Liège

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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

Dates	Themes	To prepare	Evaluated*
March 4 (2-6pm)	I: GWAS		
April 1 (2-6pm)	II: Systems Medicine		
April 22 (2-6pm)	I: presentations with discussions	1. Slides (max 50) addressing 2. Selection of slides addressing 3 Q in depth to present in 15 min	Oral slides presentation with Q&A
April 27 (2-6pm)	II: presentations with discussions	1. Slides (max 50) addressing 2. Selection of slides addressing 3 Q in depth to present in 15 min	Oral slides presentation with Q&A
		Compilation of 1. before	Written exam: Compilation of slides into a comprehensible “story” (details to be discussed: slides or doc)

## \*Evaluation

Dates	Themes	To prepare	Evaluated*	Proposed scoring
April 1 (2-6pm)	I: presentations with educative discussions	1. Slides (max 50) addressing the Qs 2. Selection of slides addressing 3 Q in depth to present in max 15 min	Oral slides presentation with Q&A	15
April 27 (2-6pm)	II: presentations with educative discussions	1. Slides (max 50) addressing the Qs 2. Selection of slides addressing 3 Q in depth to present in max 20min + results of group work: overlap between two topics	Oral slides presentation with Q&A	30  15
		Compilation of 1. before	Written exam: Compilation of slides into a comprehensible “story” (details to be discussed: slides or doc)	40 based on accurateness and critical evaluation with links to literature and classes

## Supporting docs to each class

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