

# Population-based Association Analysis: Course MF9380

## Monday

- 08.45 **Registration** (*right outside Lille Auditorium, Domus Medica*)
- 09.00 **Welcome**
- 09.05 **Introduction into genetics** (*Rom 2180, Domus Medica*)  
Teacher: Marissa LeBlanc
- 09.35 *Break*
- 09.45 **Introduction to population genetics** (*Seminarroom L-200, Domus Medica new building*)  
Teacher: Michael Nothnagel
- 10.45 **Exercise**  
Teacher: Michael Nothnagel
- 11.30 **Introduction into genetic epidemiology** (*Seminarroom L-200, Domus Medica new building*)  
Teacher: Michael Nothnagel
- 12.15 *Lunch*
- 13.00 **Exercise**  
Teacher: Michael Nothnagel
- 14.00 **Linkage disequilibrium** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Bettina Kulle Andreassen
- 14.45 *Break*
- 15.00 **Exercises**  
Teacher: Bettina Kulle Andreassen
- 16.00 *End*

## Tuesday

- 9.00 **Data quality control** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Bettina Kulle Andreassen
- 9.45 *Break*
- 10.00 **Introduction to PLINK and Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Bettina Kulle Andreassen
- 12.00 *Lunch*
- 12.45 **Analysis of SNP data** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Michael Nothnagel
- 14.15 *Break*
- 14.30 **Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Michael Nothnagel & Bettina Kulle Andreassen
- 16.00 *End*

### Wednesday

- 9:00 **Confounding and multifactorial analysis** (*Seminarroom L-200, Domus Medica new building*)  
Teacher: Michael Nothnagel
- 10:30 *Break*
- 10:45 **Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Michael Nothnagel
- 12:00 *Lunch*
- 12:45 **GWAS** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Marissa LeBlanc
- 14:15 *Break*
- 14:30 **Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Bettina Kulle Andreassen
- 16:00 *End*

### Thursday

- 09.00 **Multiple testing problem and population stratification** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Michael Nothnagel
- 10:30 *Break*
- 10:45 **Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Michael Nothnagel
- 12:15 *Lunch*
- 13:00 **Genotype imputation** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Michael Nothnagel
- 14:00 *Break*
- 14:15 **Analysis of sequencing data** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Michael Nothnagel
- 15:30 *End*

### Friday

- 9.00 **Sample size and power calculations** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Bettina Kulle Andreassen
- 10:15 *Break*
- 10:30 **Exercises** (*PC-lab R-211, Rotunden*)  
Teacher: Bettina Kulle Andreassen
- 12:00 *Lunch*
- 12:45 **Analysis of methylation data** (*Lille Auditorium A1.1004, Domus Odonthologica*)  
Teacher: Christian Page
- 14:30 **End**