



### Welcome

at

# Avans University of Applied Science

**Avans Hogeschool (in Dutch)** 



# Breda

- The name Breda descends from a contraction of the Brede (wide) Aa. This is the point where two rivers, the Mark and the Aa, flow together.
- municipal rights in the year 1252
- The city is surrounded with mouts, so called 'singels'.
- Population of 183.448
- In the city centre there are a lot of monuments: "Grote Kerk", "Kasteel van Breda" (Royal military Academy), "Koepel" (Former Prison)









# Avans University of Applied Science Avans Hogeschool (in Dutch)

31.474 students and 2.832 employees

21 Schools (academies)







#### 4 Cities:

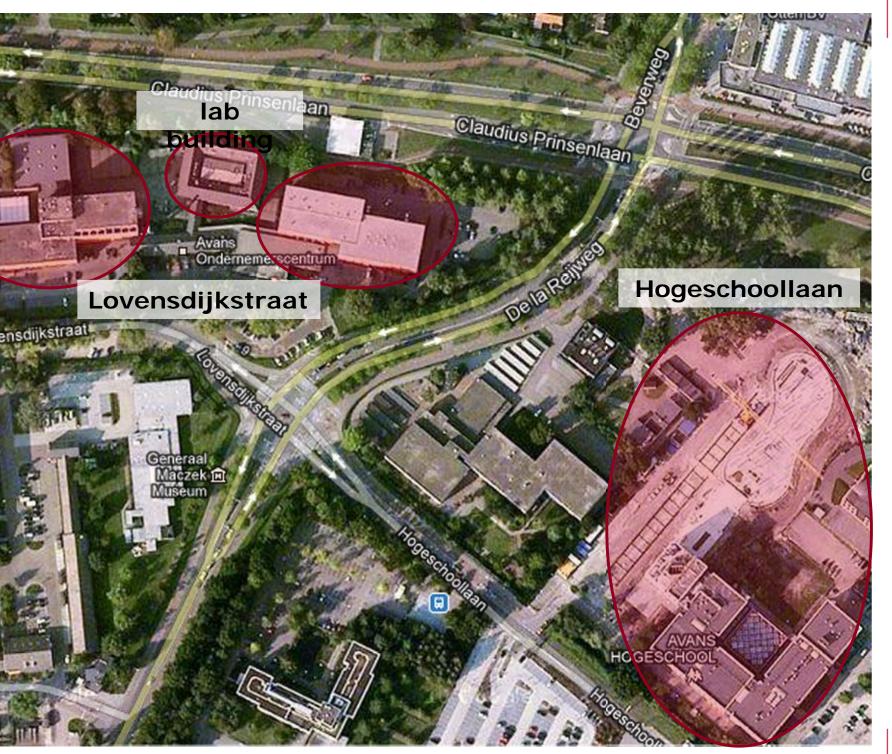
# Tilburg, 's Hertogenbosch, Roosendaal, and Breda











## Facilities in Breda: Lovensdijkstraat Ovensdijkstraat













# School of Life Sciences and Environmental Technology (~1300 students)

### Bachelor - Major Minor system

#### Major Biomedical laboratory Research

Biomedical research

Medical diagnostics

Biotechnology

**Bioinformatics** 

#### **Major Chemistry**

Organic chemistry and polymer synthesis

Analytical chemistry

**Major Chemical Technology** 

Major Major Forensic Laboratory Science

Major Environment and sustainability

Major Marketing & management in Life Sciences

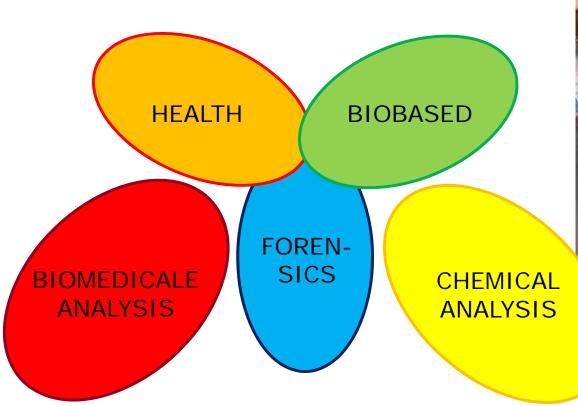


Research group Analysis techniques in the Life

Sciences (ALS)

Dr. Theo Noij

Projects and collaboration







# Research group Analysis techniques in Life Sciences

- Introduction new science developments in education
- Contract research in analytical chemistry and biomedical laboratory research
- Analytical facilities, e.g. LC-MS
- Post-graduate (inter-)national short-courses (including in company training)















# A broad Package in Biomedical Laboratory courses.....

Molecular Biological Techniques:

real-time (Quantitative) PCR
Next generation sequencing
Variant Effect Prediction
Cell and Tissue culture
Protein Purification
Flowcytometry
Immunology
Mohs Surgery







The daily agenda

start of each day

coffee/tea

lunches

end of each day

Diner

e-mail/internet login
Schedule computer rooms



### Introduction



### The manual

hand-outs:

https://atgmlab.avans.nl

Account: VEP2019

Password: VEP2019!



### The Course Team



#### The Course staff

Prof. dr. Johan T. den Dunnen, *Clinical Genetics & Human Genetics*, *LUMC*, *Leiden* 

Dr. Martie Verschuren, Avans Hogeschool

#### **Guest Lectures**

- Dr. Victor Guryev, UMCG/ERIBA, Groningen
- Dr. Peter Taschner HS Leiden
- Dr. Ivo Fokkema, Clinical Genetics&human genetics, LUMC, Leiden
- Dr. Jeroen van Reeuwijk, RadboudUMC, Nijmegen
- Dr. Ben Moore Ensembl Outreach team, EMBL-EBI
- Dr. Hanka Venselaar, RadboudUMC, Nijmegen
- Dr. Rolph Pfundt, RadboudUMC, Nijmegen
- Dr. Frans Verheijen; Erasmus MC, Rotterdam
- Dr. Lies Hoefsloot, Clinical Genetics, Erasmus MC, Rotterdam



Dr. Martie C.M. Verschuren
Course manager
Avans Hogeschool
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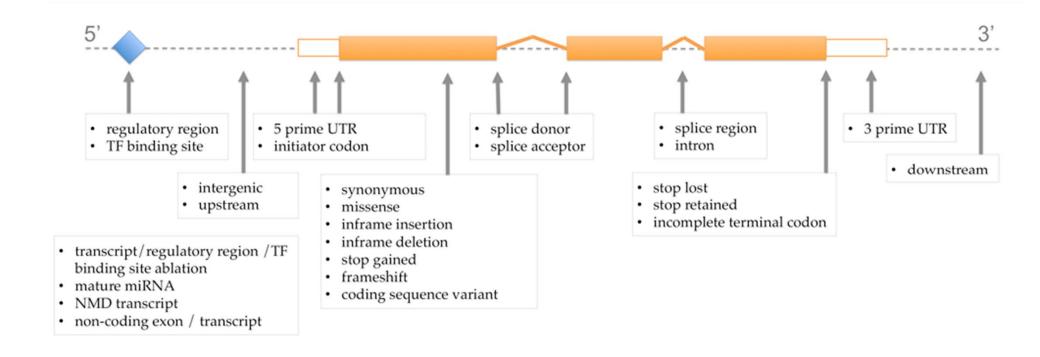
http://www.alsavans.nl



## Introduction participants



### Variation overview





# **CENTRAL DOGMA**flow of genetic information

