

# William Verstraeten

MA 4 MASTER OF LIFE SCIENCES

Lausanne, Switzerland

☎ +32 473 571 159 | ✉ [william.verstraeten@epfl.ch](mailto:william.verstraeten@epfl.ch)

## Education

### MA 4 Master of Life Sciences

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

- With a focus on biomedical engineering, bio-sensors and molecular engineering
- Finished classes with 5.6/6 average

Lausanne, Switzerland

Sep. 2020- present

### Bachelor degree in Nanobiology *Cum Laude*

TU DELFT & ERASMUS UNIVERSITY ROTTERDAM

- Graduated with 8.7/10 average
- Honours Program TU Delft (completed 7 extra ECTS)

Delft & Rotterdam , Netherlands

Sep. 2017- Jul. 2020

### Exchange Programme in Singapore

NATIONAL UNIVERSITY OF SINGAPORE

- Specialization in Nanobiology

Singapore

Aug. 2019 - Feb. 2020

## Projects

### Development and optimization of a high-throughput viability assay

SUNBIO SCIENCES

- Development and optimization of a high-throughput viability assay suitable for the GRI3D® platform for cancer drug screening. Including the development of an image analysis pipeline.

Lausanne, Switzerland

Mar. 2022- now

### Lab immersion in The laboratory of biomedical microfluidics (LBMM)

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

- Building a microfluidic system for rapid drug screening against patient-derived tumor cells, to determine the optimal personalised treatment.

Lausanne, Switzerland

Sept. 2021- Jan. 2022

### Team Captain for the SenSwiss team in the 2021 SensUs competition

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

- Management of a team of 10 interdisciplinary Master students.
- Developing and building of a biosensor and a microfluidic cartridge aimed at the rapid quantification of Hemagglutinin-1 concentration in saliva.
- Decreased the time for quantification from 120 to 10 minutes with a limit of detection of 50 pg/ml.

Lausanne, Switzerland

Jan. 2021- Sept. 2021

### Lab immersion in BioNanoPhotonic Systems Laboratory

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

- Adapting the nanoparticle-enhanced plasmonic gold nanohole array sensing to salivary body fluids.

Lausanne, Switzerland

Jan. 2021- July 2021

### Bachelor End Project

TU DELFT

- Studying the influence of plating density on mouse embryonic stem cell survival and differentiation into neural precursors.

Delft & Rotterdam , Netherlands

Feb. 2020- July 2020

## Experience

### Research intern

SUNBIO SCIENCES

- Learned to plan and perform experiments in an independent manner, as well as advanced skills in mammalian in cell culture

Lausanne, Switzerland

Mar. 2022- now

### Teaching assistant

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

- Teaching assistant in advanced Masters course for university Life Sciences, Materials and Electronic students during tutorials on Bio-sensors design and applications. Learned to come up with exercises adapted to the students' level and present the solutions in an interactive manner.

Lausanne, Switzerland

Sep. 2021- now

### Teaching assistant

DELFT UNIVERSITY OF TECHNOLOGY

- Teaching assistant for second year university Physics and Nanobiology students during tutorials on thermodynamics and programming. Learned advanced teaching skills in an advanced course.

Delft, Netherlands

Apr. 2020- May 2020

## **Cohecie external commissioner and vice-president**

*Delft, Netherlands*

DELFT UNIVERSITY OF TECHNOLOGY

2018-2019

- Contact companies abroad in order to organise trips to their labs for Nanobiology students. Mastered communication and organisational skills for big events.

## **Extracurricular Activities**

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### **Coach of the EPFL SensUs team**

*Lausanne, Switzerland*

ECOLE POLYTECHNIQUE DE LAUSANNE

Feb. 2022-Sep. 2022

- Help the Lau'Sens team with the development of their biosensor for the SensUs 2022 competition.

### **Cohecie external commissioner and vice-president**

*Delft, Netherlands*

DELFT UNIVERSITY OF TECHNOLOGY

2018-2019

- Contact companies abroad in order to organise trips to their labs for Nanobiology students.

## **Skills**

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<b>Soft Skills</b>	Working in a interdisciplinary team, flexibility, delegation
<b>Programming</b>	Python, MATLAB, R, ImageJ, $\LaTeX$
<b>Languages</b>	French (native), Dutch (native), English (C2)
<b>Lab</b>	Flow cytometry, Mammalian cell culture, Fluorescence microscopy

## **Awards**

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### **First place in analytical performance category SensUs 2021 international student competition**

*Eindhoven, Netherlands*

### **Second place in the translational potential category SensUs 2021 international student competition**

*Eindhoven, Netherlands*