

# ESAO Winter School 2021

Jaca, Spain

## The Bionic Human: Biomaterials, Bioartificial and Bioengineered Organs, and Cybernetics for the Future of Regenerative Medicine

### Scientific Committee

Pedro Baptista

Cecile Legallais

Piotr Ladyzynski

Bart Spee

Gloria Gallego Ferrer

### Layout

#### Total 17 lectures + 2 keynote lectures

I would like to give the perspective of “**Organoids and Stem Cells**” and “**Biomaterials and bioprinting**” necessary to develop “**(Bio)artificial**” and “**Bioengineered Organs**” of the future. Then, provide a broad view of “**Current cybernetic technology and human integration**”.

We will have to co-organize this with **TERMIS-EU** and we have the possibility to have the **European Kidney Health Alliance (EKHA)** to have a session here to discuss the necessary steps to further advances in dialysis and implantable kidney devices (Fokko Wieringa will help with this). For this, we could do a mixed session (with speakers physically present and online).

My idea is something like this:

2 keynote speakers (Hans Clevers and someone else with high profile)

2 sessions on “**Organoids and Stem Cells**”

1 session on “**Biomaterials and bioprinting**”

2 sessions on “**(Bio)artificial Organs**”

1 session on “**Bioengineered Organs**”

2 sessions on “**Current cybernetic technology and human integration**”

## Program

### Wednesday 24th, 2021

13.30 – 16.30 **Registration**

16:30 - 16:40 **Welcome & Opening of Winter School**

**Chair:** Pedro Baptista, Zaragoza

16:40 - 17:30 **Opening Lecture 1**

**Hans Clevers, Utrecht**

17:30 - 18:20 **Opening Lecture 2**

18:30 – 20.00 **Get together with buffet & beverages**

### Thursday 25th, 2021

#### **Session 1**

**Chair:**

08:30 - 09:10

09:10 - 09:50

09:50 - 10:20 **Coffee Break**

#### **Session 2**

**Chair:**

10.20 – 11.10

11:10 – 11:50

12:00 – 17:00 **Ski break**

#### **Session 3**

**Chair:**

17:30 – 18:20

18.20 – 19.10

19:15 -20:45 **Poster Session I with snacks & beverages,  
Seminar room 1st floor**

**Chairs:**

## **Friday 26th, 2021**

### **Session 4**

**Chair:**

08:30 - 09:10

09:10 - 09:50

09:50 - 10:20 **Coffee Break**

### **Session 5**

**Chair:**

10.20 – 11.10

11:10 – 11:50

12:00 – 17:00 Ski break

### **Session 6**

**Chair:**

17:30 – 18:20

18.20 – 19.10

19:15 -20:45 **Poster Session II with snacks & beverages,  
Seminar room 1st floor**

**Chairs:**

## **Saturday 27th, 2021**

### **Session 7**

**Chair:**

08:30 – 09:10

09:10 - 09:50

09:50 - 10:20 **Coffee Break**

**Session 8**

**Chair:**

10:20 - 11:10

11:10 - 11:50

11.50 – 12:30

12:45 - 13:15 **Poster Award Ceremony and Closing remarks**

Pedro Baptista, Zaragoza