



ESAO/TERMIS WINTER

SCHOOL 2021

ONLINE CONFERENCE

February 24-26, 2021

www.esao.org; <https://termis.org>

The Bionic Human:

***Biomaterials, (Bio)Artificial and Bioengineered Organs, and Cybernetics for the
Future of Regenerative Medicine***

ESAO/TERMIS Online Winter School 2021

The Bionic Human: Biomaterials, (Bio)Artificial and Bioengineered Organs and Cybernetics for the Future of Regenerative Medicine

The next Winter School was initially planned to be held in the town of Jaca, Spain the first capital of the Kingdom of Aragon and a skiing hotspot in the Pyrenees. However, the current pandemic situation made us switch it to an ONLINE event.

This year's school is centered on *"The Bionic Human: Biomaterials, (Bio)Artificial and Bioengineered Organs, and Cybernetics for the Future of Regenerative Medicine"*. It will cover, in a bottom-up approach, 1) the fundamentals in biomaterial science, stem cells and organoids that are making possible the creation and implantation of more complex structures like 2) (bio)artificial and bioengineered organs, and 3) cybernetic parts, enabling the future of regenerative medicine and the generation of Bionic Humans.

As usual, we count with a strong and diverse program with internationally acclaimed scientists. As keynote speakers, we will have Dr. Anthony Atala from the Wake Forest Institute for Regenerative Medicine, a pioneer in translational regenerative medicine, and Neil Harbisson, the first legal human cyborg, from the United Kingdom.



Dr. Anthony Atala, WFIRM, USA



Neil Harbisson, UK

This is also the first Winter School co-organized by the European Society for Artificial Organs (ESAO) and the Tissue Engineering and Regenerative Medicine International Society (TERMIS), bringing together the prowess and unique perspectives of these two organizations into one single program, providing a broad view of regenerative medicine and implantable medical parts/devices/organs. There will be also a special session organized by KIDNEW, the Kidney Health Initiative and The European Kidney Health Alliance that will go in-depth into the need of new kidney dialysis innovations and implantable (bio)artificial kidneys.

The meeting will also provide a nice platform for the presentation of the participants' work during two online poster sessions. There will be 3 prizes for the best posters!

The Winter School will take place from February 24-26th 2021. Registration and abstract **submission will end on January 31st 2021** with reduced fees for yESAO and ESAO, and TERMIS members at our website <https://www.esao.org/events/winterschool/>. Registration with a higher fee will be available until the day before the event.

We invite you heartily to join our next ESAO/TERMIS Winter School 2021 and hope to see you soon in The Cloud!

With warm regards from the Scientific Committee,

Pedro M. Baptista, Cecile Legallais, Piotr Ladyzinski, Bart Spee, Nuno Neves, Gloria Gallego-Ferrer, Heinrich Schima, Martijn van Griensven, Zuzana Koci and Fokko Wiering.

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The Bionic Human: Biomaterials, (Bio)Artificial and Bioengineered Organs and Cybernetics for the Future of Regenerative Medicine

24th February

Introduction

Pedro M. Baptista
IIS Aragon, Spain

Keynote Speakers

Antony Atala
WFIRM, USA

Neil Harbisson
World's First Legal Human Cyborg, UK

Poster Session I

25th February

Organoids and Stem Cells I

Matthias Lutolf
EPFL, Switzerland

Kerstin Schneeberger
Utrecht University, The Netherlands

Jeffrey Beekman
Utrecht University, The Netherlands

Organoids and Stem Cells II

Michael Monaghan
Trinity College Dublin, Ireland

Susan Kimber
University of Manchester, UK

Biomaterials and Bioprinting

Mario Barbosa
I3S, Portugal

Nuno Neves
3B's, Portugal

Lorenzo Moroni
Maastricht University, The Netherlands

(Bio)artificial Organs

Jean-Charles Duclos-Vallee
Hospital Paul Brousse, France

Thierry Berney
Geneva University, Switzerland

Poster Session II

26th February

Cardiovascular devices and human integration

Michael Lommel
Charite, Germany

Libera Fresiello
KU Leuven, Belgium

Martin Maw
Vienna University, Austria

Thomas Schlöglhofer
Vienna University, Austria

Cybernetic technology and human integration

Artur Lorens
Institute of Physiology and Pathology of Hearing, Poland

Oskar Aszmann
Vienna University, Austria

Bioengineered Organs

Alejandro Soto-Gutierrez
Pittsburgh University, USA

Giuseppe Orlando
Wake Forest University, USA

Paolo De Coppi
University College London, UK

Special session on (Bio)artificial Kidneys

Roos Masereeuw & Karin Gerritsen
Utrecht University, The Netherlands

Shuvo Roy & Bill Fissel
UCSF, USA
Vanderbilt University, USA

Dimitrios Stamatialis
TU-Twente, The Netherlands

Poster Award Ceremony and Closing Remarks

Pedro M. Baptista
IIS Aragon, Spain

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Abstract Submission

Abstracts for poster presentations are open until January 31st 2021. Poster presentations will be carried out in 2 virtual sessions with 3-5 minutes “rapid-fire” presentations.

Winners for 3 Poster Awards will be selected (1st prize: 500 EUR; 2nd prize: 300 EUR and 3rd prize: 200 EUR)!

Guidelines for poster submission:

- Abstract max. 400 words including title
- Send your abstract to anita.aichinger@donau-uni.ac.at
- Deadline: January 31st, 2021

Registration and Fees

Online by bank transfer only:

www.esao.org/registration-form-esao-winter-school-2021/

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Registration fee

before/after Jan 31, 2021

ESAO/TERMIS-EU Member € 100,- /€ 150,-

Non-Member € 150,- /€ 225,-

Student € 50,- /€ 75,-