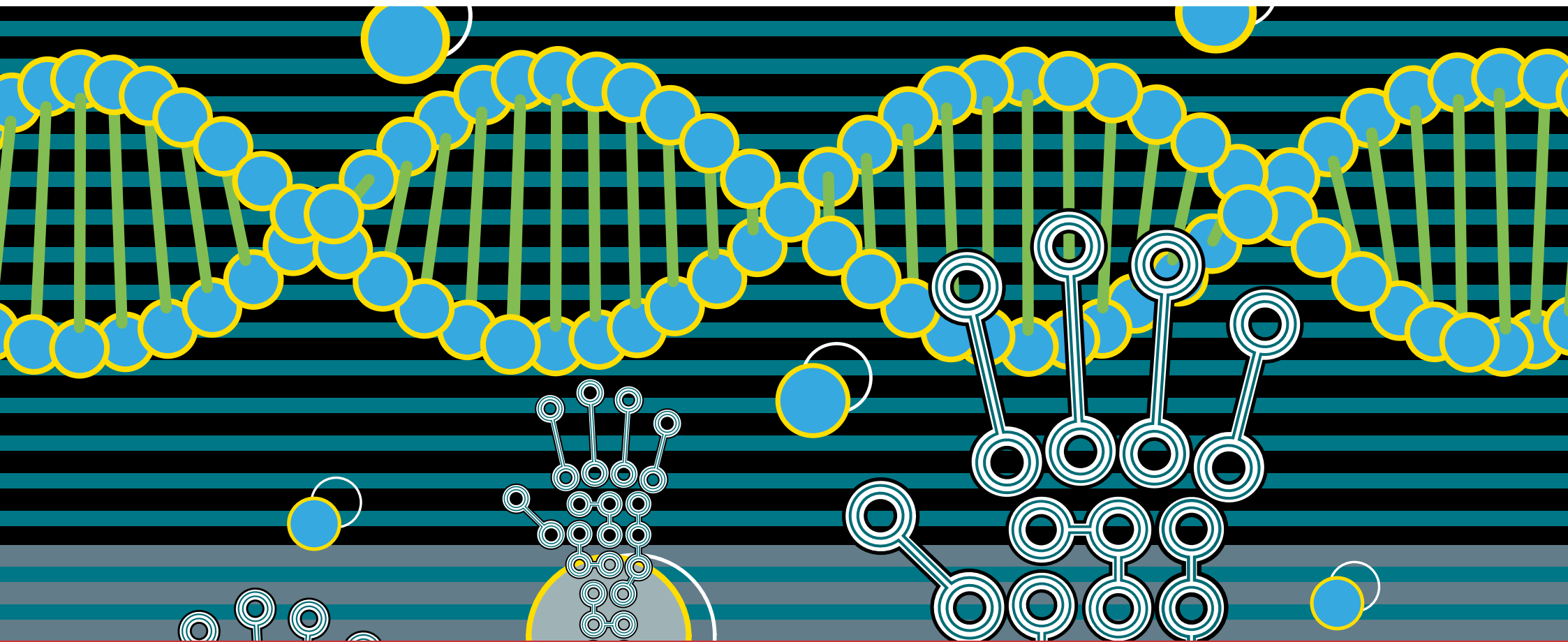


NOVEMBER 16-18, 2021

VIRTUAL CONFERENCE | FINAL PROGRAM



INNOVATIVE TISSUE THERAPIES FROM BENCH TO BEDSIDE

#NatconfTissue21



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Serena Zacchigna (Trieste, Italy)

1.00 pm Welcome and Opening Remarks

SESSION 1: Heart Gene Therapy
Chairpersons: Giovanni Landoni, Michele Marass

- 1.10 pm *Harnessing the poor regenerative capacity of the adult mammalian heart*
Serena Zacchigna (International Centre for Genetic Engineering and Biotechnology, Italy)
- 1.30 pm *Cardiac Gene Therapy*
Roger Hajjar (Flagship Pioneering, USA)
- 1.50 pm **Q&A**

SESSION 2: Ocular Gene Therapy
Chairpersons: Michele Marass, Paolo Rama

- 02.05 pm *Gene therapy approaches to cone survival*
Constance Cepko (Harvard Medical School, USA)
- 02.25 pm *Restoring Vision*
Botond Roska (Institute for Molecular and Clinical Ophthalmology, Switzerland)
- 02.45 pm **Q&A**

03.00 pm *Coffee break*SESSION 3: Genome editing in muscular and cardiac diseases
Chairpersons: Eustachio Agricola, Giulio Cossu

- 03.15 pm *Correcting Duchenne Muscular Dystrophy Using Genome Editing*
Rhonda Bassel-Duby (University of Texas Southwestern Medical Center, USA)
- 03.35 pm *CRISPR-Cas9 In Vivo Genome Editing for Transthyretin Amyloidosis*
David Lebowitz (Intellia Therapeutics, USA)
- 03.55 pm **Q&A**
- 04.10 pm **- lightning talks -**

04.40 pm *Coffee break*SESSION 4: Panel discussion on DEI
Chairpersons: Cinthia Farina, Aline Lückgen, Michele Marass

- 04.55 pm *Gender discrimination in healthcare*
Sabine Oertelt-Prigione (Radboud Universiteit, Netherlands)
- 05.25 pm *Confronting diversity in the production of clinical evidence goes beyond merely including under-represented groups in clinical trials*
Karien Stronks (Amsterdam UMC, The Netherlands)
- 05.55 pm *Prioritizing Diversity, Inclusion and Health Equity to facilitate innovation in Clinical Research*
Tanjala Purnell (Johns Hopkins University, USA)
- 06.25 pm **Q&A**

1.00 pm Opening Remarks

SESSION 5: Microbiome-mediated therapy
Chairpersons: Paolo Dellabona, Marika Falcone1.10 pm *Developing therapeutic gut-derived microbial ecosystems*
Emma Allen-Vercoe (University of Guelph, Canada)1.30 pm *The role of microbiome in liver pathology*
Jasmohan Bajaj (Virginia Commonwealth University School of Medicine, USA)

1.50 pm Q&A

SESSION 6: Artificial Retina
Chairpersons: Francesco Bandello, Michele Marass02.05 pm *Electronic "photoreceptors" enable prosthetic vision with acuity matching the natural resolution in rats*
Daniel Palanker (Stanford University, USA)02.25 pm *Optimizing Artificial Vision*
James Weiland (University of Michigan, USA)

02.45 pm Q&A

03.00 pm Coffee break

SESSION 7: Genome editing in blood disorders
Chairpersons: Chiara Bonini, Fabio Ciceri03.15 pm *Creating safe and effective cell medicines using genome editing*
Matthew Porteus (Stanford University, USA)03.35 pm *CRISPR-Cas9 Gene Editing for Sickle Cell Disease and Transfusion Dependent β -Thalassemia*
Haydar Frangoul (TriStar Medical Group, USA)

03.55 pm Q&A

04.10 pm - lightning talks -

04.40 pm Coffee break

05.05 pm Trivia Night hosted by Aline Lückgen & Michele Marass

1.00 pm **Opening Remarks**

SESSION 8: Bone Bioengineering
Chairpersons: Aline Lückgen, Vincenzo Salini

1.10 pm *Engineering human bone for medical impact*
Gordana Vunjak-Novakovic (Columbia University, USA)

1.30 pm *Regenerative Engineering of Bone and Other Musculoskeletal Tissues*
Cato Laurencin (University of Connecticut, USA)

1.50 pm **Q&A**

SESSION 9: Cartilage Tissue Engineering
Chairpersons: Maria Ester Bernardo, Aline Lückgen

02.05 pm *Designing hydrogels to regenerate cartilage*
Stephanie Bryant (University of Colorado, USA)

02.25 pm *Using Allogeneic MSCs to recycle tissues in biological joint repair*
Daniël Saris (Mayo Clinic, USA)

02.45 pm **Q&A**

03.00 pm *Coffee break*

SESSION 10: Liver Cell Therapy
Chairpersons: Luca Guidotti, Matteo Iannacone

03.15 pm *Hereditary Tyrosinemia Type 1 as a precedent indication in support of lenti-based in vivo gene therapy*
Joseph Lillegard (Mayo Clinic, USA)

03.35 pm *Taking liver cell therapies from bench to clinic*
Stuart Forbes (University of Edinburgh, UK)

03.55 pm **Q&A**

SESSION 11: Artificial Kidney
Chairpersons: Alessandra Boletta, Luca Rampoldi

04.10 pm *An Implantable Artificial Kidney - Building the Building Blocks*
Shuvo Roy (University of California, USA)

04.30 pm *Solving three technology challenges to transform dialysis*
Jonathan Himmelfarb (Kidney Research Institute, USA)

04.50 pm **Q&A**

05.05 pm **- lightning talks -**

05.35 pm **Concluding Remarks**

Tuesday, November 16

04.10 pm Lighting talks

Reprogramming of the immune by targeted inducible delivery of stimulatory cytokines inhibits growth and promotes survival in a mouse model of glioblastoma multiforme

Filippo Birocchi (SR-TIGET, Italy)

Assessing stealth and sensed base editing in human hematopoietic stem/progenitor cells

Martina Fiumara (IRCCS Ospedale San Raffaele, Italy)

CRISPR/Cas9-mediated CD39 disruption can be combined with TCR editing in T cells to improve adoptive T cell therapy for colorectal cancer

Alessia Potenza (IRCCS Ospedale San Raffaele, Italy)

Tumor-directed, myeloid cell-based interferon gene therapy synergizes with CAR T cells to control tumor growth in a new syngeneic model of glioblastoma

Federico Rossari (SR-TIGET, Italy)

Towards clinical translation of hematopoietic cell gene editing for treating Hyper - IGM Type 1

Valentina Vavassori (SR-TIGET, Italy)

Wednesday, November 17

04.10 pm Lighting talks

Tim-3, LAG-3 and 2B4 disruption differentially regulate anti-tumor response of TCR gene edited memory stem T cells

Beatrice Claudia Cianciotti (IRCCS Ospedale San Raffaele, Italy)

A CAR-Treg - based strategy for Systemic Lupus Erythematosus

Matteo Doglio (IRCCS Ospedale San Raffaele, Italy)

STEMS: neural stem cells transplantation in progressive multiple sclerosis. A phase I study

Angela Genchi (IRCCS Ospedale San Raffaele, Italy)

Exhausted, tumor-specific T cells can be exploited to generate a library of T-Cell receptors for adoptive T cell therapy in blood malignancies

Francesco Manfredi (Università Vita- Salute San Raffaele, Italy)

The ILP-technology platform is scalable and enables efficient delivery of immunoregulatory proteins locally on-site - lead program in clinical phase 2 developments

Mia Philipson (Uppsala University, Sweden)

Thursday, November 18

05.05 pm Lighting talks

Bioengineered Hydrogels For Scarless Healing of Corneal Wounds/Ulcers

Parinita Agrawal (Pandorum Technologies Pvt. Ltd., India)

Magnetic nanoparticles and magnetic microposts: new tools for promoting axonal outgrowth

Alessandro Falconeri (Università degli Studi di Pisa, Italy)

Improvement of chondrogenic potential of exosomes for treatment of osteoarthritis

Maryam Hosseinzadeh (Royan Institute, Iran)

Fabrication of an endothelial progenitor cell-based vascular graft for drug screening

Isra Marei (Weill Cornell Medicine, Qatar)

Biocompatibility and local immunomodulation of subcutaneously implanted, islet encapsulation platform in non-human primates

Jesus Paez-Mayorga (Houston Methodist Research Institute, USA)

Useful Information

This event is virtual. It will be streamed in Central European Time (CET).

REGISTRATION FEES:

Student / PostDoc

€ 100,00 VAT included

Academic

€ 240,00 VAT included

Industry

€ 450,00 VAT included

REGISTRATION FEE INCLUDES:

All scientific sessions

Poster session

Abstract book

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