

Under the High Patronage of  
Mr Emmanuel Macron  
President of the French Republic

## HYBRID: Next generations of gene & cell therapies 8&9 February 2024

### Day 1 : 8 February 2024

8:30 AM Introduction

9:00 AM Keynotes Lise Alter – Head of the French Health Innovation Agency  
Anne Jouveneau - The national acceleration strategy for biotherapies and biomanufacturing

### Session 1: 9:15am – 12:15pm The challenges associated with future viral vectors and genome editing approaches

*From the main challenges, avenues and prospects for new vectors to optimized delivery and safety, and tomorrow's genome-editing strategies*

Overview Academic speaker: Oumeya Adjali - Gene therapy using AAV viral vectors; from vector engineering to preclinical evaluation

Short talks Academic speakers:

- Ana Buj-Bello: Next generation AAV vectors for gene therapy of muscle disorders
- Alexis Duvergé: Specific Targeting of Cancer Cells by Lentiviral Vectors
- Annarita Miccio: Genome editing approaches for beta-hemoglobinopathies
- Aurélie Bedel: How to secure CRISPR-Cas9 use?

Start-up speakers: Sparing Vision

Round table To be announced

### Session 2: 02:30pm – 05:00pm New nucleic acid therapies: applications

*From prophylactic to therapeutic vaccines and the various potential uses of nucleic acids. Challenges and barriers associated with the uses of nucleic acids: shelf life, route of administration, targeting, etc.*

Overview Academic speaker: Chantal Pichon - The game changing potential of mRNA-based vaccines and therapeutics

Short talks Academic speakers:

- Nathalie Mignet: Production of lipid nanoparticles formulations for gene and cell therapy
- Philippe Barthélémy: Therapeutic oligonucleotides: efficient and specific tools to combat diseases

Round table To be announced

**B2B Meetings: 12:15pm – 02:30pm & 5:00pm – 07:00pm**

**Cocktail reception (Invitation only) : 06:30pm – 09:30pm**

## Day 2: 9 February 2024

8:00AM	Introduction	
8:30AM	Keynotes	Cécile Martinat & Christophe Junot: National research program in biotherapies and bioproduction

### Session 3: 9:00am – 11:00am

#### Immuno cell based therapies

*How can the uses of CAR be extended beyond current applications? How can we improve delivery to solid tumours, the role of the tumour environment, survival, etc.? Applications beyond cancer.*

Overview To be announced

Short talks Academic speakers:

- Mitra Suman: Optimizing Adoptive Cellular Therapies in Physio- Chemical Tumor Environments for Superior Anti-Cancer Efficacy without systemic toxicity
- Emmanuel Donnadieu: Predicting efficacy and toxicity of CAR T cells using an ex vivo human model
- Marie-Caroline Dieu-Nosjean: Manipulation of tertiary lymphoid structures as the third generation of immunotherapy

Start-up speakers : Mnemo Therapeutics

Round table To be announced

### Session 4: 1:30pm – 03:30pm

#### Cell therapies and beyond

*From the various therapeutic applications of cell therapies to exosomes: how to develop clinical uses of cell therapies, address characterisation issues, etc.? How to take full advantage of the coupling between therapeutic effect and vectorisation properties for exosomes.*

Short talks Academic speakers:

- Louis Casteilla: MSC-based ATMP: present and future
- Christelle Monville: A stem cell therapy pipeline with focus on retinitis pigmentosa and other rare indications with high unmet medical needs

Start-up speakers: Treefrog

- Christian Jorgensen: Next generation cell therapies for osteoarticular diseases

Overview Academic speakers: Philippe Menasché: Cell Therapy of Heart Failure: Cells, Exosomes, RNAs ?

Short talks Academic speakers:

- Gregory Lavieu: Extracellular Vesicle-based vector for targeted therapeutics delivery
- Start-up speakers: to be confirmed

Conclusion • Jerome Bonnet: Programming bacteria as smart therapeutics

To be announced

**B2B Meetings : 10:30am – 01:30pm & 03:30pm – 06:30pm**