

DIMET COURSE

Precision Medicine in the Era of Targeted Genome Editing

Organized by: Pietro Genovese

PROGRAM

Wednesday, November 11, 2020 – Italy time (GMT+2)

Zoom Meeting: <https://bostonchildrens.zoom.us/j/98018659067?pwd=Ylo2VTBZZmY2MnRMYYTFjMjZqZ3hWQT09>

Passcode: 701362

SITE-SPECIFIC GENOME EDITING TECHNOLOGY

15.00 – 15.05 Introduction

Pietro Genovese, PhD., Dana-Farber cancer Institute, Harvard Medical School, Boston (US).

15.05 – 16.00 “Programmable nucleases: the biotechnology revolution of genome editing”

Anna Cereseto, Ph.D., University of Trento, Trento, (IT)

16.00 – 17.00 “Nuclease Specificity and Genotoxic Risks”

Giandomenico Turchiano, Ph.D., UCL GOS Institute of Child Health, London (UK).

17.00 – 17.15 BREAK

17.15 – 18.15 “Improving the Toolkit of Site-Specific Nucleases”

Benjamin Kleinstiver, Ph.D., Center for Genomic Medicine, Massachusetts General Hospital, Boston (US)

Thursday, November 12, 2020

Zoom Meeting: <https://bostonchildrens.zoom.us/j/98819238592?pwd=alhGTkV0Z0MrUUc4MTJ2SGV1c29adz09>

Passcode: 445279

PRECISE GENETIC ENGINEERING FOR THE TREATMENT OF HEMATOLOGIC DISEASES

15.00 – 16.00 “Advanced Genetic Engineering of Hematopoiesis”

Pietro Genovese, PhD., Dana-Farber cancer Institute, Harvard Medical School, Boston (US).

16.00 – 17.00 “Gene Editing Strategies for the Treatment of Hemoglobinopathies”

Daniel E. Bauer, M.D., Boston Children’s Hospital, Harvard Medical School, Boston (US).

17.00 – 17.15 BREAK

17.15 – 18.15 “Gene editing for improving safety and efficacy of cancer adoptive immunotherapy”

Eliana Ruggiero, Ph.D., San Raffaele Scientific Institute, Milan, (IT)

Friday, November 13, 2020

Zoom Meeting: <https://bostonchildrens.zoom.us/j/94323098628?pwd=RXB6d0RuWGg3Q3pCMjh5R2VMR2xiUT09>

Passcode: 629459

BROADER APPLICATION AND ETHICAL CONSIDERATIONS OF PRECISE GENETIC ENGINEERING TOOLS

15.00 – 16.00 **“Epigenetic Editing”**

Claudio Mussolino, Ph.D., University of Freiburg, Freiburg (Germany)

16.00 – 17.00 **“Crisper Crops”**

Carlo Pozzi, Ph.D., Università degli studi di Milano (Italy).

17.00 – 17.15 BREAK

17.15 – 18.15 **“Third decentration: ethical issues on CRISPR/Cas9 Genome Editing approaches”**

Daide Battisti, M.Phil., Università degli studi dell’Insubria (Italy)