



University  
of Basel

Department of  
Biomedical Engineering



Selected research topics in Biomedical Engineering:

The Future of Personalized Medicine: 3D Printing and Patient-Specific Technologies

Location: Biozentrum, Spitalstrasse 41, Basel, Seminar Room U1.191

Date & Time: Tuesday 09.04.2023 11:15 – 13:00

# **Bioinks and Biofabrication Strategies for Musculoskeletal Tissues**

***Prof. Matteo D'Este***

*AO Research Institute Davos*

## **Abstract**

Soft biomaterials from pristine or semi-synthetic biopolymers derivatives are essential in biomedicine, and their combination into composites expands our opportunities to modulate their properties and to engineer tissue architectures. This talk will illustrate our research on semisynthetic derivatives of hyaluronic acid describing a series of applications in biofabrication with emphasis on musculoskeletal tissues.

## **Biosketch**

Matteo D'Este is head of Biomedical Materials at the AO Research Institute Davos. His group brings together wide expertise in biopolymers chemical modification for the development of molecular networks to be used for fundamental and translational research. His main research interests embrace biofabrication, immunomodulatory biomaterials, and drug delivery. Dr. D'Este is also actively committed to the growth of the biomaterial community at the Swiss and European level.