

## GENERAL INFORMATION

**Meeting Venue - Course October 13-14, 2021**  
Campanacci Hall - Rizzoli Orthopaedic Institute  
Via Pupilli 1 - Bologna, Italy

**Meeting Venue - Course October 15, 2021**  
BI-REX - Big Data Innovation & Research Excellence  
Via Paolo Nanni Costa 20 - Bologna, Italy

### Case Presentations

Participants are invited to submit clinical cases to be discussed during the course. Those interested are requested to send an e-mail to: [ortopedia@adarteventi.com](mailto:ortopedia@adarteventi.com)

### Registration fee October 13-14-15 (to attend the event in person in Bologna)

€ 200,00 VAT included  
The registration fee covers: lunches, refreshments during the breaks and the Course Dinner October 14

### Registration fee WEBINAR

**October 13 - 16:30/18:30**

Session 2: Overview on reconstruction methods in severe bone and joint defect € 25,00 € VAT included

**October 14 - 14:00/18:30**

Session 5: Skeletal Custom applications € 25,00 € VAT included

The OnLine Course will be hosted on Zoom platform  
The link will be sent by email 3 days before the Webinar

Registration and payment forms are available online at:  
[www.adarteventi.com](http://www.adarteventi.com)  
[www.orthopaediccoursesbjd.it](http://www.orthopaediccoursesbjd.it)

### Deadline

Deadline for registration is SEPTEMBER 30<sup>th</sup>, 2021

### Organizing Secretary

AD ARTE srl  
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### PRIVACY

According to art. 10/Law 675/96 Ad Arte srl is authorized to use your personal data for purposes connected to Congress management. Ad Arte srl with head offices in Bologna, Italy - Via Barberia 14 - shall be responsible for data processing. Your right to access your personal details and to supplement, correct and update the same, are guaranteed by art. 7 of Law n 196/2003.

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Thanks to:



# Custom Solutions for SEVERE BONE and JOINT DEFECTS

**OCTOBER 13-15, 2021**  
**Istituto Ortopedico Rizzoli**  
**Bologna - Italy**

[www.orthopaediccoursesbjd.it](http://www.orthopaediccoursesbjd.it)

*“The course is address to orthopaedic surgeons interested to complex reconstructions related to wide bone and soft tissue deficiencies due to tumor resection, multiple prosthetic failures, difficult trauma or infection. Particular emphasis will be taken in 3D printing custom reconstruction in pelvic oncology and revision surgery. Additionally, upper and lower limb difficult cases reconstructed with allograft or custom prosthesis will be presented”*

### Course Director

**Davide Maria DONATI, M.D.**

Head of Orthopaedic Oncology Unit, Rizzoli Orthopaedic Institute, Bologna, IT

### Course Organizers:

**Marco MANFRINI, M.D.**

Orthopaedic Oncology Unit, Rizzoli Orthopaedic Institute, Bologna, IT

**Giuseppe BIANCHI, M.D.**

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Head, Orthopedic Unit, Sant'Orsola-Malpighi Hospital, Bologna, IT

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SERVIZIO SANITARIO REGIONALE  
EMILIA - ROMAGNA  
Istituto Ortopedico Rizzoli di Bologna  
Istituto di Ricovero e Cura a Carattere Scientifico



European Reference Network  
for rare or low prevalence complex diseases  
Member: Rizzoli Orthopaedic Institute of Bologna Italy

## DAY 1 OCTOBER 13<sup>rd</sup>, 2021 (Wednesday afternoon)

Meeting Venue:  
Campanacci Hall - Rizzoli Orthopaedic Institute - Via Pupilli 1 - Bologna, Italy

### Session 1: INTRODUCTION ON SEVERE BONE AND JOINT DEFECT

The session is address to describe the problems more than the solutions.

13.30	<b>Course admission</b>
14.30	<b>General approach to wide bone and joint loss</b>
Lecture 1	Definition of the educational background to address problem solving for orthopaedic surgeon. Patient and doctor relationship: what can be expected and what should. <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
15.00	<b>Tumor related defects</b>
Lecture 2	The amount of bone and soft tissue to be resected/excised in relation to different diagnosis and sites. Resection in different skeletal sites. How to limit joint replacement (extended intercalary vs joint excision). <b>DOMENICO CAMPANACCI, M.D.</b> (CTO, Florence)
15.30	<b>Prosthetic loosening and infection related defects</b>
Lecture 3	Generalities in aseptic loosening and infection in hip and knee prosthetic failure. The problem of reconstruction after long course infection cure. How to deal with fibrosis. <b>ALESSANDRO MASSÈ, M.D.</b> (CTO, Turin)
16.00	Discussion & Coffee break

### Session 2: OVERVIEW ON RECONSTRUCTION METHODS IN SEVERE BONE AND JOINT DEFECT (also zoom webinar)

The session is address to describe advantages and limits.

16.30	<b>Standard solutions</b>
Lecture 4	Use of modular mega prostheses, different system in different skeletal sites. Advantages and limitations of the single techniques applications will be underlined. <b>MASSIMILIANO DE PAOLIS, M.D.</b> (S. Orsola Malpighi Hospital, Bologna)
17.00	<b>The use of bone massive allograft</b>
Lecture 5	Generalities on allograft: allograft application alone, allograft composite prosthesis, allograft with vascularized fibula. <b>MARCO MANFRINI, M.D.</b> (Rizzoli Institute, Bologna)
17.30	<b>The use of new reconstructive material</b>
Lecture 6	The definition of scaffold. Porous resorbable structures vs porous metal (tantalum, titanium). <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
18.00	Discussion
18.30	End of the day

## DAY 2 OCTOBER 14<sup>th</sup>, 2021 (Thursday morning and afternoon)

Meeting Venue:  
Campanacci Hall - Rizzoli Orthopaedic Institute - Via Pupilli 1 - Bologna, Italy

### Session 3: GENERALITIES ON CUSTOM SOLUTIONS

08.00	<b>The use of new virtual technology applied to orthopaedic surgery</b>
Lecture 7	Navigation, robotic, use of patient specific instrumentation. <b>TOMMASO FRISONI, M.D.</b> (Rizzoli Institute, Bologna)
08.30	<b>3D printing technology</b>
Lecture 8	Different materials and machines. What is standard and future directions. <b>ENRICO SANDRINI, Ing.</b> (Lincotek)
09.00	<b>What is intended with custom solution? Different criteria of applications</b>
Lecture 9	Custom as a standard solution (Stanmore). Custom in disaster cases (Link). Forged device. Custom as reliable prosthetic solution in young individuals (Custom – better anatomy respect – better function – better durability). <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
09.30	<b>Projecting custom made solutions (biomechanical approach)</b>
Lecture 10	Designing the trabecular custom structure. How to improve integration, how to decrease infection risk. <b>Helmut-Detlet Link</b> (Link)
10.00	Discussion & Coffee break

### Session 4: CUSTOM SOLUTIONS IN THE PELVIS

10.30	<b>Standard solution in pelvic surgery</b>
Lecture 11	Pelvic resections: surgical approach, resection classification, different type of reconstruction in different pelvic sites. <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
11.00	<b>Standard solution in hip revision surgery</b>
Lecture 12	Principle of cup revision in 3b Paproski cases and more. Pseudotumor cases. How to regain the bone stock. <b>ALESSANDRO MASSÈ, MD</b> (CTO, Turin)
11.30	<b>Custom made prosthesis in pelvic area</b>
Lecture 13	How to match resection and reconstruction. The use of 3D printed guides. Fixation. Reduce the reconstruction time. Quality of bone stock in revision cases. <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
12.00	Discussion
12.30	Lunch break

### Session 5: SKELETAL CUSTOM APPLICATIONS (also zoom webinar)

14.00	<b>Relive surgery: pelvic reconstructions with custom solutions</b>
	Cases in oncology surgery - Cases in revision surgery <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna) <b>DOMENICO CAMPANACCI, M.D.</b> (CTO, Florence) <b>ALESSANDRO MASSÈ, M.D.</b> (CTO, Turin)
16.00	Discussion & Coffee break
16.30	<b>Custom made application around the knee</b>
Lecture 14	From allograft replacement experience, through partial prosthetic applications, to articular replacement (small and large osteochondral). <b>DAVIDE M. DONATI, M.D.</b> (Rizzoli Institute, Bologna)
17.30	<b>Custom made application around the ankle</b>
Lecture 15	Ankle arthrodesis in distal tibia fracture. Mobile ankle in tumor or fracture surgery. <b>MASSIMILIANO MOSCA, MD</b> (Rizzoli Institute, Bologna)
18.00	Relive surgery (ankle or knee)
18.30	End of the day
20.30	Course Dinner

## DAY 3 OCTOBER 15<sup>th</sup>, 2021 (Friday morning)

Meeting Venue:  
BI-REX - Via Paolo Nanni Costa 20 - Bologna, Italy

### Session 6: APPLICATION IN THE UPPER LIMB AND CASES PROVIDED BY PARTICIPANTS

08.30	<b>Custom made applications in scapula and upper limb</b>
Lecture 16	Attachment of the scapula. Humeral joint reconstruction. <b>GIUSE E BIANCHI, M.D.</b> (Rizzoli Institute, Bologna)
09.00	<b>Presentation and discussion on cases provided by participants and invited speakers</b>
10.30	Coffee break
11.00	<b>The future of custom devices</b>
Lecture 17	The company perspective. The hospital based perspective. Set up of a custom project centre. <b>ALBERTO LEARDINI, Ing. PhD</b> (Rizzoli Institute, Bologna) <b>ENRICO SANDRINI, Ing.</b> (Lincotek)
Lecture 18	The regulation perspective. Future of custom business. <b>MASSIMO ANANIA, Ing.</b> (Link)
12.00	End of the course