“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.
Orthopaedic Oncology Unit, Rizzoli Orthopaedic Institute, Bologna, IT
Laura CAMPANACCI, M.D.
Orthopaedic Oncology Unit, Rizzoli Orthopaedic Institute, Bologna, IT
Massimiliano DE PAOLIS, M.D.
Head, Orthopedic Unit, Sant’Orsola-Malpighi Hospital, Bologna, IT
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

**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  
www.orthopaediccoursesbjd.it

**Deadline**
Deadline for registration is SEPTEMBER 30th, 2021

**Organizing Secretary**
AD ARTE srl  
segreteria@adarteventi.com  
www.adarteventi.com  
Phone: +39 393 7049383

**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.
DAY 1  OCTOBER 13rd, 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 Course admission
14.30 General approach to wide bone and joint loss

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.
DAVIDE M. DONATI, M.D.  (Rizzoli Institute, Bologna)

15.00 Tumor related defects
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).
DOMENICO CAMPANACCI, M.D.  (CTO, Florence)

15.30 Prosthetic loosening and infection related defects
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.
ALESSANDRO MASSÈ, M.D.  (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 Standard solutions
Lecture 4  Use of modular mega prostheses, different system in different skeletal sites. Advantages and limitations of the single techniques applications will be underlined.
MASSIMILIANO DE PAOLIS, M.D.  (S. Orsola Malpighi Hospital, Bologna)

17.00 The use of bone massive allograft
Lecture 5  Generalities on allograft: allograft application alone, allograft composite prosthesis, allograft with vascularized fibula.
MARCO MANFRINI, M.D.  (Rizzoli Institute, Bologna)

17.30 The use of new reconstructive material
Lecture 6  The definition of scaffold. Porous resorbable structures vs porous metal (tantalum, titanium).
DAVIDE M. DONATI, M.D.  (Rizzoli Institute, Bologna)

18.00 Discussion
18.30 End of the day
**Session 3: GENERALITIES ON CUSTOM SOLUTIONS**

**08.00** The use of new virtual technology applied to orthopaedic surgery
- **Lecture 7** Navigation, robotic, use of patient specific instrumentation.  
  **TOMMASO FRISONI, M.D. (Rizzoli Institute, Bologna)**

**08.30** 3D printing technology
- **Lecture 8** Different materials and machines. What is standard and future directions.  
  **ENRICO SANDRINI, Ing. (Lincotek)**

**09.00** What is intended with custom solution? Different criteria of applications
- **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).  
  **DAVIDE M. DONATI, M.D. (Rizzoli Institute, Bologna)**

**09.30** Projecting custom made solutions (biomechanical approach)
- **Lecture 10** Designing the trabecular custom structure. How to improve integration, how to decrease infection risk.  
  **Helmut-Detlet Link (Link)**

**10.00** Discussion & Coffee break

**Session 4: CUSTOM SOLUTIONS IN THE PELVIS**

**10.30** Standard solution in pelvic surgery
- **Lecture 11** Pelvic resections: surgical approach, resection classification, different type of reconstruction in different pelvic sites.  
  **DAVIDE M. DONATI, M.D. (Rizzoli Institute, Bologna)**

**11.00** Standard solution in hip revision surgery
- **Lecture 12** Principle of cup revision in 3b Paproski cases and more. Pseudotumor cases. How to regain the bone stock.  
  **ALESSANDRO MASSÈ, MD (CTO, Turin)**

**11.30** Custom made prosthesis in pelvic area
- **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.  
  **DAVIDE M. DONATI, M.D. (Rizzoli Institute, Bologna)**

**12.00** Discussion
Session 5: **SKELETAL CUSTOM APPLICATIONS (also zoom webinar)**

14.00  **Relive surgery: pelvic reconstructions with custom solutions**
Cases in oncology surgery - Cases in revision surgery  
**DAVIDE M. DONATI, M.D.** (Rizzoli Institute, Bologna)  
**DOMENICO CAMPANACCI, M.D.** (CTO, Florence)  
**ALESSANDRO MASSÉ, M.D.** (CTO, Turin)

16.00  **Discussion & Coffee break**

16.30  **Custom made application around the knee**
Lecture 14  From allograft replacement experience, through partial prosthetic applications, to articular replacement (small and large osteochondral).  
**DAVIDE M. DONATI, M.D.** (Rizzoli Institute, Bologna)

17.30  **Custom made application around the ankle**
Lecture 15  Ankle arthrodesis in distal tibia fracture. Mobile ankle in tumor or fracture surgery.  
**MASSIMILIANO MOSCA, MD** (Rizzoli Institute, Bologna)

18.00  **Relive surgery (ankle or knee)**
18.30  **End of the day**

20.30  **Course Dinner**

---

**DAY 3 OCTOBER 15th, 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  **Custom made applications in scapula and upper limb**
Lecture 16  Attachment of the scapula. Humeral joint reconstruction.  
**GIUSE E BIANCHI, M.D.** (Rizzoli Institute, Bologna)

09.00  **Presentation and discussion on cases provided by participants and invited speakers**

10.30  **Coffee break**

11.00  **The future of custom devices**
Lecture 17  The company perspective. The hospital based perspective.  
Set up of a custom project centre.  
**ALBERTO LEARDINI, Ing. PhD** (Rizzoli Institute, Bologna)  
**ENRICO SANDRINI, Ing.** (Lincotek)

Lecture 18  The regulation perspective. Future of custom business.  
**MASSIMO ANANIA, Ing.** (Link)

12.00  **End of the course**
www.ior.it

ISTITUTO ORTOPEDICO
RIZZOLI
1896-2021
40 ANNI DI IRCCS

Thanks to:

bi-rex
Big Data Innovation & Research Excellence

Requested auspices: EMSOS, ISOLS
EthicalMedTech Compliant EMT16386