

## Registration & Fees

Registration is accepted online only through [www.cartilage.org](http://www.cartilage.org)

All fees in Euros	Early Bird until May 31	Normal Fee June 1 – Sep 15	Onsite Fee from Sep 15
Junior Members, Residents, Students & Physiotherapists*	€ 190.00*	€ 290.00*	€ 340.00*
ICRS Members	€ 290.00	€ 390.00	€ 440.00
Non-ICRS Members	€ 390.00	€ 490.00	€ 540.00
Industry Associates	€ 450.00	€ 550.00	€ 600.00

\* To be accompanied by a certificate signed by the head of department.  
Please send it to [office@cartilage.org](mailto:office@cartilage.org) immediately after your registration.

## Registration Cancellation & Name Change

Written notification is required for all congress cancellations and name changes.  
Notifications should be sent to the Cartilage Executive Office [office@cartilage.org](mailto:office@cartilage.org).

### Refunds for cancellations are as follows:

50 % refund for cancellations before September 15, 2022. No refund thereafter.  
Name changes will be charged with a fee of €100.00.

### Included in the Registration Fee:

- Access to all sessions & industry exhibition
- 1 lunch on Friday
- Course registration material
- 3 coffee breaks
- Farewell reception
- Certificate of attendance

## Payment

Fees are in Euros and are accepted as follows:  
Bank Transfer, Credit cards (VISA, AMEX, Mastercard)

## ICRS Membership Benefits

Attendees who apply for ICRS membership right before registration will immediately benefit from the highly reduced members' fee. Membership applications should be done online before course registration. Please note that ICRS Members who are not in good standing with their membership dues 2022 would be charged with the non-member fee.

## Important Dates

Deadline Course Registration Early Fee	May 31, 2022
Hotel Reservation Deadline	July 15, 2022
Deadline Course Registration Normal Fee	September 15, 2022
Deadline Cancellation of Registration (refund 50%)	September 15, 2022
Onsite Fees as from	September 16, 2022

## Accommodation

For your convenience, the ICRS has made a major commitment to the City of Bologna in order to secure a sufficient block of conveniently located hotel rooms in the city centre at competitive rates. For more information and hotel reservation, please visit [www.cartilage.org](http://www.cartilage.org).

## Faculty & Course Dinner

Take in the success of the ICRS Focus Meeting while enjoying the typical Italian atmosphere and food. Seize this unique opportunity and get together with our faculty experts. Extend your networking with your international peers and colleagues in an inspiring ambience. Fee: € 80 (food & drinks included).

## Course Language

English, no simultaneous translation will be available.

## Updated Information

Please note that this is a preliminary programme. For updated information (topics, faculty, registration fees, etc.) please visit our website [www.cartilage.org](http://www.cartilage.org) frequently.

## Industry Support & Exhibition

The Industry is invited to contribute and to support this important event. Affordable tabletop exhibits and sponsorship opportunities are available to expose and enhance your organization's visibility. Interested companies please contact Anouk Bürgisser-Marti ([anouk.buergisser@cartilage.org](mailto:anouk.buergisser@cartilage.org)).

### Hot Topics

Cells (autologous, heterologous from different sources,  
extracellular vesicles, secretome)  
Growth factors (PRP)  
Biomaterials  
Medical devices  
Intellectual property

### Diamond Partners

AESCULAP  
Biologics



VERICEL

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## Preliminary Programme



# Italy Bologna

October 6–7, 2022

## ICRS Focus Meeting

**Ortho-Biologics**  
From the Laboratory to  
the Clinics: New Insight into  
Translational Research toward  
Bio-Orthopaedics



# ICRS

International Cartilage Regeneration  
& Joint Preservation Society

[www.cartilage.org](http://www.cartilage.org)

# WELCOME

Regenerative Medicine is a cutting-edge field that works to restore structure and function of damaged tissues. This therapeutic strategy offers promising results in the field of orthopaedics and its goal is to use the innate healing ability of a patient's own body to regenerate tissues. There are many different options treatments to address orthopaedic injuries. The ideal one should be minimally invasive, natural, able to restore original functions and with long-lasting results.

Even if different therapeutic regenerative strategies are applied by several orthopaedics in specialized Institutes, the clinical outcome is not always comparable and the scientific rationale at the basis of their application must be still clear and in-depth identified. These aspects will be discussed during the Focus Meeting by international basic researcher opinion leaders and orthopaedic surgeons' practitioners. Our programme will include hot topics on cells (autologous, heterologous from different sources, extracellular vesicles, secretome), growth factors (PRP), biomaterials and medical devices and some issues related to the intellectual properties discussed by experts in this field.

We are looking forward to welcoming you to beautiful Bologna!  
*Brunella Grigolo & Stefano Zaffagnini, Course Chairs*

## International Faculty (tentative)

Andriolo Luca (IT)	Desando Giovanna (IT)	Moroni Luca (IT)
Baldini Nicola (IT)	Di Martino Alessandro (IT)	Murphy Mary (IE)
Barbanti Brodano Giovanni (IT)	Donati Davide (IT)	Narcisi Roberto (NL)
Barry Frank (IE)	Faldini Cesare (IT)	Nehrer Stefan (AT)
Berruto Massimo (IT)	Fazio Nicola (IT)	Noel Daniele (FR)
Boffa Angelo (IT)	Filardo Giuseppe (IT)	Perut Francesca (IT)
Brittberg Mats (SE)	Fini Milena (IT)	Petretta Mauro (IT)
Buda Roberto (IT)	Gobbi Alberto (IT)	Russo Arcangelo (IT)
Buzzi Marina (IT)	Grande Daniel (US)	Salamanna Francesca (IT)
Chubinskaya Susan (US)	Grigolo Brunella (IT)	Saris Daniel (US)
Cucchiariini Magali (DE)	Jorgensen Christian (FR)	Sciarretta Fabio (IT)
De Caro Francesca (IT)	Kon Elizaveta (IT)	Tampieri Anna (IT)
De Girolamo Laura (IT)	Lisignoli Gina (IT)	Vannini Francesca (IT)
Dallari Dante (IT)	Lucarelli Enrico (IT)	Zaffagnini Stefano (IT)
Delbarba Andrea (IT)	Malda Jos (NL)	
Della Villa Stefano (IT)	Martin Ivan (CH)	

## Course Chairs

Brunella Grigolo & Stefano Zaffagnini, Rizzoli Orthopaedic Institute, Bologna, Italy

## Local Organizing Committee

Brunella Grigolo & Stefano Zaffagnini, Rizzoli Orthopaedic Institute, Bologna, Italy  
Livia Roseti & Giuseppe Filardo, Rizzoli Orthopaedic Institute, Bologna, Italy

## Organizing Office

Cartilage Executive Office (CEO) GmbH  
Spitalstrasse 190, House 3 | CH-8623 Wetzikon, Switzerland  
Phone: +41 44 503 73 70 | Email: [office@cartilage.org](mailto:office@cartilage.org)

## Course Venue

Istituto di Ricerca Codivilla Putti  
Istituto Ortopedico Rizzoli  
Via di Barbiano 1/10 | IT-40136 Bologna, Italy  
E-Mail: [info\\_urp@ior.it](mailto:info_urp@ior.it) | Website: <http://www.ior.it/en/ih-rizzoli>

# PRELIMINARY PROGRAMME

## Thursday, October 6, 2022

11:00–13:00	Optional guided tour of Rizzoli Orthopaedic Institute
<b>11:00–18:30</b>	<b>Registration &amp; Badge Pick-Up</b>
<b>13:30–13:45</b>	<b>Welcome Address</b>
<b>13:45–14:05</b>	<b>Session 1: Keynote Lecture</b> Moderator: Brunella Grigolo (IT) Keynote Lecture on Bio-Orthopaedics: "State of the Art" — <i>Grande Daniel (US)</i>
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<b>14:05–15:55</b>	<b>Session 2: Pre-Clinical and Clinical Evidence of Cell Transplantation in Orthopaedics: "Two Step" Procedures</b> Moderators: <i>Peretti Giuseppe (IT), Zaffagnini Stefano (IT)</i> Keynote Lecture: Chondrocytes Transplantation — <i>Brittberg Mats (SE)</i> Engineered Cartilage from Nasal Chondrocytes for Articular Cartilage Repair — <i>Martin Ivan (CH)</i> Lab Experience (Mesenchymal Stem Cells from Bone Marrow) — <i>Lucarelli Enrico (IT)</i> Clinical Application (Mesenchymal Stem Cells from Bone Marrow) — <i>Donati Davide (IT)</i> Lab Experience (Mesenchymal Stem Cells from Adipose Tissue) — <i>Murphy Mary (IE)</i> Clinical Application — <i>Jorgensen Christian (FR)</i> Q&A / Discussion
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## 15:55–16:40 Coffee Break / Exhibition

## 16:40–18:30 Session 3: Pre-clinical and Clinical Evidence of Cell Transplantation in Orthopaedics: "One Step" Procedures

	Moderators: <i>Buda Roberto (IT) &amp; Gobbi Alberto (IT)</i> Keynote Lecture: Fifteen Years' Experience with HA-BMAC Cartilage Repair in the Knee — <i>Gobbi Alberto (IT)</i> Clinical Application (BMC) — <i>Vannini Francesca (IT)</i> The Stromal Vascular Fraction in the Treatment of Osteoarthritis: Lab Experience — <i>Desando Giovanna (IT)</i> One-step Clinical Transplantation of Adipose Tissue for the Treatment of Knee Osteoarthritis — <i>Di Martino Alessandro (IT)</i> The Vertebral Bone Marrow Clot as New and Advanced Autologous Cell Therapy for Spinal Fusion Procedures — <i>Salamanna Francesca (IT)</i> Steps out from the Lab to the Patients in Spinal Surgery — <i>Barbanti Brodano Giovanni (IT)</i> Q&A / Discussion
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## 20:00–23:00 Course / Faculty Dinner

## Friday, October 7, 2022

<b>08:30–10:20</b>	<b>Session 4: Bio-Orthopaedics: Focus on Cells</b> Moderators: <i>Barry Frank (IE) &amp; Baldini Nicola (IT)</i> Keynote Lecture: State of the Art of Cell Transplantation in Bio-Orthopaedics — <i>Bany Frank (IE)</i> Secretoma of MSC — <i>De Girolamo Laura (IT)</i> Conditioned Medium-derived Extracellular Vesicles: the Crucial Impact of Cell Culture Parameters — <i>Perut Francesca (IT)</i> Extracellular Vesicles from Mesenchymal Stromal Cells in the Treatment of Rheumatic Diseases — <i>Noel Daniele (FR)</i> Gene Therapy — <i>Cucchiariini Magali (DE)</i> Clinical Aspects on the Use of Different Kind of Cells — <i>Kon Elizaveta (IT)</i> Q&A / Discussion
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# PRELIMINARY PROGRAMME

## 10:20–11:00 Coffee Break / Exhibition

<b>11:00–12:50</b>	<b>Session 5: Bio-Orthopaedics: Focus on Growth Factors</b> Moderators: <i>Chubinskaya Susan (US) &amp; Faldini Cesare (IT)</i> Keynote Lecture: State of the Art of Pre-Clinical Studies on Growth Factors — <i>Chubinskaya Susan (US)</i> Influence of Senescence and Growth Factors on Cartilage (Re)generation — <i>Narcisi Roberto (NL)</i> Growth Factors and Dose-controlled Ultrasound Stimulation Direct Stromal Cells Chondrogenic Differentiation in 3D Hydrogels? — <i>Lisignoli Gina (IT)</i> Clinical Application of Platelet Rich Plasma (PRP) in Knee Osteoarthritis — <i>Filardo Giuseppe (IT)</i> Platelet Rich Plasma from Umbilical Cord: Rational for its Use in Orthopedic Application — <i>Buzzi Marina (IT)</i> EVs (Extracellular Vesicles) and Growth Factors in Cartilage Repair — <i>Nehrer Stefan (AT)</i> Q&A / Discussion
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## 12:50–14:00 Lunch Break

## 14:00–15:50 Session 6: Bio-Orthopaedics: Focus on Scaffolds and 3D Models

	Moderators: <i>Fini Milena (IT) &amp; Tampieri Anna (IT)</i> Keynote Lecture: Clinical Application of Tissue Engineering — <i>Saris Daniel (US)</i> Biofabrication and Biomaterials Design — <i>Malda Jos (NL)</i> New Biofabrication Technologies to Generate 3D Scaffolds Able to Control Cell Fate — <i>Maroni Lorenzo (IT)</i> 3D Bioprinting Approaches for Musculoskeletal Tissue Engineering and Modeling — <i>Petretta Mauro (IT)</i> Human Biomimetic Grafts for Clinical Application — <i>Dallari Dante (IT)</i> Clinical Needs — <i>Zaffagnini Stefano (IT)</i> Q&A / Discussion
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## 15:50–16:30 Coffee Break / Exhibition

## 16:30–17:30 Session 7: Focus on Intellectual Property

	Moderators: <i>Sciarretta Fabio (IT) &amp; Fazio Nicola (IT)</i> IP Protection and Patent Strategy — <i>Delbarba Andrea (IT)</i> The IP Protection of Lipogems Instruments and Tissue — <i>Delbarba Andrea (IT)</i>
7.1	
7.2	

## 17:30–18:45 Session 8: ICRS Meets SIAGASCOT

	Moderators: <i>Berruto Massimo (IT) &amp; De Caro Francesca (IT)</i> BMAC for Knee OA: Also Subchondral? — <i>Boffa Angelo (IT)</i> Microfragmented Adipose Tissue: Indications from a Large Experience — <i>Russo Arcangelo (IT)</i> Osteochondral Scaffolds: What are the Limits? — <i>Andriolo Luca (IT)</i> Rehabilitation after Orthobiological Treatments — <i>Della Villa Stefano (IT)</i> Q&A / Discussion
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## 18:45–19:00 Final Remarks & Conclusion

## 19:00–20:30 Farewell Reception