5 February (Wednesday)

10:00 - 18:30  Registration Think Tank

12:30 - 19:00  Biologic Association Think Tank (upon invitation only)

12:30 - 14:00  Session 1
Moderator: Farr Jack (US)
12:30 - 13:00  Kimera: Chondrogenic Exosome Hydrogel for Articular Cartilage Regeneration
Sanders Jason (US)
13:00 - 13:30  Organogenesis: Amniotic Suspension Allograft Improves Pain and Function in Osteoarthritis - The Evidence
Mowry Katie (US)
13:30 - 14:00  Samumed: Lorecivivint: A First-in-Class, Disease-Modifying Drug Candidate for Knee Osteoarthritis.
Tambiah Jeyanesh (US)

14:00 - 14:30  Break

14:30 - 16:00  Session 2
Moderator: Farr Jack (US)
14:30 - 15:00  Lipogems: Micro-fragmented Adipose Tissue: Basic Science and Clinical Evidence
O’Connell Julie (US)
15:00 - 15:30  Orthopedic Stem Cell Research Lab, Regenerative Medicine Institute, Cedars-Sinai: Identification of Cell and Protein Biomarkers in PRP to Improve Individual Pain Outcomes in Knee OA
Sheyn Dmitriy (US)
15:30 - 16:00  Regenacell Therapy: Marrow Cellution Device And The CellFUSE - Bone Graft Substitute
Chabot Jeff (US)

16:00 - 16:30  Break

16:30 - 18:00  Session 3
Moderator: Farr Jack (US)
16:30 - 17:00  Keck School of Medicine of USC: Evaluation of Engraftable Human Pluripotent Stem Cell-Derived Chondrocytes in a Long-Term Preclinical Pig Model of Focal Cartilage Injury
Evseenko Denis (US)
17:00 - 17:30  Bioventus: Preclinical Characterization and Clinical Development Plans for PTP-001, a Novel Human Tissue Biologic in Development For The Treatment of Osteoarthritis.
Pavesio Alessandra (US)
17:30 - 18:00  Biorez: The First Look at BioBrace™, a New, Fully Resorbable, Bioactive Tissue Regeneration Scaffold For The Repair of Ligament and Tendons
Rocco Kevin (US)
## 6 February (Thursday)

### 6:30 - 18:00
**Registration Biologic Association Summit**

### 7:30 - 9:30
**Module 1 - Biologics: What is Currently Available?**
Moderator: Frank Rachel (US) Moderator: Sherman Seth (US)

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<tr>
<th>Time</th>
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<th>Presenter</th>
<th>Country</th>
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<tbody>
<tr>
<td>07:30</td>
<td>1.1 The Importance of the Biologic Association</td>
<td>Mandelbaum Bert (US)</td>
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<td>07:45</td>
<td>1.2 Platelet Rich Plasma</td>
<td>Cole Brian (US)</td>
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<td>08:00</td>
<td>1.3 Bone Marrow Concentrate</td>
<td>Muschler George (US)</td>
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<td>08:15</td>
<td>1.4 Adipose Cellular Therapy</td>
<td>Dragoo Jason (US)</td>
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<td>08:30</td>
<td>1.5 Amniotic Cellular Therapy</td>
<td>Tokish John (US)</td>
<td>US</td>
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<td>08:45</td>
<td>1.6 Short and Long Acting Cortisone: Are they Still Current?</td>
<td>Sherman Seth (US)</td>
<td>US</td>
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<td>09:00</td>
<td>1.7 Viscosupplementation</td>
<td>McIntyre Louis F. (US)</td>
<td>US</td>
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<td>09:15</td>
<td>Questions &amp; Answers</td>
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### 9:30 - 10:00
**Coffee Break**

### 10:00 - 12:00
**Module 2 - Regulatory Process and Ethical Implications**
Moderator: Piuzzi Nicolas (US) Moderator: Vangsness, Jr. C. Thomas (US)

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<tr>
<td>10:00</td>
<td>2.1 Overview of Regulatory Process</td>
<td>Anz Adam (US)</td>
<td>US</td>
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<td>10:15</td>
<td>2.2 Implications of Off-Label Promotion to Your Practice and Reputation: Staying Out of Trouble</td>
<td>Bruder Scott (US)</td>
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<td>10:30</td>
<td>2.3 Nomenclature Challenges</td>
<td>Murray Iain (UK)</td>
<td>UK</td>
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<td>10:45</td>
<td>2.4 Rogue Stem Cell Clinics and Complications</td>
<td>Halbrecht Joanne (US)</td>
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<td>11:00</td>
<td>2.5 Expansion and Culture: What Does This Mean and Why Can’t We Do It?</td>
<td>Leucht Philipp (US)</td>
<td>US</td>
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<td>11:15</td>
<td>2.6 Successes, Dead-Ends, and Open Questions in Biologics Research from the Basic Science Perspective</td>
<td>Chubinskaya Susan (US)</td>
<td>US</td>
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<td>11:30</td>
<td>2.7 Past Present and Future of “Stem Cells”</td>
<td>Caplan Arnold (US)</td>
<td>US</td>
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<tr>
<td>11:45</td>
<td>Questions &amp; Answers / Discussion</td>
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### 12:00 - 13:00
**Lunch Break**
Module 3 - Clinical Applications

Moderator: Zaslav Kenneth (US) Moderator: Tokish John (US)

13:00 - 15:15

3.1 Tendonitis (LE, Patellar, Achilles)
Dragoo Jason (US)

3.2 Osteoarthritis
Chu Constance (US)

3.3 Tendon Tears (Hamstring, Elbow UCL)
Tokish John (US)

3.4 Augmentation to Surgery - ACLR
Mandelbaum Bert (US)

3.5 Augmentation to Surgery - Rotator Cuff
Cole Brian (US)

3.6 Augmentation to Surgery - Cartilage Repair
Minas Tom (US)

3.7 Augmentation to Surgery - Scaffolds
McIntyre Louis F. (US)

3.8 Biologics in Athletes - What Should We Do In-Season?
Jones Kristofer (US)

15:00 - 15:15 Questions & Answers / Discussion

Coffee Break

Module 4 - Office Logistics and Billing

Moderator: Dragoo Jason (US) Moderator: Zaslav Kenneth (US)

15:45 - 17:15

4.1 PRP in the Office - How I Do it & How I Code
Cole Brian (US)

4.2 BMC in the Office - How I Do it & How I Code
Saris Daniel BF (US)

4.3 Adipose in the Office - How I Do it & How I Code
Halbrecht Joanne (US)

4.4 BMC in the OR - How I Do it and How I Code
Gomoll Andreas (US)

4.5 Adipose in the OR - How I Do it and How I Code
Dragoo Jason (US)

17:00 - 17:15 Questions & Answers / Discussion

Module 5 - The Biologic Association

Moderator: Dragoo Jason (US) Moderator: Mandelbaum Bert (US)

17:15 - 18:30

5.1 BA Website Presentation
Dragoo Jason (US)

5.2 Advocacy and Biologics
Halbrecht Joanne (US)

5.3 Repository and Registry
Tokish John (US)

5.4 Development of Best Practice (Real Time Dashboard, How do we Review Literature in Real Time)
Frank Rachel (US)

18:15 - 18:30 5.5 Summary of the Think Tank
Farr Jack (US)
7 February (Friday)

7:00 - 12:00  Registration Biologic Association Summit

7:30 - 9:30  Module 6 - Presentations by the Biologic Association Summit
Moderator: Frank Rachel (US) Moderator: Sherman Seth (US)
07:30 - 07:40  6.1 Current Landscape in Orthobiologics
  Dragoo Jason (US)
07:40 - 07:50  6.2 The Future of Orthobiologics
  Mandelbaum Bert (US)
07:50 - 08:00  6.3 Orthobiologics Registry - Opportunity or Challenge?
  Maloney William (US)
08:00 - 08:15  6.4 Orthobiologics in Tendon (RCR, LE Examples)
  Cole Brian (US)
08:15 - 08:30  6.5 Orthobiologics in Muscle
  Huard Johnny (US)
08:30 - 08:45  6.6 Orthobiologics in Cartilage Repair
  Gobbi Alberto (IT)
08:45 - 09:00  6.7 Orthobiologics in Early OA
  Zaslav Kenneth (US)
09:00 - 09:15  6.8 Orthobiologics in Bone
  Anz Adam (US)
09:15 - 09:30  Questions & Answers / Discussion

9:30 - 9:40  Official BA Summit Adjourn / Break

9:40 - 12:00  Module 7 - Optional BA/ISMF Ultrasound & Orthobiologics Skills Workshop
Instructor: Batten Casey G. (US) Instructor: Malanga Gerard (US) Instructor:
  Roh Eugene (US) Instructor: Sampson Steven (US) Instructor: Yoon Steve
  (US)
09:40 - 09:55  Intro to Orthobiologics Skills Workshop & Ultrasound
  Overview
  Batten Casey G. (US)
09:55 - 10:00  Transition to Workshop
10:00 - 12:00  Hands-On Workshop: Ultrasound and Orthobiologics Skills Workshop