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3RD



**WORLD
ARTHROPLASTY
CONGRESS**

**22-24 APRIL 2021
VIRTUAL MEETING**

**The Royal College of Surgeons of England has awarded
up to 16.75 CPD points for the 3rd WAC - Virtual Meeting**

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Our World Arthroplasty Congresses held in Paris in 2015 and Rome in 2018 were great successes with over 1,000 attendees each time representing over 60 countries throughout Africa, Asia, Europe, Middle East, North America, Oceania, Russia and South America.

The third World Arthroplasty Congress in Munich will feature a 3-day virtual interactive agenda with international faculty and including online podium and ePoster presentations from abstract submissions.

Course Directors

Gijs Van Hellemond Nijmegen, The Netherlands	Jean-Noël Argenson Marseille, France	Arlen Hanssen Rochester, USA	Norman Scott New York, USA
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Program Chairmen

	Knee	Hip
Program Chairs	Gijs Van Hellemond, The Netherlands	Arlen Hanssen, USA
Vice-Chairs	Henry Clarke, USA Andreas Halder, Germany Robert Hube, Germany Bryan Springer, USA	Matthew Abdel, USA Jean-Alain Epinette, France Michael Meneghini, USA Carsten Perka, Germany

Invited Faculty

Matthew Abdel, USA	George Haidukewych, USA	Andrew Price, UK
Paolo Adravanti, Italy	Andreas Halder, Germany	Ashok Rajgopal, India
Jean-Noël Argenson, France	Arlen Hanssen, USA	Roberto Rossi, Italy
Andrea Baldini, Italy	Karl-Dieter Heller, Germany	Wim Schreurs, The Netherlands
Gabriel Baron, Chile	Siegfried Hofmann, Austria	Norman Scott, USA
Robert Barrack, USA	Robert Hube, Germany	Jasmeet Singh Saren, Malaysia
David Barrett, UK	Raymond Kim, USA	Rami Sorial, Australia
Johan Bellemans, Belgium	Per Kjaersgaard-Andersen, Denmark	Bryan Springer, USA
Francesco Benazzo, Italy	Gwo-Chin Lee, USA	Patrick Sussman, Switzerland
Daniel Berry, USA	Myung Chul Lee, South Korea	Aree Tanavalee, Thailand
Michel Bonnin, France	Nick London, UK	Samih Tarabichi, UAE
Warwick Bruce, Australia	Sebastien Lustig, France	Emmanuel Thienpont, Belgium
Nicolaas Budhiparama, Indonesia	George Macheras, Greece	Mazhar Tokgozoglu, Turkey
Martin Buttaró, Argentina	William Maloney, USA	Andrew Toms, UK
John Callaghan, USA	Shuichi Matsuda, Japan	Anders Troelsen, Denmark
Tilman Calliess, Switzerland	Steven MacDonald, Canada	Robert Trousdale, USA
Fabio Catani, Italy	Michael Meneghini, USA	Eleftherios Tsiridis, Greece
Philip Chapman-Sheath, UK	Arun Mullaji, India	Gijs Van Hellemond, The Netherlands
Peter Chiu, Hong Kong	David Murray, UK	Hilde Vandenuecker, Belgium
Bernhard Christen, Switzerland	Rob Nelissen, The Netherlands	Jan Verhaar, The Netherlands
Henry Clarke, USA	Lo Ngai Nung, Singapore	Jan Victor, Belgium
Justin Cobb, UK	Douglas Padgett, USA	Jonathan Vigdorichik, USA
José Cordero Ampuero, Spain	Mark Pagnano, USA	Kelly Vince, New Zealand
Chris Dodd, UK	Wayne Paprosky, USA	Rüdiger von Eisenhart-Rothe, Germany
Jean-Alain Epinette, France	Yoon Sun Park, South Korea	Bill Walter, Australia
Julio César Garcia, Columbia	Sebastien Parratte, France	Russell Windsor, USA
Thorsten Gehrke, Germany	Carsten Perka, Germany	Luigi Zagra, Italy
Klaus Peter Guenther, Germany	Chris Peters, USA	Hong Zhang, China
Fares Haddad, UK	Andrew Porteous, UK	Yixin Zhou, China

Program at a glance

Sydney (AEDT)	Beijing (CST)	New York (EST)	Europe (CET)	Thursday 22 April 2021	Friday 23 April 2021	Saturday 24 April 2021
18.00 - 18.40	15.00 - 15.40	02.00 - 02.40	08.00 - 08.40			Industry Satellite Symposium
18.45 - 20.41	15.45 - 17.41	02.45 - 04.41	08.45 - 10.41			Hip Session 4
20.30 - 22.01	17.30 - 19.01	04.30 - 06.01	10.30 - 12.01		Hip Session 3	Knee Session 5
22.02 - 22.40	19.02 - 19.40	06.02 - 06.40	12.02 - 12.40		Knee Session 3	
22.44 - 23.35	19.44 - 20.35	06.44 - 07.35	12.44 - 13.35			Global Session
23.00 - 23.40	20.00 - 20.40	07.00 - 07.40	13.00 - 13.40	Industry Satellite Symposium	Industry Satellite Symposium	
23.50 - 01.21	20.50 - 22.21	07.50 - 09.21	13.50 - 15.21	Hip Session 1	Knee Session 4	Industry Satellite Symposium
01.22 - 02.47	22.22 - 23.47	09.22 - 10.47	15.22 - 16.47	Knee Session 1	Global Session 1	
02.48 - 04.27	23.48 - 01.27	10.48 - 12.27	16.48 - 18.27	Hip Session 2		
04.28 - 05.46	01.28 - 02.46	12.28 - 13.46	18.28 - 19.46	Knee Session 2		
05.50 - 06.30	02.50 - 03.30	13.50 - 14.30	19.50 - 20.30	Industry Satellite Symposium	Industry Satellite Symposium	

Legend

The program consists of invited lectures, best rated abstracts presentations (indicated as AP), videosurgery talks, 2 debates and 2 panel discussions.

- AP Fuschia
- Debate/Panel Discussion Purple
- Videosurgery Orange

The general topics are marked as follows:

- Global Sessions Titles and timing are in light orange
- Hip Sessions Titles and timing are in blue
- Knee Sessions Titles and timing are in green





- 13.00 - 13.40 Industry Satellite Symposium organized by Stryker
- 13.40 - 13.45 Break
- 13.45 - 13.50 Welcome and Meeting Presentation
Gijs Van Hellemond, President EKS

HIP SESSION 1

Hip Instability Panel

Moderators: Matt Abdel (USA) & Carsten Perka (Germany)

- 13:50 - 13:56 My algorithm in diagnostic a treatment of Instability
Arlen Hanssen (USA)
- 13:56 - 14:02 AP - Instability-prone hips: Is revision for instability associated with a high rate of recurrence?
Ran Schwarzkopf (USA)
- 14:02 - 14:08 Dual-mobility constructs: A great solution for most with instability
Bryan Springer (USA)
- 14:08 - 14:14 Constraint liner for revision THA revisited: A good option when needed
Eleftherios Tsiridis (Greece)
- 14:14 - 14:20 AP - The effect of lipped polyethylene liner use on the risk of THA revision for instability and aseptic loosening – An analysis of data from the National Joint Registry of England, Wales, Northern Ireland and the Isle of Man
Joseph Pagkalos (UK)
- 14:20 - 14:26 AP - Post-operative change in pelvic tilt is predictable after total hip arthroplasty
Michael Alexiades (USA)
- 14:26 - 14:35 Discussion
- Controversies in THA
Moderators: William Maloney (USA) & George Macheras (Greece)
- 14:36 - 14:42 Ceramic-on-polyethylene: For everyone?
John Callaghan (USA)
- 14:42 - 14:48 AP - Sleeved ceramic heads are necessary to reduce the risk of ceramic head fractures in hip revision
Michael Morlock (Germany)
- 14:48 - 14:54 AP - Pseudotumors in small-head metal-on-metal Total Hip Arthroplasties at a minimum follow-up of 20 years
Richard Lass (Austria)
- 14:54 - 15:00 Videosurgery – Mini-posterior approach: How I do it
Michael Meneghini (USA)
- 15:00 - 15:06 AP - Total Hip Arthroplasty with direct anterior approach on high-ride DDH patients without femoral shortening osteotomy
Javad Mortazavi (Iran)
- 15:06 - 15:12 AP - Effect of intraoperative use of technology on outcomes following Total Hip Arthroplasty
Vivek Singh (USA)
- 15:12 - 15:21 Discussion



KNEE SESSION 1

Alternatives to Total Knee Arthroplasty

Moderators: Norm Scott (USA) & Chris Dodd (UK)

- 15:22 - 15:28 The role of PRP and injection
Aree Tanavalee (Thailand)
- 15:28 - 15:34 HTO: Still a role in 2021?
Andreas Halder (Germany)
- 15:34 - 15:40 UKA: Consensus EKS/BASK
Andrew Price (UK)
- 15:40 - 15:46 UKA & ACL
Paolo Adravanti (Italy)
- 15:46 - 15:52 Debate - UKA vs TKA
David Murray (UK) & Steven MacDonald (Canada)
- 15:52 - 16:01 Discussion
- Controversies in Knee Arthroplasty
Moderators: Henry Clarke (USA) & Jan Victor (Belgium)
- 16:02 - 16:08 Managing expectations
Patrick Sussman (Switzerland)
- 16:08 - 16:14 Metal allergy: Does it exist?
Andrew Toms (UK)
- 16:14 - 16:20 AP - No clinically relevant difference in functional outcome and quality of life after total knee arthroplasty with or without patella resurfacing
Gerian Huitema (The Netherlands)
- 16:20 - 16:26 AP - Bilateral simultaneous Total Knee Arthroplasty may not be safe even in the healthiest of patients
Nicolas S. Piuze (USA)
- 16:26 - 16:32 AP - Is restoring knee phenotype and joint line obliquity important after primary TKA?
Elliot Sappey-Mariniere (France)
- 16:32 - 16:38 AP - Medial unicompartmental and bicompartmental arthroplasty are associated with nearer – Normal gait and higher patient satisfaction than Total Knee Arthroplasty
Amy Garner (UK)
- 16:38 - 16:47 Discussion



HIP SESSION 2

THA Complications / Prevention and Treatment

Moderators: Gwo-Chin Lee (USA) & Francesco Benazzo (Italy)

- 16:48 - 16:54 **AP** - Prevalence of risk factors for adverse spinopelvic mobility in Total Hip Arthroplasty
Jonathan Vigdorichik (USA)
- 16:54 - 17:00 **AP** - Posterior pelvic tilt and cup position changes in patients undergoing total hip arthroplasty – Radiographic study with a minimum follow-up of 10 years
Eduardo Garcia-Rey (Spain)
- 17:00 - 17:06 **AP** - Clinical outcomes after single stage hardware removal and total hip arthroplasty: A match-paired controlled study
Francesco La Camera (Italy)
- 17:06 - 17:12 **Videosurgery** - Vancouver B1: This is how I do my ORIF
George Haidukewych (USA)
- 17:12 - 17:18 Vancouver B2 and B3 – Revision THA with modular fluted tapered stems are the standard!
Robert Trousdale (USA)

- 17:18 - 17:24 **Videosurgery** - Extended trochantric osteotomy – A video-based technique
Matt Abdel (USA)

Discussion

Revision THA: Acetabulum

Moderators: Wayne Paprosky (USA) & Thorsten Gehrke (Germany)

- 17:34 - 17:40 Inlay and head exchange in well fixed THA – How much damage should be tolerated?
Karl-Dieter Heller (Germany)
- 17:40 - 17:46 **AP** - Defect based treatment strategy for acetabular revision arthroplasty – A new classification system
Daniel Karczewski (Germany)
- 17:46 - 17:52 **AP** - Porous titanium augments, cup on cup technique, and custom implants: Which approach in Paprosky Type III acetabular defects?
Giorgio Burastero (Italy)
- 17:52 - 17:58 Managing acetabular defects in THA
Julio César Garcia (Columbia)
- 17:58 - 18:04 Long-term results after modular reconstruction of large acetabular defects with antiprotrusio cages and metal augments
Klaus-Peter Guenther (Germany)

- 18:04 - 18:10 **Videosurgery** - Custom made 3D implants in acetabular revision surgery
Martin Buttaró (Argentina)

- 18:10 - 18:16 Pelvis distraction for pelvic discontinuity: When and how I do it
Wayne Paprosky (USA)

Discussion

18:16 - 18:27



KNEE SESSION 2

The Difficult Primary TKA

Moderators: Raymond Kim (USA) & Sebastien Lustig (France)

- 18:28 - 18:34 **Videosurgery** - Balancing severe varus knee
Arun Mullaji (India)
- 18:34 - 18:40 **Videosurgery** - Balancing severe valgus knee
Andrew Porteous (UK)
- 18:40 - 18:46 **AP** - Cruciate retaining TKA effective at average 10 year follow-up of a group of patients with severe deformity
David Dalury (USA)
- 18:46 - 18:52 The post-traumatic knee
Ashok Rajgopal (India)
- 18:52 - 18:58 **Videosurgery** - Managing severe flexion contracture
Samih Tarabichi (UAE)
- 18:58 - 19:05 **Discussion**

GLOBAL SESSION 1

Improving Practice / Efficiency

Moderators: Douglas Padgett (USA) & Anders Troelsen (Denmark)

- 19:06 - 19:12 Same-day THA: What are the keys?
Raymond Kim (USA)
- 19:12 - 19:18 **AP** - Introduction of day case hip and knee replacement program at an elective orthopaedic ward is safe and leads to shorter hospital stay of inpatient arthroplasties
Gyorgy Lovasz (UK)
- 19:18 - 19:24 **AP** - Enhanced recovery programs for primary Total Hip Arthroplasty may increase the rate of emergency department visits after discharge
Eduard Tornero (Spain)
- 19:24 - 19:30 Fast track in 2021 – What we have learnt
Emmanuel Thienpont (Belgium)
- 19:30 - 19:36 Outpatient TKA: Tips and tricks
Michael Meneghini (USA)
- 19:36 - 19:42 Optimizing OR management
Arun Mullaji (India)
- 19:42 - 19:50 **Discussion**

Panel Discussion - Revision TKA Case Based discussion

Moderators: Bryan Springer (USA) & David Barrett (UK)

- Panelists: Chris Peters (USA), Russell Windsor (USA), Mark Pagnano (USA), Jan Verhaar (The Netherlands), Gijs Van Hellemond (The Netherlands), Robert Hube (Germany)

Break

20:15 - 20:55 Industry Satellite Symposium organized by Zimmer Biomet



10:25 - 10:30 Welcome and Meeting Presentation
Norm Scott, President ICJR

HIP SESSION 3

Post-Traumatic THA

Moderators: Peter Chiu (Hong Kong) & Luigi Zagra (Italy)

- 10:30 - 10:36 **AP** - Total Hip Arthroplasty after osteosynthesis of proximal femoral fractures
Alisa Schleicher (Switzerland)
- 10:36 - 10:42 **AP** - Replacement for failed dynamic hip screw fixation of intertrochanteric fractures
Afshin Taheriazam (Iran)
- 10:42 - 10:48 **AP** - Survival analysis of salvage total hip arthroplasty after failed internal fixation of femoral neck fractures versus primary total hip arthroplasty as index treatment in the acute phase of fracture – A national registry population based study
Peter Schmitz (The Netherlands)
- 10:48 - 10:54 **AP** - Long term results of salvage cemented primary Total Hip Arthroplasty for failed neck of femur fracture fixation in patients aged less than 80 years: A 13 year follow up study
Kevin Syam (UK)
- 10:54 - 11:00 **AP** - Experimental validation of the gross taper failure mechanism in Total Hip Arthroplasty
Valerie Polster (Germany)
- 11:00 - 11:06 **AP** - One-year mortality after periprosthetic acetabular fractures in the elderly: lower than for other hip fractures?
Vera Maren Stetzelberger (Switzerland)
- 11:06 - 11:15 Discussion
- Revision THA**
Moderators: Rami Sorial (Australia) & George Macheras (Greece)
- 11:16 - 11:22 **AP** - What are the reasons for revision of a primary Total Hip Arthroplasty in a high-volume arthroplasty center in Germany?
Christian Hipfl (Germany)
- 11:22 - 11:28 **AP** - Reasons for revision Total Hip arthroplasty do not associate with clinical outcome – A prospective evaluation of 647 consecutive patients
Matteo Innocenti (Italy)
- 11:28 - 11:34 **AP** - Trabecular metal augments combined with impaction bone grafting for management of acetabular bone defect during THA
Mohammed Abdelhameed (Egypt)
- 11:34 - 11:40 **AP** - Custom-made 3D-printed cup-cage implants for acetabular revisions
Vasileios Zampelis (Sweden)
- 11:40 - 11:46 **AP** - 3D-CT Assessment of custom 3D-printed cups for acetabular reconstruction, the bone response at 1 year
Johann Henckel (UK)
- 11:46 - 11:52 **AP** - Total Hip Arthroplasty for femoral neck fracture versus osteoarthritis in patients with prior lumbosacral fusion: Are outcomes different between indications?
Safa Fassihi (USA)
- 11:52 - 12:01 Discussion



KNEE SESSION 3

Miscellaneous

Moderators: Aree Tanavalee (Thailand) & Nick London (UK)

- 12:02 - 12:08 **AP** - Training the perfect scrub nurse: An immersive virtual reality curriculum for learning revision total knee arthroplasty
Thomas Edwards (UK)
- 12:08 - 12:14 **AP** - Revision total stabilized versus primary posterior stabilized knee prostheses: Is there any kinematic differences during the gait? A prospective case control study
Cecile Batailler (France)
- 12:14 - 12:20 **AP** - Morbid obesity does not increase risk of return to operating room in Total Knee Arthroplasty
Benjamin Levens (USA)
- 12:20 - 12:26 **AP** - A straight incision lateral to tibial tubercle reduces rate of residual skin numbness at 1 year compared with a regular midline incision – A prospective randomized paired study in bilateral Total Knee Arthroplasty
Nattapol Tammachote (Thailand)
- 12:26 - 12:32 **AP** - Evaluating femorotibial kinematics for various TKA designs for 1100 subjects
Michael LaCour (USA)
- 12:32 - 12:39 Discussion
- 12:40 - 13:00 Break
- 13:00 - 13:40 Industry Satellite Symposium organized by DePuy Synthes
- 13:40 - 13:50 Break

KNEE SESSION 4

Concepts in TKA

Moderators: Robert Barrack (USA) & Andreas Halder (Germany)

- 13:50 - 13:56 **Videosurgery** - Gap balancing vs measured resection
Bryan Springer (USA)
- 13:56 - 14:02 Measuring soft tissue tension in TKA: Do we need better devices?
Myung Chul Lee (South Korea)
- 14:02 - 14:08 The correct femoral and tibial rotation
Siegfried Hofmann (Austria)
- 14:08 - 14:14 Individualized implant position will improve knee biomechanics
Tilman Callies (Switzerland)
- 14:14 - 14:20 Bicruciate retaining TKA
Bernhard Christen (Switzerland)
- 14:20 - 14:26 Personalized implants
Michel Bonnin (France)
- 14:26 - 14:35 Discussion



	Emerging Concepts in TKA Alignment Moderators: Chris Peters (USA) & Sebastien Parratte (France)
14:36 - 14:42	Shoot for mechanical alignment Norman Scott (USA)
14:42 - 14:48	Anatomic alignment Mark Pagnano (USA)
14:48 - 14:54	Kinematic alignment Shuichi Matsuda (Japan)
14:54 - 15:00	Constitutional varus alignment Johan Bellemans (Belgium)
15:00 - 15:06	Alignment and joint line Jan Victor (Belgium)
15:06 - 15:12	Alternative alignment: Can you do it manually or do we need robotics? Fabio Catani (Italy)
15:12 - 15:18	AP - Patient specific alignment is the key attribute of robotically assisted surgery – A comparative trial with 120 patients Philip Winnock de Grave (Belgium)
15:18 - 15:27	Discussion

GLOBAL SESSION 2

	Registry Outcomes: What Works? Moderators: John Callaghan (USA) & Klaus-Peter Guenther (Germany)
15:28 - 15:34	How national registries can improve patient care Wim Schreurs (The Netherlands)
15:34 - 15:40	Surprising results from the German Arthroplasty Registry Arnd Steinbrück (Germany)
15:40 - 15:46	An AJRR Update from the AAOS William Maloney (USA)
15:46 - 15:52	An EU JR registry update from EFORT Per Kjaersgard Andersen (Denmark)
15:52 - 15:59	Discussion
	Innovations in Orthopedics Moderators: Arlen Hanssen (USA) & Michel Bonnin (France)
16:00 - 16:06	Regenerative medicine in orthopaedics: Future perspective Rob Nelissen (The Netherlands)
16:06 - 16:12	AP - Automated measurement of alignment following Total Knee Arthroplasty Andreas Kappel (Denmark)



16:12 - 16:18	AP - Postoperative outcomes and activity can be predicted with preoperative objective data from a smart-phone and smart-watch based platform Christopher Pelt (USA)
16:18 - 16:24	AP - Evaluation of performance on outcomes after Total Hip and Knee Arthroplasty: A more comprehensive reflection of delivered care by combining indicators in a composite outcome Peter Van Schie (The Netherlands)
16:24 - 16:30	Team training for Hip Arthroplasty: Multiplayer VR training improves surgical performance Justin Cobb (UK)
16:30 - 16:36	AP - Anteversion angle measurement in suspected torsional malalignment of the femur in 3-dimensional EOS versus computed tomography – A validation study Hermann Mayr (Germany)
16:36 - 16:45	Discussion
	Infection in Arthroplasty: Prevention, Treatment, Host Modification Moderators: Steven MacDonald (Canada) & Fares Haddad (UK)
16:46 - 16:52	Treatment algorithm of periprosthetic joint infection Rudiger Von Eisenhart-Rothe (Germany)
16:52 - 16:58	Oral vs. intravenous therapy in the infected THA / TKA Jose Cordero Ampuero (Spain)
16:58 - 17:04	The Era of Globalization – What we need to know about regional bacterial strains? Nicolaas Budhiparama (Indonesia)
17:04 - 17:10	AP - There is no difference in reinfection rates but significantly higher reoperation rates associated with premolded cement spacers than primary component spacers in treatment of PJI with 2-Stage Exchange Ran Schwarzkopf (USA)
17:10 - 17:16	AP - Synovial fluid D-lactate – A pathogen-specific biomarker for diagnosis of periprosthetic joint infection: Preliminary results from a prospective multicenter study Paula Morovic (Germany)
	Debate
17:16 - 17:28	One stage: The most important things we need to know Thorsten Gehrke (Germany)
	Two-stage exchange arthroplasty: Why it is still the gold standard Gwo Chin Lee (USA)
17:28 - 17:37	Discussion
	Robotic Surgery and New Technologies Moderators: Dan Berry (USA) & Fabio Catani (Italy)
17:38 - 17:44	Robotic surgery in 2021 Fares Haddad (UK)
17:44 - 17:50	Robotics in THR – A real step forward or simple fleetingness? Jean-Alain Epinette (France)
17:50 - 17:56	Robotic TKAs: Is it the future? Robert Barrack (USA)



17:56 - 18:02	PSI in TKA Nick London (UK)
18:02 - 18:08	Videosurgery - Transition from PSI to robotic assist TKA Rami Sorial (Australia)
18:08 - 18:14	AP - Sensor guided knee surgery provides improved patient outcomes and cost savings in the ninety-day bundle Martin Roche (USA)
18:14 - 18:20	Robotic acetabular reconstruction during revision total hip arthroplasty Yixin Zhou (China)
18:20 - 18:26	Robotics in TKA: What vision for the future? Sebastien Parratte (France)
18:26 - 18:37	Discussion
18:38 - 18:58	Panel Discussion - How and Why I do a TKA Moderators: Dan Berry (USA) & Jean-Noel Argenson (France) Panelists: Henry Clarke (USA), Douglas Padgett (USA), Steven MacDonald (Canada), Sebastien Lustig (France), Anders Troelsen (Denmark), Philip Chapman-Sheath (UK)
18:58 - 19:05	Break
19:05 - 19:45	Industry Satellite Symposium organized by Smith+Nephew



08:00 - 08:40	Industry Satellite Symposium
08:40 - 08:45	Break
08:45 - 08:50	Welcome and Meeting Presentation Jean-Alain Epinette, President EHS

HIP SESSION 4

	THA: Preventing Complications Moderators: Warwick Bruce (Australia) & Jean Alain Epinette (France)
08:50 - 08:56	AP - Can preoperative functional planning decrease prosthetic impingement in THA Gwo-Chin Lee (USA)
08:56 - 09:02	Basicervical rotational osteotomy for femoral head necrosis Hong Zhang (China)
09:02 - 09:08	Videosurgery - Hip resurfacing – From metal to ceramic articulations Bill Walter (Australia)
09:08 - 09:14	Methods to measure functional leg length and offset Warwick Bruce (Australia)
09:14 - 09:20	AP - Dual mobility cup total hip arthroplasty with highly cross-linked polyethylene for femoral neck fractures: A short-term outcome study from a single institution Wei Xiang Ng (Singapore)
09:20 - 09:26	Patient specific safe zone for Total Hip Arthroplasty Yixin Zhou (China)
09:26 - 09:32	AP - How to minimize post-operative instability in conversion arthroplasty after failed femoral fixation? Ahmed Ebied (Egypt)
09:32 - 09:38	Total Hip Arthroplasty in patients with ankylosing spondylitis Peter Chiu (Hong Kong)
09:38 - 09:49	Discussion
	THA: Optimizing our practice Moderators: Bill Walter (Australia) & Eleftherios Tsiridis (Greece)
09:50 - 09:56	Bearing options in THA Luigi Zagra (Italy)
09:56 - 10:02	AP - Arthrofibrosis following primary Total Hip Arthroplasty – A distinct clinical entity Philip Linke (Germany)
10:02 - 10:08	Does spine deformity benefit from THA in patients with high riding DDH? Mazhar Tokgozoglul (Turkey)
10:08 - 10:14	AP - Is there a difference in perception using three-dimensional and two-dimensional imaging for developmental dysplasia of the hip? Rashid Tikhilov (Russia)



- 10:14 - 10:20 **AP** - The effect of opioid free anesthesia and a high dose of perioperative glucocorticoids on the quality of recovery after direct anterior Total Hip Arthroplasty: A randomized controlled trial
Jan Vanlommel (Belgium)
- 10:20 - 10:26 **AP** - Functional assessment of abductor muscle force after straight compared to short stem total hip arthroplasty: A randomized controlled clinical trial
Michael Fuchs (Germany)
- 10:26 - 10:32 **AP** - Posterior hip approach associated with lower decrease in hemoglobin in the postoperative period of Total Hip Arthroplasty
Rita Alçada (Portugal)
- 10:32 - 10:41 **Discussion**

KNEE SESSION 5

- Revision TKA: Diagnostic and Principles**
Moderators: Kelly Vince (New Zealand) & Andrea Baldini (Italy)
- 10:42 - 10:48 **AP** - Why revision Total Knee Arthroplasty fails? A consecutive cohort of 1170 revisions
Axel Schmidt (France)
- 10:48 - 10:54 Diagnostic algorithm for the painful knee
Andrew Porteous (UK)
- 10:54 - 11:02 **AP** - Measured resection mechanically and kinematically aligned TKA's often result in an imbalanced knee
Mark Clatworthy (New Zealand)
- 11:02 - 11:08 Getting my revision TKA stable
Hilde Vandenneucker (Belgium)
- 11:08 - 11:14 **Videosurgery** - A 3-step technique
Robert Hube (Germany)
- 11:14 - 11:20 Restoring the joint line – What are the landmarks?
Roberto Rossi (Italy)
- 11:20 - 11:26 The problem of re-revision TKA
Kelly Vince (New Zealand)
- 11:26 - 11:32 **AP** - Repeat revision rates differ between reasons for revision Total Knee Arthroplasty: An analysis of 8,978 index revisions in the Dutch Arthroplasty Register
Maartje Belt (The Netherlands)
- 11:32 - 11:43 **Discussion**
- Revision TKA: Video Techniques – Managing Complications**
Moderators: Nicolaas Budhiparama (Indonesia) & Emmanuel Thienpont (Belgium)
- 11:44 - 11:50 Metaphyseal fixation
Myung Chun Lee (South Korea)
- 11:50 - 11:56 **AP** - Migration profiles and risk factors for tibial component loosening: A meta-analysis with individual participant implant migration data using radiostereometric analysis (RSA)
Koen Van Hamersveld (The Netherlands)



- 11:56 - 12:02 **Videosurgery** - Getting the patella back on track
Francesco Benazzo (Italy)
- 12:02 - 12:08 Stem fixation in revision TKA
Ashok Rajgopal (India)
- 12:08 - 12:14 Managing the stiff TKA
Philip Chapman-Sheath (UK)
- 12:14 - 12:20 Hyperextension after TKA
Jasmeet Singh Saren (Malaysia)
- 12:20 - 12:26 **Videosurgery** - Extensor mechanism reconstruction
Andrea Baldini (Italy)
- 12:26 - 12:32 Periprosthetic fractures of the femur above TKA
Carsten Perka (Germany)
- 12:32 - 12:43 **Discussion**

GLOBAL SESSION 3

- Analysis of our practice**
Moderators: Martin Buttarò (Argentina) & Gijs Van Hellemond (The Netherlands)
- 12:44 - 12:50 **AP** - Revisions for periprosthetic hip infections do not fail more than revisions for aseptic loosening, but mortality is higher
Francesco Castagnini (Italy)
- 12:50 - 12:56 **AP** - Long-term follow-up of total hip arthroplasty in 1,049 patients younger than 50 years and the outcome of subsequent revisions
Martijn Kuijpers (The Netherlands)
- 12:56 - 13:02 **AP** - Mortality following post-operative periprosthetic fracture of the femur after hip replacement in the last decade: Meta-analysis of 33 cohort studies including 4616 patients
Oliver Nix (UK)
- 13:02 - 13:08 **AP** - Results are improving in knee arthroplasty and more so in UNI than for other varieties! A study from the UK National Joint Registry
Tim Wilton (UK)
- 13:08 - 13:14 Impact of increased BMI on TKA practice
Lo Ngai Nung (Singapore)
- 13:14 - 13:20 Orthopaedic waste in TKA: Could we reduce our environmental impact?
Gabriel Baron (Chile)
- 13:20 - 13:26 **AP** - How much biomedical waste does a knee arthroplasty surgery produce? Are we aware of how much we contaminate?
Sebastian Ruidiaz (Chile)
- 13:26 - 13:35 **Discussion**
- 13:36 - 13:40 **Break**
- 13:40 - 14:20 Industry Satellite Symposium

ADJOURN



- P1** Safety and efficacy of outpatient joint arthroplasty, results of a systematic review with meta-analysis
Yoeri Bemelmans (The Netherlands)
- P2** Personalised data driven home-based physiotherapy coaching to manage pain after total knee replacement: A safety and feasibility study
Geza Kordas (UK)
- P3** The effects of coronavirus on perioperative morbidity and mortality in a high-risk population: A multicentre cohort study
Ajay Asokan (UK)
- P4** Does lumbar plexus nerve block provide better analgesic management than periarticular infiltration in primary Total Hip Arthroplasty? Comparative, prospective, and single-blind clinical trial
Santiago Luis Iglesias (Argentina)
- P5** Intra-articular inflammation in unexplained pain after knee and hip replacement
Karolina Mazur (UK)
- P6** Computer guided Total Hip Arthroplasty is associated with reduced risk of revision surgery and improved satisfaction when compared to conventionally implanted THA – An analysis of manufacturer-specific data from the National Joint Registry of England, Wales, Northern Ireland, and the Isle of Man
Edward Davis (UK)
- P7** Evaluation of potential factors predicting aspiration yield or “dry taps” for hip joint infection
Ran Schwarzkopf (USA)
- P8** Measuring activity of patients before and after Total Knee Arthroplasty
Kristine Opheim Lindemann (Norway)
- P9** Is history of a COVID-19 infection associated with an increased risk of deep vein thrombosis in arthroplasty patients?
Friedrich Boettner (USA)
- P10** Predicting complications and length of stay in total joint replacement using machine learning models
Vikas Kumar (UK)
- P11** Time to return sport following hip arthroplasty: A systematic review and a meta-analysis
Ganan Radhakrishnan (UK)
- P12** Postoperative joint biomechanics with increasing implant design constraint in Total Knee Arthroplasty
Orcun Taylan (Belgium)
- P13** Correlation of the subjective hip value with validated patient reported outcome measurements for the hip
David Krueger (Germany)
- P14** Closed incision negative pressure therapy in revision knee arthroplasty: A randomized clinical trial
Carlos Higuera (USA)
- P15** Impact of the acetabular component thickness on the implantation process and primary stability
Miriam Ruhr (Germany)
- P16** Analysis of treatment failures in hematogenous PJI - new infections occur more often than infection persists or relapses
Nora Renz (Germany)
- P17** Extended oral antibiotics prevent PJI in high-risk cases: 3,855 patients with 1-year follow-up
Michael Kheir (USA)
- P18** Investigation of the efficacy of serum c-reactive protein screening for the risk of developing periprosthetic joint infection prior to primary Total Hip Arthroplasty
Viktor Janz (Germany)
- P19** Assessment of a synovial fluid calprotectin lateral-flow test to diagnose low-grade prosthetic joint infections of primary and revision Total Hip and Knee Arthroplasty
Christian Suren (Germany)



- P20** Incidence of venous thromboembolism in elective hip arthroplasty surgery: A review of 8,891 patients receiving post-operative Aspirin VTE prophylaxis
Christopher Hutton (UK)
- P21** Average seven-year survivorship of porous tantalum acetabular augments in the flying buttress configuration
Adrian J Cassar-Gheiti (Ireland)
- P22** Revision-free survival and radiographic analysis of collared and collarless metadiaphyseal stems
Kevin Staats (Austria)
- P23** Implant breakage risk for modular fluted tapered stems in revision Total Hip Arthroplasty at 5-year follow-up
Thibaut Lucena (France)
- P24** DAA approach with extensionable and frame system – Metha short stem
Marco Ezechieli (Germany)
- P25** Handheld navigation improves accuracy in direct anterior total hip replacement
Bradford Waddell (USA)
- P26** Minimally invasive direct anterior approach THA to treat DDH Hartofilakidis Type A developmental dysplasia of the hip – Mid-term results in 64 hips
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- P27** Capsular resection versus capsular repair in direct anterior approach for Total Hip Arthroplasty: A prospective randomized control trial
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- P28** Acetabuloplasty by augment for Total Hip Arthroplasty in dysplastic hips
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- P29** Mid-term results of the custom triflange acetabular components for revision hip arthroplasty in patients with massive acetabular defects
Younes El moudni (Morocco)
- P31** Treatment of osteonecrosis of the femoral head: Primary stability of short-stem Total Hip Arthroplasty
Karl Philipp Kutzner (Germany)
- P32** Complications and survival of the Total Hip Arthroplasty after femoral neck fractures: A comparison of two procedures
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- P33** What is the best surgical strategy for pelvic disjunction after Total Hip Arthroplasty? A purpose of a lesion-based algorithm
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- P35** Femoral neck fracture between 45 and 64 years: Internal fixation versus arthroplasty
Mouadh Nefiss (Tunisia)
- P36** Two-stage Total Hip Arthroplasty with Iliofemoral Distraction Technique in Patients with Crowe Type IV dysplastic osteoarthritis
Stanislav Bondarenko (Ukraine)
- P37** Mid to long term outcomes of 154 cemented Total Hip Arthroplasties in ankylosing spondylitis
Musheer Hussain Mohamed (UK)



- P38** Total Hip Arthroplasty In Crowe III And IV dysplasia
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- P39** Understanding the internal morphology of the proximal femur and its impact on stem position
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- P45** Can mathematical modeling be a theoretical replacement for fluoroscopic THA analyses?
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- P52** Midterm outcomes of ceramic-on-ceramic bearings in cementless revision acetabular components
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- P53** Midterm result of fully coated with titanium/ hydroxyapatite triple taper stems in primary Total Hip Arthroplasty
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- P54** Development of a new concept for 3D-printed acetabular cups supported by finite element analysis
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- P55** Evaluate clinical functioning and time to deterioration of hip implants according to the value of the offset after total hip prosthesis – Retrospective study carried out between 2016-2019 including 195 patients between 45 and 65 years old
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- P58** Effect of preoperative electronic patient engagement on patient reported outcomes following Total Hip Arthroplasty
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- P68** Early experience with a new monoblock tapered fluted titanium stem design for all-cause revision in Paprosky I To IIIA femoral defects
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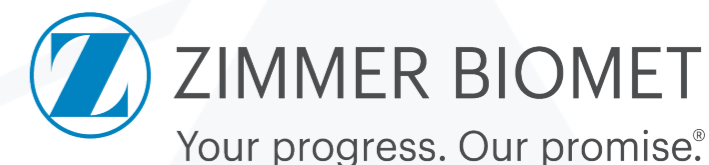


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