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JOINT ISIC, IIT DELHI
HAMBURG UNIVERSITY OF TECHNOLOGY
AND UNIVERSITY OF TOLEDO
2ND INTERNATIONAL CONFERENCE ON

Clinical Spine & Orthopaedic Biomechanics

April 13 - 15, 2018

Venue: Indian Spinal Injuries Centre

Contact:

Indian Spinal Injuries Centre,
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Suitable for:

Spine & Orthopaedic Surgeons, Biomechanical Engineers, Rehab Students & Professionals

HIGHLIGHTS

- Brings together Orthopaedic and Spine surgeons, Biomechanical engineers, Rehab professionals, Researchers and Industry on one platform to discuss biomechanical issues
- Keynote lectures by eminent surgeons, engineers and rehab professionals working in the field of biomechanics and implant design.
- Find biomechanical answers to your clinical Spine and Orthopaedic problems
- Learn how to formulate your own biomechanical study
- Find out what the future holds
- Eminent national and international faculty

Inviting papers to be considered for free paper presentations. All papers will be peer reviewed. Accepted full-length 4 page papers will appear in the conference proceedings.

Important dates

Abstract submission for free paper presentation - Mar 20, 2018

Last day for early bird registration - Mar 31, 2018

Program Schedule

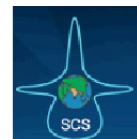
Day 1 (April 13): Clinical orthopaedic biomechanics

Day 2 (April 14): Clinical spine biomechanics

Day 3 (April 15): Design thinking for development of implants & testing

Registration fees

Category	Early bird registration till 31st March 2018		1st April onwards	
	Full Conference	Per day	Full Conference	Per day
Surgeons/Engineers/Trade delegates	1500	750	2000	1000
Post Graduate Students/Rehabilitation Professionals/ Engineering Students	1000	500	1500	750



**2nd International Workshop on Clinical Spine and Orthopedics Biomechanics
13th to 15th April, 2018 Auditorium, ISIC**

Program

13th April, 2018: Clinical Orthopaedic biomechanics

Time	Topic
0900-1015	Session I- Total Hip Arthroplasty
0900-0915	Biomechanics of a Normal, Arthritic and Artificial Hip
0915-0930	Current & novel designs of Modular Total Hip Arthroplasty
0930-1015	Panel discussion: How do I prolong life of my patients THA
1015-1045	Tea Break
1045-1300	Session II- Total Knee Arthroplasty
1045-1055	Biomechanics of a Normal, Arthritic and Artificial Knee
1055-1105	Current & novel designs of Total Knee Arthroplasty
1105-1115	Do Unloader braces really work
1115-1125	To squat or not to squat – a biomechanical answer
1125-1215	Debate - Intra-operative aids in Total Knee Arthroplasty - What works for me and why Experience and eye-balling Computer assisted navigation Patient specific instrumentation Robotic arm
1215-1345	Session III - Designing a biomechanical study
1215-1235	Basics of experimental study design for orthopaedic implants
1235-1255	Dr Gerd Huber Talk
1255-1330	Discussion on how to design a biomechanical study
1330-1415	Lunch
1415-1445	Inauguration
1445-1615	Session - IV - Trauma
1445-1455	Whats better - SS or Titanium implants - a biomechanical and clinical perspective
1455-1505	Ideal biomechanical construct for fixation of comminuted long bone fracture
1505-1515	Is non weight bearing/partial weight bearing a myth?
1515-1615	Panel discussion - case based discussion of failure of fracture fixations
1615-1645	Tea Break
1645-1	Session V – ACL Biomechanics
1645-1655	Biomechanics of a ACL deficient knee
1655-1705	Evolution and future of ACL implants
1705-1715	Rehab of ACL deficient knee
1715-1725	What's the hype of core muscle strengthening
1725-1825	Panel discussion –ACL Biomechanics
1900 onwards	Faculty Dinner



**2nd International Workshop on Clinical Spine and Orthopedics Biomechanics
13th to 15th April, 2018**

Auditorium, ISIC

Program

14th April 2018: Clinical spine Biomechanics

Time	Topic
0900-0915	Instability in thoracic and Thoracolumbar Spine- a biomechanical perspective
0915-0930	Biomechanical principles of fixation of thoracolumbar spine
0930-1015	Panel discussion: Design requirements for a thoracic and thoracolumbar spine trauma system
1015-1030	Biomechanics of unstable cervical spine
1030-1045	Biomechanical principles of fixation of cervical spine
1045-1100	Biomechanical peculiarities of instability in junctional regions of spine
1100-1115	Development of Universal Reducer for CV Junction anomalies
1115-1145	Tea Break
1145-1230	Panel discussion: Can we improve the design of cervical spine stabilization systems
1230-1245	Biomechanics of unstable lumbar spine
1245-1300	Biomechanical peculiarities of L5 vertebra
1300-1315	Pathomechanics of SI Joint dysfunction
1315-1330	Biomechanics consideration in sacral & sacropelvic fixation
1330-1415	Lunch
1415-1430	Biomechanical considerations of sagittal imbalance
1430-1445	Biomechanical consideration of coronal imbalance
1445-1530	Panel discussion: Specific design requirements for a spine deformity correction system
1530-1600	Tea
1600-1700	Best Paper Award session (6+2 X7)
1700-1715	How degeneration affects Disc & Spine Biomechanics
1715-1730	Biomechanical considerations in non fusion instrumentation
1730-1745	Effect of osteoporosis on biomechanics of spine
1745-1800	Which pedicle screw augmentation technique provides the best biomechanical strength of construct
1800-1845	Setting up of a Biomechanics laboratory in emerging countries for implant design and testing : Opportunities and the way forward
1845-1915	Best poster presentation award session (3+2X6)
1915 onwards	Dinner



2nd International Workshop on Clinical Spine and Orthopedics Biomechanics
13th to 15th April, 2018
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Implant Design Development: Program Thinking & Testing
15th April 2018

	Meet the experts
0900-0915	Historical evaluation of orthopedic trauma implants
0915-0930	Historical evolution of Knee implants
0930-0945	Historical evolution of Hip implants
0945-1000	Historical evolution of Spinal implants
1000-1040	Panel discussion- Basic considerations in orthopaedic & spine implant designing
1040-1100	Tea Break
1100-1140	Introduction to design thinking
1140-1300	Case Study and hands on workshop
1300-1320	ASTM, FDA and ISO testing protocols for implant testing
1320-1340	Regulatory perspective for implant design and testing
1340-1430	Lunch
1430-1445	From implant design to implant production
1445-1500	IPR and patenting for design
1500-1600	Future for implant designing and manufacturing: An Indian perspective (each company gets 10 mts to present x 6 industries)
1600-1630	Closing remarks & Tea