

Wednesday, 14 August 2019

7:30 am - 6:00 pm	Registration						
8:45 am - 09:00 am	Welcome						
9:00 am - 10:30 am	Auditorium East	Auditorium West	569 (60 theatre)	555 (147 theatre)	476 A (36 theatre)	476 B (36 theatre)	568 (36 theatre)
	A - 01 Cardiovascular fluid dynamics: Patient-specific modeling I Chairs: <i>Lucas H. Timmins, John LaDisa</i>	B - 01 Design and evaluation of implant systems I Chairs: <i>Heath Henninger, Kevin Moerman</i>	C - 01 Agent-based modeling Chairs: <i>Sandra Loerakker, James Moore</i>	D - 01 Biomechanics of tendon and ligament Chairs: <i>Mark R. Buckley, Kristin Miller</i>	E - 01 Dental biomechanics I Chairs: <i>Jing Du, Christoph Bourauel</i>	F - 01 Brain biomechanics I - Imaging and modeling Chairs: <i>Yuan Feng, Kaveh Laksari</i>	G - 01 Biomechanics of morphogenesis Chairs: <i>Nandan Nerurkar, Karen Kasza</i>
10:30 am - 11:00 am	Coffee break ► North Lobby						
11:00 am - 12:30 pm	Auditorium East	Auditorium West	568 (36 theatre)	569 (60 theatre)	476 A (36 theatre)	476 B (36 theatre)	555 (147 theatre)
	A - 02 Cardiovascular fluid dynamics: Patient-specific modeling II Chairs: <i>Lucas H. Timmins, Frank Gijzen</i>	B - 02 Design and evaluation of implant systems II Chairs: <i>Heath Henninger, Kevin Moerman</i>	C - 02 Artificial intelligence and machine learning in biomechanics I (11:00am - 12:15pm) Chairs: <i>Ferris M. Pfeiffer, James Moore</i>	D - 02 Workshop - Introducing FEBio3 Chairs: <i>Steve A. Maas, Gerard A. Ateshian, Jeffrey Weiss</i>	E - 02 Dental biomechanics II (11:00am - 12:15pm) Chairs: <i>Christoph Bourauel, Ludger Keilig</i>	F - 02 Brain biomechanics II - Measurement and modeling Chairs: <i>Mehmet Kurt, Reuben Kraft</i>	G - 02 Growth and remodeling I Chairs: <i>Salvatore Federico, Chiara Bellini, Alfio Grillo</i>
12:30 pm - 2:00 pm	Lunch & Poster Session 1 ► North Lobby & Auditorium East						
2:00 pm - 3:00 pm	Plenary lecture - Blending engineering and medicine; <i>Natalia Trayanova</i> ► Auditorium East						
3:15 pm - 4:45 pm	569 (60 theatre)	Auditorium West	568 (36 theatre)	555 (147 theatre)	476 A (36 theatre)	Auditorium East	476 B (36 theatre)
	A - 03 Multiscale modeling of thrombosis and transport Chairs: <i>Kevin Moerman, Danny Bluestein</i>	B - 03 Cartilage mechanics and tissue engineering Chairs: <i>Corinne Henak, Michael Albro</i>	C - 03 Artificial intelligence and machine learning in biomechanics II Chairs: <i>Ferris M. Pfeiffer</i>	D - 03 Soft tissue damage, strength and fracture I Chairs: <i>Anne Robertson, Spandan Maiti</i>	E - 03 Bone biomechanics I Chairs: <i>Ani Ural, Jeffrey Stephen Nyman</i>	F - 03 Brain biomechanics III - Modeling and evaluation Chairs: <i>Brittany Coats, Haojie Mao</i>	G - 03 Growth and remodeling II Chairs: <i>Salvatore Federico, Chiara Bellini, Alfio Grillo</i>
4:45 pm - 5:15 pm	Coffee break ► North Lobby						
5:15 pm - 6:45 pm	Auditorium East	555 (147 theatre)	Auditorium West	568 (36 theatre)	476 A (36 theatre)	476 B (36 theatre)	569 (60 theatre)
	A - 04 Thrombosis biomechanics and transport Chairs: <i>Danny Bluestein, Kevin Moerman</i>	B - 04 Modeling of diarthrodial joints I - The art of it Chairs: <i>Nigel Shrive, Ahmet Erdemir</i>	C - 04 Mimics Innovation Awards	D - 04 Soft tissue damage, strength and fracture II Chairs: <i>Michelle L. Oyen, Anne Robertson</i>	E - 04 Bone biomechanics II Chairs: <i>Jeffrey Stephen Nyman, X. Sherry Liu</i>	F - 04 Brain biomechanics IV - Measurement and modeling Chairs: <i>Songbai Ji, Lyndia Wu</i>	G - 04 Workshop - SlicerSALT for Biomedical and Biomechanical Research <i>Beatriz Paniagua</i>
7:00 pm	Welcome reception, Party Space (ground level)						

Thursday, 15 August 2019

8:00 am - 5:00 pm	Registration						
9:00 am - 10:30 am	555 (147 theatre)	Auditorium West	476 A (36 theatre)	Auditorium East	569 (60 theatre)	476 B (36 theatre)	568 (36 theatre)
	A - 05 Calcific aortic valve disease, bicuspid aortic valve and transcatheter aortic valve replacement Chairs: <i>Gil Marom, Rami Haj-Ali</i>	B - 05 Modeling of diarthrodial joints II - Cartilage and mechanics Chairs: <i>Petri Tanska, Leping Li</i>	C - 05 Computer-aided surgery I Chairs: <i>Songbai Ji, Stéphane Avril</i>	D - 05 Soft tissue mechanics, damage, remodeling I Chairs: <i>Grace O'Connell, Jeffrey Weiss, Weiyong Gu</i>	E - 05 Workshop - SimVascular Workshop and New User Training <i>Noelia Grande Gutierrez, Vijay Vedula</i>	F - 05 In vivo imaging and visualization Chairs: <i>Lucas H. Timmins, Craig Goergen</i>	G - 05 Urinary tract and reproductive biomechanics I Chairs: <i>Kristin Myers, Choon Hwai Yap</i>
10:30 am - 11:00 am	Coffee break ► North Lobby						
11:00 am - 12:30 pm	Auditorium East	555 (147 theatre)	569 (60 theatre)	Auditorium West	476 A (36 theatre)	476 B (36 theatre)	568 (36 theatre)
	A - 06 Cardiac mechanics I - Heart valve mechanics (11:00am - 12:15pm) Chairs: <i>Joao Soares, Daniel Hurtado</i>	B - 06 Modeling of diarthrodial joints III Chairs: <i>Samer Adeeb, Tao Liu</i>	C - 06 Computer-aided surgery II Chairs: <i>Stéphane Avril, Songbai Ji</i>	D - 06 Soft tissue mechanics, damage, remodeling II Chairs: <i>Grace O'Connell, Jeffrey Weiss, Weiyong Gu</i>	E - 06 Biomechanics of movement and rehabilitation bioengineering I Chairs: <i>Antonia Zaferiou, Victoria Chester</i>	F - 06 Biomedical image analysis & processing Chairs: <i>João Tavares</i>	G - 06 Urinary tract and reproductive biomechanics II Chairs: <i>Duncan Morhardt, Sara Roccabianca</i>
						Party space F - 12 BETA CAE Systems Workshop: From CT Scans to FE Simulations (11:00 am - 12:00pm) <i>Evangelos Karatsis, Laura Ianneti</i>	
12:30 pm - 2:00 pm	Lunch & Poster Session 2 ► North Lobby & Auditorium East						
2:00 pm - 3:00 pm	Plenary lecture - Integrated models of cell shape and function in tissue organization; <i>Ravi Iyengar</i> ► Auditorium East						
3:15 pm - 4:45 pm	Auditorium East	Auditorium West	555 (147 theatre)	569 (60 theatre)	476 A (36 theatre)	568 (36 theatre)	476 B (36 theatre)
	A - 07 Cardiac mechanics II - Myocardial Mechanics Chairs: <i>Lik Chuan Lee, Choon Hwai Yap</i>	B - 07 Spine biomechanics I - Intervertebral disc and vertebrae Chairs: <i>Francesco Travascio, Giovanni F. Solitro</i>	C - 07 Micro-physiological systems or organ-on-chip I Chairs: <i>Ben Maoz, James Hickman</i>	D - 07 Workshop - Patient-specific blood flow simulations using CRIMSON (3:15pm - 5:15pm) <i>C. Alberto Figueroa, Christopher J. Arthurs</i>	E - 07 Biomechanics of movement and rehabilitation bioengineering II (3:15pm - 4:30pm) Chairs: <i>Scott Delp, Brian Jones</i>	F - 07 Imaging and image analysis for biomechanics I - Head and brain biomechanics (3:15pm - 4:30pm) Chairs: <i>Philip V. Bayly, Johannes Weickenmeier</i>	G - 07 Injury biomechanics: dynamics (3:15pm - 4:30pm) Chairs: <i>Peter Cripton, Lyndia Wu</i>
7:30 pm	CMBBE 2019 Cruise ship dinner (tickets required, see directions on p. 34)						

Friday, 16 August 2019

8:00 am - 6:00 pm	Registration						
9:00 am - 10:30 am	Auditorium East	555 (147 theatre)	569 (60 theatre)	Auditorium West	476 A (36 theatre)	568 (36 theatre)	476 B (36 theatre)
	A - 08 Cardiac mechanics III - Cardiac function Chairs: <i>Vicky Wang, Reza Avaz</i>	B - 08 Spine biomechanics II - Patient specific modeling and scoliosis Chairs: <i>Giovanni F. Solitro, Francesco Travascio</i>	C - 08 Micro-physiological systems or organ-on-chip II Chairs: <i>David Elad, Ashutosh Agarwal</i>	D - 08 Soft Tissues and Gels I: Testing methods and constitutive models Chairs: <i>Martyn Nash, Dominique Pioletti</i>	E - 08 Biomechanics of movement and rehabilitation bioengineering III Chairs: <i>Brian Jones, Victoria Chester</i>	F - 08 Imaging and image analysis for biomechanics II - Cardiovascular biomechanics Chairs: <i>Manuel Rausch, Emma Lejeune</i>	G - 08 3D printing for patient-specific modeling (09:00am - 10:15am) Chairs: <i>Paulo Rui Fernandes, André Castro</i>
10:30 am - 11:00 am	Coffee break ► North Lobby						
11:00 am - 12:30 pm	555 (147 theatre)	Auditorium East	Auditorium West	568 (36 theatre)	569 (60 theatre)	476 A (36 theatre)	476 B (36 theatre)
	A - 09 Vascular mechanics I Chairs: <i>Chiara Bellini, Salvatore Federico, Alfio Grillo</i>	B - 09 Symposium in honor of Prof. Christopher Jacobs: Chris Jacobs' students and fellows Chairs: <i>Ronald Kwon, Alesha Castillo</i>	C - 09 Inverse modeling/ Parameter identification I Chairs: <i>Johannes Weickenmeier, Stéphane Avril</i>	D - 09 Soft tissues and hydrogels II: Brain and Gels Chairs: <i>Cees Oomens, Sam Evans</i>	E - 09 Workshop - GIBBON <i>Kevin M. Moerman</i>	F - 09 Elastography imaging Chairs: <i>Daniel H. Cortes, Deva Chan</i>	G - 09 Patient-specific modeling Chairs: <i>Sarah Vigmostad, Laura Marx</i>
12:30 pm - 2:00 pm	Lunch & Poster Session 3 ► North Lobby & Auditorium East						
2:00 pm - 3:00 pm	Plenary lecture - Digital twins in tissue engineering: from bench to bedside via the computer; <i>Liesbet Geris</i> ► Auditorium East						
3:15 pm - 4:45 pm	476 A (36 theatre)	Auditorium East	476 B (36 theatre)	569 (60 theatre)	568 (36 theatre)	555 (147 theatre)	Auditorium West
	A - 10 Vascular mechanics II (3:15pm - 4:15pm) Chairs: <i>Chiara Bellini, Salvatore Federico, Alfio Grillo</i>	B - 10 Symposium in honor of Prof. Christopher Jacobs: Musculoskeletal mechanobiology Chairs: <i>Farsh Guilak, Seth Donahue</i>	C - 10 Inverse modeling/ Parameter identification II Chairs: <i>Johannes Weickenmeier, Michelle Oyen</i>	D - 10 Cellular and molecular biomechanics Chairs: <i>Stavros Thomopoulos, Guy Genin</i>	E - 10 Injury biomechanics: Prevention Chairs: <i>Lyndia Wu, Peter Cripton</i>	F - 10 Imaging and image analysis for biomechanics III - Cellular and orthopedic biomechanics Chairs: <i>David Pierce, Greet Kerckhofs</i>	G - 10 Ocular biomechanics Chairs: <i>Ross Ethier, Jonathan Vande Geest</i>
4:45 pm - 5:15 pm	Coffee break ► North Lobby						
5:15 pm - 6:45 pm	476 A (36 theatre)	Auditorium East	569 (60 theatre)	555 (147 theatre)	568 (36 theatre)	Auditorium West	476 B (36 theatre)
	A - 11 Biomechanics of pulse wave propagation Chairs: <i>Patrick Segers, Vijay Vedula</i>	B - 11 Symposium in honor of Prof. Christopher Jacobs: Computational biomechanics Chairs: <i>Ellen Kuhl, Scott Delp</i>	C - 11 Human modeling for robotics Chairs: <i>Carlotta Mummolo, Joo H. Kim</i>	D - 11 Soft tissues and hydrogels III: Skin damage Chairs: <i>Cees Oomens, Martyn Nash</i>	E - 11 Sports biomechanics Chairs: <i>António Veloso, Scott Selbie</i>	F - 11 Société de biomécanique session: Joint imaging and musculoskeletal modeling Chairs: <i>Raphael Dumas</i>	G - 11 Growth and remodeling in reproductive biomechanics Chairs: <i>Kristin Miller, Raffaella De Vita</i>
6:45 pm - 7:00 pm	Auditorium East						
	Closing session Paper and poster awards						