	February 24	February 25	February 26	February 27	February 28
09.00 - 10.30	Continuum Biomechanics 1	Continuum Biomechanics 2	Computational Biomechanics 1	Computational Biomechanics 2	Advanced Seminar 1 Advanced Seminar 2
	BREAK	BREAK	BREAK	BREAK	BREAK
11.00 - 12.30	Biomedical Imaging 1	Biomedical Imaging 2	Hard Tissue Biomechanics	Modeling & Simulation of Bone Biomechanics	Advanced Seminar 3 Advanced Seminar 4
	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14.00 - 15.30	Fluid Biomechanics	Soft Tissue Biomechanics	Modeling & Simulation of the Cardiovascular System	Modeling & Simulation of the Cardiovascular System	Advanced Seminar 5 Advanced Seminar 6
	BREAK	BREAK	BREAK	BREAK	BREAK
16.00 - 17.30	Mechanobiology of Cells & Tissues	Modeling & Simulation in Mechanobiology	Talk Participants	Round Table "University and Beyond" Past-Present-Future	Closing Remarks & Conclusions
			Social activities		

ORGANIZING COMMITTEE

Alessio Gizzi - Campus Bio-Medico University of Rome (IT)
Michele Marino - Leibniz University of Hannover (DE)
Giuseppe Vairo - University of Rome "Tor Vergata" (IT)

SCIENTIFIC COMMITTEE

Miguel Angel Ariza Gracia - University of Bern (CH)
Stephane Avril - MINES Saint-Etienne (FR)
Michele Conti - University of Pavia (IT)
Christian J. Cyron - Hamburg University of Technology - Helmholtz Center (DE)
Enrico Dall'Ara - University of Sheffield (UK)
Marco Donato De Tullio - Politecnico di Bari (IT)
Salvatore Federico - University of Calgary (CA)
Salvatore Pasta - University of Palermo (IT)
Alberto Rainer - Campus Bio-Medico University of Rome (IT)
Oliver Röhrle - University of Stuttgart (DE)
Paola Saccomandi - Politecnico di Milano (IT)
Emiliano Schena - Campus Bio-Medico University of Rome (IT)
Paolo Soda - Campus Bio-Medico University of Rome (IT)

ADVISORY BOARD COMMITTEE

Luca Cristofolini - University of Bologna (IT)
Luca Deseri - University of Trento (IT)
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Francesco Migliavacca - Politecnico di Milano (IT)
Umberto Morbiducci - Politecnico di Torino (IT)
Anna Pandolfi - Politecnico di Milano (IT)

ENDORSING SCIENTIFIC SOCIETIES

- European Society of Biomechanics (ESB)
- Italian Group on Theoretical and Applied Biomechanics (GBMA-AIMETA)
- Società Italiana di Scienza delle Costruzioni (SISCo)
- Institute of Electrical and Electronic Engineering (IEEE) - Italy Section. Italy Chapter of the IEEE Sensors Council
- Italy Chapter of the Engineering in Medicine & Biology Society (EMBS). IEEE Chapter of EMB-18
- IEEE Computer Society, Technical Committee on Computational Life Sciences
- Canadian Society for Biomechanics (CBS)
- Gruppo Nazionale di Bioingegneria (GNB)

WWW.UNICAMPUS.IT/ADVANCED-SCHOOL

Advanced International School on

IMAGING, MODELING AND SIMULATION IN BIOMECHANICS & MECHANOBIOLOGY

ROME, 24-28 FEBRUARY 2020

In collaboration with

Leibniz Universität Hannover

Università di Roma Tor Vergata

Advanced International School on

IMAGING, MODELING AND SIMULATION IN BIOMECHANICS & MECHANOBIOLOGY

Rome, 24-28 February 2020

SCHOOL AIMS

The School aims at delivering an **Advanced Training Program in Biomechanics and Mechanobiology** merging complementary bits of knowledge from different fields. Lecturers are renowned expert scientists from multidisciplinary fields, such as Biomedical Imaging, Theoretical Biology and Biomechanics, Computational Mechanics and in-silico biomechanical analyses for the Clinical Practice. Classes will be focused on **state-of-the-art problems of biomedical research**, developing **multidisciplinary learning skills**. Basic concepts of interdisciplinary knowledge will be opened to the **critical thinking** of Biomechanics and Mechanobiology applications. Emphasis will be on scientific and technological challenges able to foster an effective **translation towards the clinical world**.

SCHOOL IMPACT

The School will offer a **broad context of scientific sessions** in which it will be possible to discuss with Lecturers, other students and researchers. It is intended to create the **best conditions for future synergic and multidisciplinary cooperation**. Social and cultural activities will be organized where students will meet lecturers in an informal context. The **expected impact** of the School is the **creation of an international network on Theoretical and Applied Biomechanics & Mechanobiology** in which the young participants can get access to a higher educational level and find their research line on a robust epistemological framework. New synergies are expected to face the urgent challenges connected with healthcare social problems and sustainability through integrated multidisciplinary approaches.

SCHOOL CRITERIA AND REQUIREMENTS

The School Committee will select a **limited number of participants** (CV, motivation, scientific interest) to maximize the interaction. **Student Travel Grant** will be set to support young scientists and students from low-income founds. **Members of affiliated Scientific Societies will gain a fee discount**.

FEES	BEFORE 15/11/2019	AFTER 15/11/2019
PhD Students (Reduced*)	€ 400	€ 500
PhD Students (Regular)	€ 500	€ 600
PostDoc/Researchers (Reduced*)	€ 500	€ 600
PostDoc/Researchers (Regular)	€ 600	€ 700

* Members of Endorsing Scientific Societies

TIMING AND VENUE

The School will run over the week 24-28 February 2020.

Deadlines:

- Student Travel Grant application: **15 October 2019**
- Early Registration fee: **15 November 2019**

LOCATION

Rome INNOVATION HUB.

Via Antonio Salandra 113, 00187 Rome, Italy.

FUTHER INFORMATION

www.unicampus.it/advanced-school

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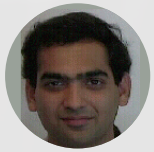
LECTURERS

Lecturers represent excellence in multidisciplinary Biomechanics research.



VIKRAM DESHPANDE

Cambridge University (UK), an expert in mechanical engineering, non-equilibrium thermodynamics, statistical mechanics and mechanobiology

THOMAS CHRISTIAN GASSER

KTH Royal Institute of Technology (Sweden), an expert in imaging and clinical applications in cardiovascular biomechanics

DANIEL E. HURTADO

School of Structural Engineering and Institute of Biological & Medical Engineering (Chile), an expert in computational biomechanics

BRUNO QUESSON

Liryc-Centre de Recherche Cardiothoracique, CNRS, Bordeaux (France), an expert in biomedical imaging

ROBERTO VERZICCO

University of Rome Tor Vergata & Gran Sasso Science Institute (GSSI), an expert in imaging, modeling and simulation of cardiovascular hemodynamics for bioengineering applications

ZOHAR YOSIBASH

Tel Aviv University (Israel), an expert in biomedical imaging, experimental and computational mechanics of bone