

Michele Conconi

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Esperienze lavorative

Ott. 2024 – ad **Professore Associato** presso il **DIN, Università di Bologna, Facoltà di Ingegneria** oggi

Ott. 2021 – **Ricercatore a tempo determinato di tipo b)** presso il **DIN, Università di Bologna, Facoltà di Ingegneria**
Ott. 2024

Set. 2018-Set. 2021 **Collaboratore Coordinato Continuativo di Ricerca** presso il **DIN, Università di Bologna, Facoltà di Ingegneria**

2015-Ago. 2018 **Ricercatore** a contratto presso il **DIN, Università di Bologna, Facoltà di Ingegneria**

2011-2014 **Ricercatore** presso il **Centro Interdipartimentale di Ricerca Industriale (CIRI): Piattaforma Scienze della Vita**

2010 - 2011 **Ricercatore** a contratto presso il **DIEM, Università di Bologna, Facoltà di Ingegneria**

Progetti di Ricerca

2023 PRIN: REBALANCE - REinforcing BALANCE with a neurally-driven wearable assistive device

2022 GALILEO 2023/24: Digital Lower Limb To Link Anatomy And Function In Orthopaedics

2019 NSF IRES PROJECT. Biomechanical Modeling and Design of KAFO.

2019 INAIL BRIC – SIC_O_MAN. Analisi, progettazione e sperimentazione di sistemi integrati basati sulle tecnologie robotiche e meccatroniche innovative del piano industriale 4.0 per migliorare le condizioni di sicurezza degli operatori nell'uso e manutenzione di macchine e insiemi di macchine presenti nell'industria manifatturiera.

2013 INAIL CANTIERI SICURI. Indagine sulla sicurezza nei cantieri navali - Identificazione delle principali criticità e reingegnerizzazione dei processi produttivi per la riduzione del rischio infortuni.

2011 INDUSTRIA 2015. Competitività nella deformazione: DEFCON.

2010 BRAVO (IIT). Brain computer interfaces for Robotic enhanced Action in Visuo-motor tasks.

Consulenze scientifiche

Mar. 2018 ad “Characterization and validation of knee prostheses proposed by the Contractor,

oggi	throughout tests and measurements in order to investigate if the Contractor's prostheses can be considered suitable to be further developed for the market or if the Contractor's prostheses need to be optimized", commissionata da Beijing Arthrone Science and Technology Co., Ltd.
Feb.-Mar. 2019	"Misurazione tramite sistema stereofotogrammetrico delle deformazioni sotto carico di una macchina di sollevamento", commissionata da Toyota Material Handling
Nov. 2017 ad oggi	"Identificazione di modelli articolari di piede e tecniche di triangolazione spaziale da bio-immagini", commissionata da Orthofix International
Ott. 2015 Nov. 2016	"Prove di caratterizzazione funzionale di protesi di ginocchio", commissionata da Medacta International
Ott. 2015 Nov. 2016	"Il sistema di fissatori ortopedici TL-HEX: analisi del motore di calcolo per la generazione della prescrizione", commissionata da Orthofix International
Set. 2013 Apr. 2014	"Misure ed analisi del movimento di ginocchio integro e protesizzato", commissionata da Lima Corporate
Ott. 2010 Nov. 2013	"Indagine sulla sicurezza nei cantieri navali - Identificazione delle principali criticità e reingegnerizzazione dei processi produttivi per la riduzione del rischio infortuni", commissionata dall' Istituto Nazionale Assicurazione contro gli Infortuni sul Lavoro (INAIL)

Didattica

2020– ad oggi	Professore per il corso Fondamenti Di Meccanica Applicata alle Macchine T-2 , Università di Bologna, Facoltà di Ingegneria
2019– ad oggi	Professore per il corso Mechanics of Machines for Automation M – modulo 2, Università di Bologna, Facoltà di Ingegneria
2015 - 2018	Professore per il corso Fondamenti di Meccanica Applicata alle Macchine T1 - modulo 2, Università di Bologna, Facoltà di Ingegneria
2015 - 2016	Professore per il corso di riallineamento per Foundation of Mechanics , Università di Bologna, Facoltà di Ingegneria
Nov. 2011- Jan. 2012	Professore per il corso di Foundation of Mechanics presso la Tong Ji University, Shanghai, Cina
2008-ad 2017	Tutor didattico per i corsi di Meccanica Applicata alle Macchine, Università di Bologna, Facoltà di Ingegneria

Formazione

Ott. 2023 -	Research Fellow presso l' Université Gustave Eiffel, Laboratoire de Biomécanique et Mécanique des Chocs, Lyon, France.
Sett. 2019	Abilitazione Scientifica Nazionale, Professore II fascia , settore concorsuale 09/A2 – Meccanica Applicata alle Macchine
Ott. 2009 -	Research Fellow presso l' Orthopaedics Research Laboratory, Dip. di

- Apr. 2010 **Ortopedia, Rhode Island Hospital, Rhode Island, U.S.**
- 2007 - 2010 **Dottorato di ricerca in Meccanica Applicata**, presso la Facoltà di Ingegneria di Bologna. Tesi: "*A new energetic approach to the modeling of human joint kinematics: application to the ankle*".
- 2007 **Abilitazione** all'esercizio della professione di Ingegnere, Università di Bologna.
- 1998 - 2006 Laurea in Ingegneria Meccanica presso la Facoltà di Ingegneria di Bologna, indirizzo automazione industriale e robotica. Tesi svolta presso l'**Università di Duisburg-Essen, Germania**: "Generating dynamically equivalent trajectories with a heavy-weight serial-robot physical motion simulator".

Lingue

Italiano (madrelingua), Inglese (Academic English LEA2), Tedesco (buono).

Capacità e competenze tecniche

Linguaggi di programmazione: C++, Python, html, javascript, Latex.

Software: Visual Studio, Matlab, Solid Edge, Rhinoceros, Geomagic, MITK, Anybody, Mimics, Vicon Nexus e BodyBuilder, Visual Nastran, Abaqus, SolidWorks, PCT Creo, Adams.

Analisi sperimentale in-vitro di tessuti umani: pianificazione prove, analisi dati, gestione laboratorio.

Analisi sperimentale in-vivo delle articolazioni umane tramite tecniche di risonanza dinamica: pianificazione prove, elaborazione dati, ricostruzione del moto.

Motion capture: utilizzo del sistema Vicon per la registrazione e l'analisi del moto nello spazio di corpi rigidi.

Bioimaging: analisi, elaborazione e registrazione di immagini biomediche.

Interessi di Ricerca

Biomeccanica delle articolazioni umane, con particolare riguardo a caviglia e ginocchio.

- Modellazione della cinematica articolare, con particolare attenzione a modelli predittivi e patient-specific.
- Caratterizzazione sperimentale del comportamento delle articolazioni umane in vivo e in vitro.
- Definizione di protesi articolari patient-specific realizzate tramite stampa 3D SLM.
- Quantificazione della cinematica articolare tramite risonanza dinamica
- Quantificazione dell'accuratezza nei sistemi stereofotogrammetrici
- Caratterizzazione meccanica e cinematica dei tessuti fibrosi, in particolare legamenti e menischi
- Studio delle relazioni tra osteoartrite e geometria articolare, con particolare riguardo sulla prima articolazione carpo-metacarpica.

Teoria dei meccanismi

- Analisi cinematica dei manipolatori paralleli, focalizzata allo studio delle singolarità e alla loro identificazione.
- Dinamica dei manipolatori seriali, in particolare generazione di traiettorie prescritte dall'utente.

Journals

1. Sorrentino, R., Carlson, K. J., Orr, C. M., Pietrobelli, A., Figus, C., Li, S., ... and Benazzi, S., "Morphological and evolutionary insights into the keystone element of the human foot's medial longitudinal arch", *Communications Biology*, 6(1), 1061, 2023.
2. Conconi, M., Pompili, A., Sancisi, N., Durante, S., Leardini, A., and Belvedere, C., "Foot kinematics as a function of ground orientation and weightbearing", *Journal of Orthopaedic Research*, 2023.
3. Conconi, M., De Carli, F., Berni, M., Sancisi, N., Parenti-Castelli, V., and Monetti, G., "In-Vivo Quantification of Knee Deep-Flexion in Physiological Loading Condition through Dynamic MRI", *Applied Sciences*, 13(1), 629, 2023.
4. Conconi, M., Pompili, A., Sancisi, N., Leardini, A., Durante, S., and Belvedere, C., "New Anatomical Reference Systems for the Bones of the Foot and Ankle Complex: Definitions and Exploitation on Clinical Conditions", *Journal of Foot and Ankle Research*, 14 (1), 1-13, 2022.
5. Liverani, E., Sancisi, N., Conconi, M., and Fortunato, A. "Design and fabrication of personalized knee prostheses by laser-based powder bed fusion: Influence of manufacturing process on geometric accuracy", *Journal of Laser Applications*, 33 (4), 042045, 2021.
6. Conconi, M., Montefiori, E., Sancisi, N. and Mazzà, C. "Modeling Musculoskeletal Dynamics during Gait: Evaluating the Best Personalization Strategy through Model Anatomical Consistency", *Applied Science*, 11(18), 8348, 2021.
7. Conconi, M., Sancisi, N. and Parenti-Castelli, V. "Prediction of Individual Knee Kinematics from an MRI Representation of the Articular Surfaces", *IEEE Transaction of Biomedical Engineering*, 68 (3), 1084-92, 2021.
8. Conconi, M., Pompili, A., Sancisi, N. and Parenti-Castelli, V. "Quantification of the errors associated with marker occlusion in stereophotogrammetric systems and implications on gait analysis", *Journal of Biomechanics*, 114, 110162_1-9, 2021.
9. Martelli, S., Sancisi, N., Conconi, M., Pandey, M. G., Kersh, M. E., Parenti-Castelli, V. and Reynolds, K. "The relationship between tibiofemoral geometry and musculoskeletal function during normal activity", *Gait&Posture*, 80, 374-382, 2020.
10. Nardini, F., Belvedere, C., Sancisi, N., Conconi, M., Leardini, A., Durante, S. and Parenti-Castelli, V. "An anatomical-based subject-specific model of in-vivo knee joint 3D kinematics from medical imaging", *Applied Sciences*, 10, 693551 pp1-13, 2020.
11. Smale, K.B., Conconi, M., Sancisi, N., Krogsgaard, M., Alkjaer, T., Parenti-Castelli, V., Benoit, D.L. "Relationship of Knee Forces to Subjective Function Pre and Post ACL Reconstruction", *Medicine and science in sports and exercise*, 52(6), pp.1338-1346, 2020.
12. G.Marchiori, G., Parrilli, A., Sancisi, N., Berni, N., Conconi, M., Luzi, L., Cassiolas, G., Zaffagnini, S., Lopomo, N.F. "Integration of micro-CT and uniaxial loading to analyse the evolution of 3D microstructure under increasing strain: application to the Anterior Cruciate Ligament", *Materials Today*, 7 (1), pp. 501-507, 2019.
13. Conconi, M., Sancisi, N. and Parenti-Castelli, V. "The Geometrical Arrangement of Knee Constraints that Makes Natural Motion Possible: Theoretical and Experimental Analysis", *Journal of Biomechanical Engineering*, 141 (5), pp. 5100.1-6, 2019.
14. Smale, K.B., Conconi, M., Sancisi, N., Krogsgaard, M., Alkjaer, T., Parenti-Castelli, V., Benoit, D.L. "Effect of implementing magnetic resonance imaging for patient-specific OpenSim models on lower-body kinematics and knee ligament lengths", *Journal of Biomechanics*, 83, pp. 9-15, 2019.
15. Leardini, A., Belvedere, B., Nardini, F., Sancisi, N., Conconi, M. and Parenti-Castelli, V. "Kinematic models of lower limb joints for musculo-skeletal modelling and optimization in gait analysis", *Journal of Biomechanics*, 62, pp. 77-86, Aprile 2017.

16. F. Nardini, F., Sancisi, N., C. Belvedere, Conconi, M., Leardini, A. and Parenti Castelli, V. "Definition of A Subject-Specific Model of the Knee in Vivo", *Gait & Posture*, 49S (S1), S6, September 2016.
17. Luzi, L., Sancisi, N., Conconi M. and Parenti-Castelli, V., "A New Test Rig for Human Joint and Prosthesis Characterization", *Journal of Medical Devices, Transactions of the ASME*, 10 (2), pp. 1-3, May 2016.
18. Conconi, M., Leardini, A. and Parenti-Castelli, V., "Joint kinematics from functional adaptation: A validation on the tibio-talar articulation", *Journal of Biomechanics*, 48 (12), pp. 2960-2967, September 2015.
19. Forlani, M., Sancisi, N., Conconi, M. and Parenti-Castelli, V., "A New Test Rig for Static and Dynamic Evaluation of Knee Motion based on a Cable-Driven Parallel Manipulator Loading System", *Meccanica*, 51, pp. 1571-1581, 2015.
20. Sancisi N., Conconi, M., Forlani M. and Parenti-Castelli, V., "A Test Rig for the Analysis of the Knee under Dynamic Motion Tasks", *Journal of Medical Devices, Transactions of the ASME*, 9 (2), pp. 1-3, June 2015.
21. Conconi, M., Halilaj, E., Parenti-Castelli, V. and Crisco, J., "Is Early Osteoarthritis Associated with Differences in Joint Congruence?", *Journal of Biomechanics*, 47 (16), pp. 3787-3793, December 2014.
22. Conconi, M. and Parenti-Castelli, V., "A Sound and Efficient Measure of Joint Congruence", *Proc. Inst. Mech. Eng. Part H J. Eng. Med.*, 228 (9), pp.935-941, September 2014.
23. Conconi, M. and Parenti-Castelli, V., "Joint Kinematics from Functional Adaptation: An Application to the Human Ankle", *Applied Mechanics and Materials*, 162, pp. 266-275, June 2012.
24. Conconi, M. and Carricato, M., "A New Assessment of Singularities of Parallel Kinematic Chains", *IEEE Transaction on Robotics*, 25 (4), pp. 757-770, August 2009.

Books

1. Conconi, M., Sancisi, N., and Parenti-Castelli, V., "Exploiting reciprocity between constraints and instantaneous motion to reconstruct individual knee kinematics", International Symposium on Advances in Robot Kinematics. Springer, Cham, 2022.
2. Avallone, G., Agostini, L., Conconi, M., Parenti-Castelli, V., Vertechy, R., and Sancisi, N., "Low-Cost Gyroscope and Accelerometer Calibration with Free Fall Pendulum Motion: Results and Sensitivity", Symposium on Robot Design, Dynamics and Control. Springer, Cham, 2022
3. Parenti-Castelli V., Sancisi N., Conconi M. "Kinematic Synthesis". In: Ang M.H., Khatib O., Siciliano B. (eds) Encyclopedia of Robotics. Springer, Berlin, Heidelberg, 2021.
4. Conconi, M., Sancisi, N., and Parenti-Castelli, V., "The Geometrical Arrangement of Joint Constraints that Makes Natural Motion Possible: Experimental Verification on the Ankle", International Symposium on Advances in Robot Kinematics, Springer, Cham, pp. 109-116, 2020.
5. Conconi, M., Sancisi N. and Parenti-Castelli, V., "Subject-specific model of knee natural motion: a non-invasive approach", Advances in Robot Kinematics 2016. Springer, Cham, 2018.
6. Conconi, M. and Parenti-Castelli, V., "Functional Modeling Of Human Joints: A Feasibility Study For The Knee", International Design Engineering Technical Conferences and Computers and Information in Engineering Conference - IDETC/CIE. American Society of Mechanical Engineers, 2013.
7. Conconi, M. and Parenti-Castelli, V., "Sensitivity and Stability Analysis of a Kinematic Model for Human Joints (An Application to Human Ankle) ", XII International Symposium on 3D Analysis of Human Movement. TABU: Bologna, 2012.
8. Tändl, M., Conconi, M. and Kecskeméthy, A., "Determining User-Prescribed Accelerations for a Serial Robot Motion Simulator", *Proceedings of the 17th CISM-IFTOMM Symposium on Robot Design, Dynamics, and Control*. CISM, Udine, 2008.
9. Conconi, M. and Carricato, M., "A new assessment of singularities of parallel kinematic chains", Advances in Robot Kinematics: Analysis and Design. Springer, Dordrecht, 2008.
10. Marx, M., Conconi, M., Tändl, M. and Kecskeméthy, A., "Optimized Kinematical Positioning and Guidance of a Serial Robot for Motion Simulation", Proceedings of the 1st Conference on Interdisciplinary Applications of Kinematics. Springer Netherlands, Dordrecht, 2008.

Conferences

1. Sorrentino, R., Conconi, M., Carlson, K.,... & Belcastro, M. G., “Looking for the Morpho-functional Meaning of the Neanderthal Talar Uniqueness: Morphological and Kinematic Investigations”, XXV Congresso Associazione Antropologica Italiana, Torino, 6-8 Settembre 2023.
2. Conconi, M., Sancisi, N., Leardini, A., Mosca, M., Caravelli, S. and Belvedere, C., “Automatically Designed Patient-Specific Instrumentation for Total Ankle Replacement: an In-Vitro Study”, 28th Congress of the European Society of Biomechanics – ESB, Maastricht, The Netherlands, July 9 -12, 2023.
3. Conconi, M. and Sancisi, N., “Experimental Identification of a Continuous, Non-Linear Map of the Knee Compliance”, 28th Congress of the European Society of Biomechanics – ESB, Maastricht, The Netherlands, July 9 -12, 2023.
4. Conconi, M. and Sancisi, N., Belvedere, C., and Leardini, A., “A New Synergy-Based Foot Model: Description of Arches Mobility in Healthy and Flat Feet During”, 28th Congress of the European Society of Biomechanics – ESB, Maastricht, The Netherlands, July 9 -12, 2023.
5. Kruger, K., Lenz, A., Dibbern, K., ... and Leardini, A., “Standardizing Terminology, 3D Spatial Orientation, and Relative Positioning of the Foot and Ankle Bones: An Expert Consensus Task Force” 8th Congress of International Foot and Ankle Biomechanics Society, I-FAB, Bordeaux April, 19 - 22, 2023.
6. Pompili, A., Conconi, M., Sancisi, N., Leardini, A., and Belvedere, C., “A synergy-based approach to track foot bones motion using different gait analysis protocols”, *Proceedings of ESB-ITA 2022*, Massa, Italy, 2022.
7. Alessandro, P., Michele, C., Nicola, S., Alberto, L. and Claudio, B. (2022), “A Novel Multibody Kinematics Optimization Approach Based on Foot Synergies to Reconstruct Bone Motion of the Foot-Ankle Complex Using Different Gait Protocols”, *XIV Giornata di Studio Ettore Funaioli*, Bologna, Italy, July, 2022.
8. Avallone, G., Chen, Y., Veretichy, R., Conconi, M. and Sancisi, N., “Upper Limb Joint Moment Estimation for Ergonomics Evaluation in Real-Time”, *XIV Giornata di Studio Ettore Funaioli*, Bologna, Italy, July, 2022.
9. Pompili, A., Conconi, M., Sancisi, N., Leardini, L., Durante, S., and Belvedere, C., “Multibody kinematics optimization based on synergies to track the motion of all foot bones with a standard gait protocol”, *Proceedings of WCB 2022*, Taipei, 2022.
10. Conconi, M., Berni, M., Sancisi, N., De Carli, F., and Monetti, G. “Investigation of Knee Flexion under Orthostatic Physiological Loads through Dynamic MRI”, *Proceedings of WCB 2022*”, Taipei, 2022.
11. Conconi, M., Pompili, A., Sancisi, N., Leardini, L., Durante, S., and Belvedere, C., “Joint motion and instantaneous helical axes along foot synergies in loaded and unloaded conditions by weight-bearing CT”, *Proceedings of WCB 2022*, Taipei, 2022.
12. Conconi, M., Pompili, A., Sancisi, N., Leardini, A., Durante, S. and Belvedere, C., “A Novel Technique for Morphology-based Anatomical Reference System Definitions”, *Proceedings of WCB 2022*, Taipei, 2022.
13. Warren, C. E., Conconi, M., Sancisi, N., Clouthier, A. L., Benoit, S. C. and Daniel, L., “Reconstruction of Patient-Specific Tibiofemoral Joint Articulations from Marker Trajectories and Anthropometrics”, *Proceedings of NACOB 2022*, Ottawa, CA, 2022.
14. Warren, C. E., Michele, C., Nicola, S., Benoit, S. C. and Daniel, L., “Development of a Congruence-Based Musculoskeletal Model of the Knee in Anterior Cruciate Ligament Injured Adolescents”, *Proceedings of NACOB 2022*, Ottawa, CA, 2022.
15. Conconi, M., Pompili, A., Sancisi, N., Leardini, L., Durante, S., and Belvedere, C., “A proposal for the definition of new anatomical reference systems for the bones in the foot and ankle complex”, *Proceedings of ORS 2022*, Tampa, UA, 2022.
16. Conconi, M., Pompili, A., Sancisi, N., Leardini, L., and Belvedere, C., “Validation of an MRI-Based Personalized Model of the Subtalar Joint”, *Proceedings of ESB 2022*, Porto, PT,

2022.

17. Conconi, M., Pompili, A., Sancisi, N., Leardini, L., Durante, S., and Belvedere, C., "Quantification of Post-Operative Correction of Foot Posture Through New Anatomical Reference Systems", *Proceedings of ESB 2022*, Porto, PT, 2022.
18. Pompili, A., Conconi, M., Sancisi, N., Leardini, L., Durante, S., and Belvedere, C., "Sinergy-Based Multibody Kinematics Optimization to Track All the Foot Bones with a Standard Gait Protocol", *Proceedings of ESB 2022*, Porto, PT, 2022.
19. degli Esposti Castori, L., Sancisi, N., Girelli, V. A., Tini, M. A., Barbieri, E., Conconi, M., Bitelli, G. and Parenti-Castelli, V. (2022), "Accuracy of a Minimally Invasive Frame-Based Stereotactic Procedure", *Proceedings of Aimeta 2022*, Palermo, Italy, 2022.
20. Conconi, M., Pompili, A., Sancisi, N., Belvedere, C., Durante, S., and Leardini, L., "Motion of All Foot Bones under Controlled Vertical Load from Series of Weightbearing CT Scans", *i-FAB 2021 - International Foot & Ankle Biomechanics Meeting*", on-line meeting, 2022
21. Liverani, E., Sancisi, N., Conconi, M., and Fortunato, A "Design and Fabrication of Personalized Knee Prostheses by Laser-Based Powder Bed Fusion: Influence of Manufacturing Process on Geometric Accuracy", 40th International Congress on Application of Laser and Electro-Optics – ICALEO 2021, on-line meeting, October 2021.
22. Conconi, M., Pompili, A., Sancisi, N., Leardini, A., Durante, S., Belvedere, C., "Differences Between Loaded and Unloaded Bone Kinematics of the Foot and Ankle Complex", the XXVIII Congress of the International Society of Biomechanics, on-line meeting, July 2021.
23. Conconi, M., Montefiori, E., Sancisi, N., Mazzà, C., "Musculoskeletal Modelling: Relevance of Model Anatomical Consistency", the XXVIII Congress of the International Society of Biomechanics, on-line meeting, July 2021.
24. Conconi, M., Pompili, A., Sancisi, N., Leardini, A., Durante, S., Belvedere, C., "A Proposal for the Definition of Anatomical Reference Systems for the Bones of the Foot and Ankle Complex", the XXVIII Congress of the International Society of Biomechanics, on-line meeting, July 2021.
25. Pompili, A., Conconi, M., Sancisi, N., Leardini, A., Durante, S., Belvedere, C., "A Procedure for Measuring the Kinematics of the Foot and Ankle Complex Through Weight-Bearing CT", the XXVIII Congress of the International Society of Biomechanics, on-line meeting, July 2021.
26. Conconi, M., Sancisi, S., De Carli, F., Monetti, G., Parenti Castelli, V., "Investigation of Knee Flexion under Orthostatic Physiological Loads Through Dynamic MRI", the 26th Congress of the European Society of Biomechanics, on-line meeting, July 2021.
27. Conconi, M., Sancisi, S., De Carli, F., Monetti, G., Parenti Castelli, V., "Prediction of Individual Knee Motion: an In-Vivo Validation under Physiological Load", the 26th Congress of the European Society of Biomechanics, on-line meeting, July 2021.
28. Conconi, M., Sancisi, S., Best, G. M., Rainbow, M. J., "Prediction of Individual Carpal Kinematics During Hammer Motion: an In-Vivo Validation", the 26th Congress of the European Society of Biomechanics, on-line meeting, July 2021.
29. Marchiori, G., Cassiolas, G., Parrilli, A., Sancisi, N., Berni, M., Conconi, M., Zaffagnini, S., Fini, M., Lopomo, N. F. "Biomechanics of Fibrous Tissues: Volumetric Analysis of Microstructure under Increasing Strain", the 26th Congress of the European Society of Biomechanics, on-line meeting, July 2021.
30. Conconi, M., Pompili, A., Belvedere, C., Durante, S., Sancisi, N., Leardini, A., "3D Kinematics of foot bones under load via Cone Beam CT", International Foot and Ankle Biomechanics Meeting, on-line conference, April 2021.
31. Brocato, M., Podio-Guidugli, P., Sancisi, N., Conconi, M., Belvedere, C., Parenti-Castelli, V., Leardini, A. "Subject-specific Geometric Definition and Validation of a Novel Kinematic Model of Human Hind+Midfoot", International Foot and Ankle Biomechanics Meeting, on-line conference, April 2021.

32. Conconi, M., Pompili, A., Sancisi, N., Leardini, A., Durante, S., Belvedere, C., "Differences between loaded and unloaded kinematic synergies among foot bones through weight-bearing CT", II International WBCT Society Meeting, on-line conference, January 2021.
33. Sancisi, N., Conconi, M. and Parenti-Castelli, V., "Experimental Robotic Systems for Design, Development and Testing of Orthopaedic Devices", *I-RIM 3D*, Rome, 18-20 October 2019.
34. Conconi, M., De Carli, F., Sancisi N., Monetti, G. and Parenti-Castelli, V., " Measuring in-vivo, loaded knee kinematics through dynamic MRI", *XXIV Congresso - Associazione Italiana di Meccanica Teorica e Applicata - AIMETA*, Roma, Italy, September 2019.
35. Conconi, M., Montefiori, E. Sancisi, N. and Mazzà, C., "Evaluation of anatomical consistency of three subject-specific ankle joint modelling approaches", *The 27th Congress of the International Society of Biomechanics - XXVII ISB-ASB*, July 31 – August 4, 2019, Calgary, CA.
36. Barzan, M., Maine, S., Brito da Luz, S., Modenese, L., Conconi, M., Sancisi, N., Stockton, C., Lloyd, D.G., Carty, C.P., "Development and validation of subject-specific patellofemoral joint kinematic models for children and adolescents with recurrent patellar dislocation", *The 27th Congress of the International Society of Biomechanics - XXVII ISB-ASB*, July 31 – August 4, 2019, Calgary, CA.
37. Conconi, M., Pompili, A., Sancisi, N. and Parenti-Castelli, V., "Quantification of a Systematic Source of Error Affecting Optoelectronic Stereophotogrammetric Measurements: the Camera Occlusion Artefact", *The 27th Congress of the International Society of Biomechanics - XXVII ISB-ASB*, July 31 – August 4, 2019, Calgary, CA.
38. Conconi, M., Sancisi, N. Best, G.B. and Rainbow, M., "Prediction of Individual Carpal Kinematics during Hammer Motion: an In-vivo Validation", *The 27th Congress of the International Society of Biomechanics - XXVII ISB-ASB*, July 31 – August 4, 2019, Calgary, CA.
39. Conconi, M., Montefiori, E., Sancisi, N. and Mazzà, C., "From Scaling to MRI Defined Subject-specific Ankle Joint Models: a Comparison of Three Approaches with Increasing Level of Anatomical Consistency", *The 16th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering - CMMBE 2019*, August 14-16, 2019, New York, US.
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41. Conconi, M., Sancisi N., De Carli, F., Monetti, G. and Parenti-Castelli, V., "Prediction of Individual Knee Motion Under Physiological Load: an In-Vivo Validation", *XIII Giornata di Studio Ettore Funaioli*, Bologna, Italy, July, 2019.
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Riconoscimenti

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