

CURRICULUM VITAE

GLORIA CASAROLI, PhD

CONTACT DETAILS

Mobile phone: +39 3477035769

Date of birth: 23 November 1988

Nationality: Italian

E-mail: gloriacasaroli.88@gmail.com

Address: Via C. Poma 54, 20129 Milano (MI), Italy

Skype: gloria.casaroli

Websites: www.researchgate.net/profile/Gloria_Casaroli
www.linkedin.com/in/gloria-casaroli-6553a663/



CURRENT POSITION: since February 2017

Post-doctoral researcher at I.R.C.C.S. Istituto Ortopedico Galeazzi, Milan (Italy).

SUMMARY

I am a Biomedical Engineer with research experience in numerical modeling and experimental testing in orthopedic field. I collaborate with physicians and companies on the biomechanics of different surgical techniques.

Main activities and responsibilities:

- Numerical modeling
- Data analysis
- Working in team
- Writing and public speaking

ACADEMIC AND PROFESSIONAL EXPERIENCE:

- **Institut für Unfallchirurgische Forschung und Biomechanik, Ulm (Germany), Medicine department**, March-November 2015
Ph.D Intern. Mechanical tests on animal specimens, Micro-CT and MR images analysis.
Supervisor: Prof Hans-Joachim Wilke
- **Politecnico di Milano, Research Fellow**, June - October 2013
Numerical modeling, collaboration with the Dental department of the I.R.C.C.S. Istituto Ortopedico Galeazzi
- **The University of Sheffield, Sheffield (UK) Mechanical department, M.Sc thesis intern**, September 2012-February 2013.
Working on an international EU project (VPHOP), Finite element modeling, CT images analysis, image segmentation. Supervisor: Prof Marco Viceconti.
- **Children educator and entertainer** (Summer school, 2003-2006)

EDUCATION:

- **Ph.D. in Bioengineering, with Merit, Politecnico di Milano, IRCCS Istituto Ortopedico Galeazzi (Milan, Italy), 2013-2016** Duration of the program of study: 3 years
Principal subjects / skills: Biomechanics, Animal testing, Experimental testing, Finite element analysis
- **M.Sc in Bioengineering, Politecnico di Milano, Final mark 110/110, 2010–2013**
Principal subjects: Biomechanics, Biomaterials, Finite element analysis
- **B.Sc. in Bioengineering, Politecnico di Milano 2007-2010.**
Principal subjects: Biomechanics, Biomaterials, Biology
- **High School: Liceo Scientifico Melchiorre Gioia (Piacenza, Italy), final mark 94/100, 2002-2007**

OTHER SCHOOL/COURSES:

- **Management Essentials for PhDs (2016)**, held by MIP - Politecnico di Milano Graduate School of Business
- **Workshop: Spine Loading and Deformation - From Loading to Recovery, 2 – 4 July 2015**, Berlin

TOP SKILLS:

Office applications, Windows

Finite Element (ABAQUS, ANSYS Mechanical),

Image processing (MIMICS, AVIZO, ITK Snap, Image J)

Experimental testing, Laboratory testing on animal/human specimens

Working in team, Public speaking, writing

OTHER CORE COMPETENCIES:

Statistical analysis (SPSS, Sigmaplot)

Technical design software: PTC CREO

Peer reviewer for scientific journals (European Spine Journal, JABFM, Royal Society Open Science)

Professional certifications: Ingegneria Industriale: Sezione A

Languages:

Italian (Mother language),

English (very good in reading, writing, speaking),

German (sufficient in reading, writing, speaking)

Certifications of language knowledge:

English: TOEFL 14 May 2010 85/C1,

German: GOETHE Level A2

Affiliations: European Society of Biomechanics

PUBLICATIONS IN PEER-REVIEWED JOURNALS:

1. Berger-Roscher N, **Casaroli G**, Rasche V, Villa T, Galbusera F, Wilke H-J, “Influence of Complex Loading Conditions on Intervertebral Disc Failure”, *Spine*, 41, 2016.
2. **Casaroli G**, Villa T, Bassani T, Berger-Roscher N, Wilke H-J, Galbusera F “Numerical prediction of the mechanical failure of the intervertebral disc under complex loading conditions”, 10(1), 31, *Materials*, 2017
3. **Casaroli G**, Galbusera F, Jonas R, Schlager B, Wilke H-J, Villa T, “A novel finite element model of the ovine lumbar intervertebral disc with anisotropic hyperelastic properties” (PLOS ONE, 2017)

Autorizzo il trattamento dei dati personali ai sensi dell’art. 13 del D. Lgs. 196/03.

Gloria Casaroli