

PERSONAL INFORMATION



Sonia DUPREY

📍 Laboratoire de Biomécanique et Mécanique des Chocs
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Sex F | Date of birth 24/02/1980 | Nationality French

POSITION Associate Professor

WORK EXPERIENCE

From Sept 2009

Associate Professor in Mechanics

Université Claude Bernard Lyon 1, IUT Génie Mécanique et Productique; Laboratoire de Biomécanique et Mécanique des Chocs

- Teaching and research

From Sept 2016 to Sept 2017

Invited Professor UdeM Research sabbatical leave from the CNU – 6 months

Université de Montréal, S2M Lab, Kinesiology Department, University of Montréal, Canada

- Research

From Oct 2008 to Sept 2009

Temporary Assistant professor in Mechanics

Université Claude Bernard Lyon 1; Laboratoire de Biomécanique et Mécanique des Chocs

- Teaching and research

From March 2007 to Oct 2008

Research associate – Post doctoral position

Centre for Applied Biomechanics, University of Virginia, USA

- Research

From Nov 2006 to Feb 2007

Assistant professor in Mechanics

INRETS de Lyon, Laboratoire de Biomécanique et Mécanique des Chocs

- Research

EDUCATION AND TRAINING

From Nov 2003 to Feb 2007

PhD

INSA de Lyon, France

- Biomechanics

From Sept 2002 to Sept 2003

M Sc

Université L. Pasteur de Strasbourg, France

- Mechanics

From Sept 2000 to Sept 2003

Engineering School

École Nationale Supérieure de Physique de Strasbourg, France

- Mechanical engineering, with a major in Biomechanics

PERSONAL SKILLS

Mother tongue(s) French

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	A2	A2	A2	A2	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Computer skills

- OS: Windows, Mac, Unix
- Text editor: Word, LaTeX
- Softwares: Hyperwork (Radioss, Hypermesh), LS-Dyna, Abaqus, Patran-Nastran, Anybody Modeling, ProEngineer
- Programming: Matlab, C/C++

ADDITIONAL INFORMATION

Rewards

- "PEDR" Reward for doctoral supervision and research, 2016 campaign
- Research sabbatical leave " CRCT": 6 months in 2016-17 funded by the CNU (60)
- "Prix Jeune Chercheur" of the " Société de Biomécanique", 2017

Seminars

- Member of the organization team: 1st International Symposium on Digital Human Modeling, 2011
- Leader of the organization of the 2nd colloquium of the BOHNES Interuniversity Centre, 2016 <http://www.iuc-bohnes.eu/colloquium-lyon/>
- Member of scientific committees: 2017 International Symposium on Digital Human Modeling, 2018 IEA conference.

Regular reviewer

Journal of Biomechanics, Clinical Anatomy, International Journal of Crashworthiness, Computer Methods in Biomechanics and Biomedical Engineering, Enhanced Safety Vehicle Conference, International Journal of Human Factors Modeling and Simulation, British Journal of Medicine and Medical Research

Publications

- **21 articles** in international journals (10 as first or last author)
- **37 conferences** (including 18 indexed proceedings)
- **4 book's chapters** (3 as first or last author)

Selected publications in archive journals

Duprey S., Bruyère K., Verriest J.P., Clavicle fracture prediction: simulation of shoulder lateral impacts with geometrically personalized finite elements models. Journal of Trauma, 2010, vol.68(1), pp.177-182

Duprey S., Chèze L., Dumas R., Influence of joint constraints on lower limb kinematics estimation from skin markers using global optimization. Journal of Biomechanics, 2010, doi:10.1016/j.jbiomech.2010.06.010

Duprey, S., Naaim, A., Moissenet, F., Begon, M. & Chèze, L. Kinematic models of the upper limb joints for multibody kinematic optimisation: An overview. Journal of Biomechanics 62, 87–94 (2017).

Dallard, J., Petitjean, N., Merhlot, X. & **Duprey**, S. MRI-based experimentations of fingertip flat compression: geometrical measurements and finite element inverse simulations to investigate material property parameters. Journal of Biomechanics 67, 166-171 (2018).

Savonnet, L., Wang, X., **Duprey**, S. Finite element models of the thigh-buttock complex for assessing static sitting discomfort and risks of pressure sore occurrence. Computer Methods in Biomechanics and Biomedical Engineering, 21(4):379-388 (2018)