One year post-doc in sitting biomechanics at University of Lyon, France

We are seeking highly qualified and motivated persons to apply for a post-doctoral research position in sitting biomechanics at Biomechanics and Impact Mechanics Lab (LBMC) (http://www.lbmc.ifsttar.fr/en/the-institute/ts22/laboratories/lbmc/), a Joint Research Unit between IFSTTAR (French institute of science and technology for transport, development and networks) and the Université Claude Bernard Lyon 1 (first University in France for health sciences), located at Lyon, France. The post-doctoral fellow will work in a French national collaborative project which aims to develop future airplane passenger seats. He/she will work closely not only with the LBMC research team but also with other partners of the project composed of a leading aerospace equipment manufacturer, a leading software editor in virtual prototyping and public research labs. LBMC has the main task for identifying objective criterion for assessing sitting discomfort and fatigue. To achieve this goal, a new multi-adjustable experimental seat was developed recently at LBMC, allowing the simulation of a large range of seat geometric configurations and the measurement of all contact force including both normal and shear forces for investigating biomechanical factors of sitting discomfort. In addition, the experimental seat has the possibility of varying the seat pan surface thanks to a matrix of 52 movable cylinders, each equipped with a tri-axial force sensor.

The primary focus of this position will be on the biomechanical analysis of sitting discomfort with help of a musculoskeletal human model.

The ideal candidate should possess:

- A recently completed PhD in biomechanics or a related field
- Expertise in musculoskeletal modeling
- Experience in motion capture and/or other biomechanical measurements from human subjects
- Experience in data processing and analysis using Matlab (or equivalent)
- Evidence of scholarship; e.g. peer-reviewed publications.
- Demonstrated ability to work independently and as a member in a collaborative project

In addition to the experimental seat dedicated to investigate sitting discomfort, the fellow will be joining a state of the art biomechanics laboratory which includes motion capture systems, pressure maps, force sensors, EMG wireless system, 3D body scanner, etc. The expected start date is January/February 2017. To apply for this position, please send a CV and the names and contact information of three references to Dr. Xuguang Wang via email: xuguang.wang@ifsttar.fr. Applications will be accepted until the position is filled.