

**PhD position available at the Institute of Movement Sciences
Aix-Marseille University**

In the context of a new project on aging — the **Chair Active Aging 2.0** — starting in September at the Institute of Human Movement Sciences of Aix-Marseille University, a PhD position is available at the interface between cognitive sciences, movement sciences, engineering, and data sciences. The Institute of Movement Sciences is one of the Europe's leading pluri-disciplinary lab specializing in health, science and technology. It is renowned for its cutting-edge fundamental research. The PhD program takes part of the *Chair Active Aging 2.0*, which is dedicated to the prevention of the effects of aging on brain and cognitive health through exercise and innovative technologies.

PhD position. For the growing number of older adults, preventing age-related cognitive and motor declines is an important challenge. Despite significant progress in our understanding the effects of exercise on brain plasticity and cognition, it is still unclear how the different types of exercise can be combined to optimize their effects. The goal of PhD program is to explore the effects different combinations of aerobic, motor and cognitive stimulations on motor and cognitive performance in healthy older adults. The research will be carried out in direct connection with the "technological innovation" program of Active Aging 2.0. The results will serve as a basis for validating a new exergame. The PhD program will be achieved under the supervision of Prof. Jean-Jacques Temprado, in a group including several researchers, PhD and Master degree students, post-docs, engineers, MD and specialized sports educators. The project is granted for 3 years and it benefits from the sophisticated equipment of the Institute of Movement Sciences.

In addition to the general requirements described below, candidates are expected to have experience in, or a strong interest for aging, exercise, cognition, data sciences and exergames. The successful candidate will be enrolled as a PhD student at the Institute of Movement Sciences (Aix-Marseille University, France), under the supervision of Prof. Jean-Jacques Temprado (jean-jacques.temprado@univ-amu.fr) *Keywords: aging, exergaming, data sciences, VR, brain health.*

General requirements and additional information: applicants should have a background in one (or several) of the field/s mentioned above or in related disciplines. The PhD position is offered in an interdisciplinary context: Aging Research, Cognitive Sciences and Movement Sciences (Neurosciences, Motor Control, Exercise Physiology). We are seeking candidates with a strong background in movement sciences with familiarity in aging research and a strong appetite for pluri-disciplinary studies. Essential requirements for the position are strong quantitative and/or analytical skills, knowledge of at least one programming language (such as Matlab, C/C++), excellent grades and the ability to learn and employ new methods and concepts from different disciplines. A strong motivation is expected as well as the willingness to work in a multi-disciplinary environment.

The starting date is October 1, 2019. **Applications are accepted until July 12, 2019.** Short-listed candidates will be asked to prepare an interview face to face or by skype for the hiring committee. **Interviews will take place on July 15, 2019.** The position is for 3 years. Net salary is around 1500€ and includes the French social security/health package. All professional expenses (e.g., experiments / hardware / software / travel / publications) are covered by the Institute of Movement Sciences.

Applicants should: (1) contact the supervisors to prepare their application and (2) send, in one merged PDF, a cover letter with a statement of research interests, CV, publications, relevant certificates (degrees and grades), and the name and contact of at least two references to jean-jacques.temprado@univ-amu.fr. Fluency in French is not mandatory but a beginner's mastery of the French language would be an additional asset.

More information:

Institute of Movement Sciences: <https://ism.univ-amu.fr>

Doctoral School in Human Movement Sciences: <https://ecole-doctorale-463.univ-amu.fr/fr>