Reasoning of dissertation topic and competency of potential supervisor for admission onto joint LSU and TU doctoral studies in 2022

Area of research (title and code)	Gerontology: (b) the role of physical activities in the prevention and control of chronic diseases; (d) planning of innovative programs for health promotion through physical activities integrated with cognitive and affective skills; (h) the study of the effectiveness of psychological treatment for the improvement of individual's well-being and health condition.	
Field of research (title and code)	Ageing	
Topic of research	Physical activity, Sedentary behaviour, ageing, social inclusion	
Institution	Lietuvos Sporto Universitetas // University of Vic- Central University of Catalonia (UVic-UCC, Spain)	

Potential supervisor

Pedagogical and scientific degree	Name, surname	Academic position
PhD	Javier Jerez-Roig	Professor

Short reasoning of proposed dissertation topic

short reasoning of proposed dissertation topic
Title
Enjoying physical activity to battle sedentary behaviour and inactivity among older adults from a
socially inclusive perspective (JOIN4JOY project)

Short research description (including aims and objectives) (maximum 1500 characters).

Sedentary behavior (SB) and insufficient physical activity (PA) has increased substantially over the last decades and especially with the COVID restrictions. SB increases with age and older adults are the least physically active age group. Robust evidence shows the health benefits of regular PA and the harms of high levels of SB along the ageing process. Moreover, enjoying PA is a key element to adhere and maintain this healthy behavior. However, the content of the programmes has been traditionally determined by the focus on the functional benefits of PA to prevent age-related disability. Therefore, The JOIN4JOY aims to: a) co-create a programme for community-dwelling older adults (JOIN4JOY-C), and for long-term care residents (JOIN4JOY-LTC), focused on enjoyment and applying a social inclusion perspective to reduce socioeconomic, cultural, health and disability-related barriers to access physical activity; b) create local and global virtual communities of practice to share knowledge and experiences and enhance the sustainability of the project; c) train professionals and students on behavior change techniques with a social inclusion perspective ; d) implement and evaluate the programme regarding feasibility, acceptability and impact; e) replicate the training with the train the trainers methodology.

Relevance of the problem, its novelty at national and international level (maximum 1500 characters).

This project stands out for:

 \cdot Wide impact (wide age span and variety of settings): the JOIN4JOY project will include people aged 60+ in the pre-retirement period from workplaces and also older people aged 65 and over, from community settings and long-term care institutions for people from different European countries.

 \cdot Comprehensive evaluation of the JOIN4JOY programme.

· Multidisciplinarity.

 \cdot Dissemination of innovative practices to health professionals.

 \cdot Sustainability. Implementing programmes to promote PA and reduce SB in the workplace, community and long-term institutions can be cost-effective since it may lead to a reduction in costs of health care costs.

We expect to reach a total of 144 end-users, 9-15 students and >300 professionals and to impact current research, policy and practice by promoting a change in the PA culture.

From a technical point of view, the JOIN4JOY project will use an innovative intervention to battle SB and enhance PA levels that stands out for its:

□ Uniqueness.

□ Client-centeredness: The development of the adequate training programme will take into consideration end-users' preferences.

□ Customization: the JOIN4JOY intervention will be tailored for every setting and also end-user.

 \Box Progression: the protocol foresees a progressive setting (also customized) of the goals in the different phases of the programme.

 \Box Empowerment of end-users.

Research methods and possibilities for conducting these studies (maximum 1500 characters).

Phase 1: Co-creation.

- 1 Identify settings (community settings and long-term care institutions).
- 2 Recruit participants.
- 3 Conduction of co-creation (8-10 participants per organization):
 - □ 1 discussion group in each site with end-users and caregivers/family members
- □ 1 discussion group with professionals (interdisciplinary team) and policy makers.

4 Thematic analysis of the focus groups.

The octalysis gamification framework will be used to define the enjoyment component.

Phase 2: initial training of the trainers.

The platform for the online training with the theoretical sessions will be linked to Virtual Communities of Practice.

Phase 3: Implementation of the JOIN4JOY program with end users in 5 countries in two settings

(community and nursing homes).

A total of minimum of 144 older people (including social minorities) would be reached initially to conduct pilot studies.

Phase 4: Evaluation of the pilot studies.

We will use mixed methods to assess the intervention feasibility and acceptability of the preliminary version of the JOIN4JOY programme. Another objective of the pilot is to evaluate the impact of the programme on social inclusion and enjoyment of PA. It aims to assess the effectiveness and perceived effects of the reviewed version of the JOIN4JOY-C programme with functional and psychosocial health measures, self-reported and objective procedures.

Phase 5: Cascade training.

The Train the trainers' methodology will be used to reach exercise and health care professionals working with older adults in the participating countries and beyond.

Please indicate the links between the proposed topic for the doctoral thesis and biomechanics / physical therapy / sports study programs.

The JOIN4JOY programme will consist of behavioural change techniques that can be learned by professionals of different disciplines (e.g. physiotherapists, occupational therapists, health sport professionals) to complement their previous background. Trained Professionals will include (although not limited to) Sport scientists and Physiotherapists in the community. Professionals applying the programme will include (although not limited to) Sport scientists and Physiotherapists (to deliver the PA programme), Nurses and Assistant nurses to help implementing the behavior change section of the programme in NHs. Physical therapy and Sport Sciences undergraduate students will participate in the project by offering students individual service opportunities (placements) with community settings and Residential Care Homes (service-learning methodology).

Secondary outcomes to be assessed will be: (a) physical function through the Short Physical Performance Battery (SPPB) which consists of 5-chair rise test, gait speed and balance evaluation, (b) quality of life using the self-reported questionnaire EUROQOL-5D (EQ-5D), (c) PACE: PA Enjoyment Scale.

JOIN4JOY partnership involves different bodies coming from five European countries. The partnership is formed by a Foundation skilled on Ageing and linked to a University (FSIE), 4 Universities skilled in Sport sciences (FB and SDU) and Physiotherapy (UVIC), 1 sport association (SIELBLEU), 1 geriatric hospital with long-term care settings linked to the ABKU, and 1 association working in the related sport fields, social development and media (ISES).

Is the proposed topic for the doctoral thesis related to currently funded research projects? Please indicate the links between the proposed topic for the doctoral thesis and funded research projects

Yes. This doctoral thesis is related to the international Erasmus+ project JOIN4JOY, successfully funded in the call ERASMUS-SPORT-2021-SCP (400000). There is no direct funding for the PhD student (e.g. salary), but the candidate will take advantage of the support to conduct the study (e.g. equipment). Also, we will seek additional funding such as Erasmus+ mobility for PhD students.

Is the proposed topic for the doctoral thesis related to joint research with a foreign institution? Please indicate the links between the proposed topic for the doctoral thesis and research with a foreign institution

Yes. This doctoral thesis is related to joint research with University of Vic-Central University of Catalonia (coordinator of the JOIN4JOY project), together with other academic and non-academic institutions (FUNDACIO SALUT I ENVELLIMENT, Spain; FUNDACION BLANQUERNA, Spain; ISTITUTO EUROPEO PER LO SVILUPPO SOCIO ECONOMICO ASSOCIAZIONE, Italy; SPORT INITIATIVE ET LOISIR BLEU ASSOCIATION, France; SYDDANSK UNIVERSITET, Denmark; AGAPLESION BETHESDA KLINIK ULM, Germany). Most of these institutions have been collaborating in previous research such as the SITLESS project (you can visit webpage: <u>https://sitless.eu/</u>), with EC Horizon2020 funding.

The PhD candidate is expected to collaborate with an excellent group of researchers, experts in topics such as ageing, sedentary behaviour, physical activity, social inclusion and virtual communities of practices, behavioural change techniques or cocreation. Specific objectives, workload and other aspects will be further discussed and agreed with the PhD student. For more information: javier.jerez@uvic.cat

Currently I am supervisor of <u>0</u> doctoral students.

Supervisor

(signature)

(Name, surname)

Javier Jerez-Roig

Date: 05/05/2022