



Back-UP- Personalised Prognostic Models to Improve Well-being and Return to Work After Neck and Low Back Pain

Neck and low back pain (NLBP) are leading causes for years lived with disability in Europe and worldwide. About 70% of all adults experience NLBP at some point in their lives, and both conditions are among the top ten in terms of overall disease burden expressed as disability adjusted life years. Management of NLBP is a difficult challenge for healthcare professionals since their decisions have a decisive impact on the patient's future health and welfare, as well as on the economic burden on the public and private healthcare systems. However, health professionals often lack appropriate information to tailor the management and follow-up of individual patients and to predict the outcome of a certain treatment. At European level, diverse research initiatives are undergoing at this moment for tackling NLBP from diverse angles, including biomarkers (PainOmics), pain self-management (selfBACK), lifestyle and workplace conditions (AHA), or patients stratification (STarT Back). Back-UP project provides a wider vision of NLBP, bringing together the research groups that are leading these and other innovative approaches to create a prognostic model to underpin more effective and efficient management of NLBP based on the digital representation of multidimensional clinical information and on simulations of the outcomes of possible interventions. Patient-specific models will provide a personalised evaluation of the patient case, using multidimensional health data from the following sources: personal, health, psychological, behavioural, and socioeconomic factors related to NLBP; biological patient characteristics, including musculoskeletal structures and function, and molecular data; and workplace and lifestyle risk factors. Back-UP will provide health, well-being and economic benefits to different user profiles (clinicians, employers / insurance companies and patients) and will create a channel for sharing information during the rehabilitation and return to work process.

UNIPD Team Leader: Giuseppe Sartori

Department: General Psychology

Coordinator: Instituto de Biomecanica de Valencia- IBV (Spain)

Other Participants:

The University of Sheffield- USFD (United Kingdom)

GMV Soluciones Globales Internet SAU (Spain)

Università degli Studi di Parma (Italy)

Empirica Gesellschaft für Kommunikations und Technologieforschung mbH (Germany)

Norges Teknisk- Naturvitenskapelige Universitet- NTNU (Norway)

Roessingh Research and Development B.V. (Netherlands)

Genos Dooza Vjestacenje i Analizu- GENOS (Croatia)

Karolinska Institutet- KI (Sweden)



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

H2020
PROJECTS FUNDED AT THE UNIVERSITY OF PADOVA

Centralny Instytut Ochrony Pracy- Państwowy Instytut Badawczy- CIOP-PIB (Poland)

University of Keele- KU (United Kingdom)

Mutua de Accidentes de Trabajo y Enfermedades Profesionales de la Seguridad Social (Spain)

University of Padova (Italy)

Total EU Contribution: Euro 5.130.140,00

Call ID: H2020-SC1-2016-2017

Project Duration in months: 36

Start Date: 01/01/2018

End Date: 31/12/2020

Find out more: https://www.cordis.europa.eu/project/rcn/212455_en.html