Perspectives For Future Innovation in Tendon repair (P4 FIT)-H2020-MSCA-ITN-EJD-955685

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P4 FIT was selected within the highly competitive H2020-MSCA-ITN-EJD actions (mean rating score 3-5%) which aim at financing research networks involved in creating international Doctoral Programmes. Innovation in tendon medicine is a promising frontier to respond to the urgent societal/economic healthcare demand determined by the worldwide growing incidence of tendinopathy. Perspectives For Future Innovation in Tendon repair (P4 FIT) fosters to build a new generation of 15 early stage researchers with adequate skills to explore non-conventional therapeutic and diagnostic solutions by exploiting the technological advances in nanomedicine. The University of Helsinki brings together world-renowned academic and non-academic EU institutions, covering most of the basic and technological disciplines of the fields to launch a unique EJD. The inter-disciplinary, inter-sectoral, and international high quality educational environment will booster innovation-driving training and research leadership grounded in excellence for widening success in P4 medicine (predictive, preventive, personalized and participatory), promoting tendinopathy resolution. P4 FIT will encourage cross-disciplinary working under the coordination of human and veterinary orthopedics addressing innovation and R&D facilities to combine multidrug nanovectors/nanotheranostic devices with tissue engineering. The translation of innovative nanodevices carried out on integrated pre-clinical and vet/human clinical settings will produce solid evidence-based datasets able to reduce fragmentation still limiting the impact of biomedical discoveries and to offer a unique opportunity for identifying new predictive biomarkers through the use of AI and deep learning data analysis. Working across disciplines and sectors, P4 FIT will foster ESRs to be creative, critical, autonomous intellectual risk takers at the frontiers of research with the R&I mind-set necessary for thriving careers. P4 FIT will allow to fill the EU gap in tendon healthcare, building up a generation of researchers able to develop nano-based biomedical devices by integrating biology advances to technology innovation, and to computational resolution. These aims will also be possible thanks to the collaboration with the CNR-EMMA-Infrafrontier - International Network and Mouse Clinic (EU - ESFRI), which with the preclinical studies on mice, will increase solidity and accelerate the technological transfer of the P4 FIT proposed novel devices/diagnostic path.

References:
www.unite.it
https://cordis.europa.eu/project/id/955685/it
www.infrafrontier.eu,

Keywords: tendon regenerative medicine; nanomedicines; stem cells; bioactive molecules, immunomodulation; artificial intelligence; biosensors; bioimaging, preclinical studies.

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Other: Twitter: @P4Fit; Facebook: @PforFIT EU, YouTube Channel: P4FIT EU - https://www.youtube.com/channel/UC-LqO-d4ETQ ewuchYS5U4nA