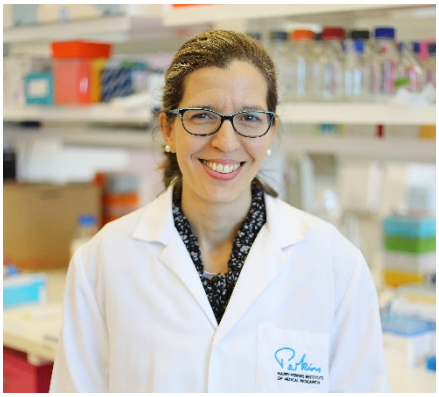

Short Biography: Dr. Elena De-Juan-Pardo has extensive expertise in biomaterials and biofabrication for applications in tissue engineering, regenerative medicine and in vitro modelling. She has worked in three different continents and acquired a wide set of interdisciplinary skills at the interface between engineering, biology and medicine. She started her research career as a materials engineer at the Max-Plank-Institute for Plasma Physics (Munich, Germany), developing materials for the first wall of fusion reactors. After a major career change, she transferred her engineering skills to the medical world post-PhD, which is her real passion. She is a Senior Lecturer at the School of Engineering, Mechanical Engineering and Program Chair of Biomedical Engineering at the University of Western Australia (UWA) in Perth, Australia. Dr De-Juan-Pardo serves in a number of university committees including the Engineering Educational Committee, the Board of Examiners (UWA Engineering), and the Board of Studies (UWA Management and Commerce). Dr De-Juan-Pardo is committed to equality and diversity and also serves as Diversity, Equity and Inclusion Contact Officer (UWA Engineering).

Dr De-Juan-Pardo established her research group, the *Translational 3D Printing Laboratory for Advanced Tissue Engineering* or T3mPLATE at the Harry Perkins Institute of Medical Research, with the mission of bringing the latest technological advances in biofabrication to the clinic. She is an international expert in melt electrowriting (MEW), a high-resolution 3D printing technology, which enables the production of highly controlled cellular scaffolds. Dr De-Juan-Pardo's research has made a significant contribution to expanding the depth of knowledge on the physical principles and capabilities of MEW and demonstrates the unique capabilities of MEW to manufacture biomimetic scaffolds with tailored biomechanical properties for tissue engineering applications, including complex bespoke heart valves. Dr De-Juan-Pardo has led the development of novel bioengineered heart valves using specialised biopolymers and MEW to provide superior performance, durability and cost-effectiveness compared to existing technology. Her team has designed and patented a novel heart valve scaffold which stands out by replicating the intricate mechanical properties found in native valves. Inspired by the wavy collagen structure of natural heart valves, the scaffold microarchitecture provides the valve with unparalleled structural integrity and functionality, with the potential to restore blood flow to normal, healthy levels in patients suffering aortic stenosis. Dr De-Juan-Pardo is leading the efforts towards translation of this innovative heart valve technology in collaboration with clinical cardiologist and co-Founder Dr Ihdayhid by their newly established start-up CoraMetix Pty Ltd. The new company has been selected to join Australia's national biotech incubator - CUREator, which has provided $500k non-dilutive funding from federal government's Medical Research Future Fund (MRFF) administered by Brandon Biocatalyst, the largest life science investment fund in Australia and New Zealand. Based on her profile in Scopus, Dr. Elena De-Juan-Pardo has 67 publications (*h*-index 25). Her research has also attracted >$5.5 Million research funding. She has been recipient of multiple prestigious awards, including the Otto Hahn Medal for Outstanding Scientific Achievement (Max Planck Society), Spanish National Prize in Materials Engineering (Spanish Ministry of Education, Culture and Sports), and was recently shortlisted as 1 of 37 finalists from over 500 applications for the 2023 International WiSTEM2D Scholars Program at Johnson & Johnson.

Personal Statement: I have been working in the field of biomaterials and biofabrication for >15 years and am committed to bringing the latest advances in biofabrication technologies to the clinic. I am very fortunate to work collaboratively with a great interdisciplinary team of clinicians, scientists and engineers who share the same vision and passion. I have received so much support from great mentors such as Prof. Prosper (University of Navarra, Spain), Prof. Hutmacher (Queensland University of Technology, Australia), and Prof. Kumar (University of Berkeley, USA). I will be delighted to give back to the vibrant biofabrication community by bringing to the ISBF Board my diverse, collaborative and passionate work towards accelerating biofabrication advances to the clinic.