

Short resumé

Name: Diego VELASQUEZ

Occupation: researcher- professor at CES University (Medellin, Colombia)

Research and academic activities :

The main subjects I have worked at are biomaterials, cell therapies and *in vitro* toxicity. I started my research experience by defining a strategy for skin cells culture and the production of an extracellular matrix in order to create skin grafts. Then I started my master's degree where I had the experience of research. The first one focused on surface modification of PCL films in order to enhance cell adhesion for a further application in tissue engineering. The second one focused on the synthesis of a co-polymer of dextran and polybutyl methacrylate as a stent coating to prevent late stent thrombosis and restenosis. Afterwards, I pursued a doctoral thesis with a project about developing starch-based materials for biomedical applications. The main interest of this project was to take advantage of the degradable and biocompatible properties of starch to be used as a resorbable medical device.

After my thesis defense, I started to work at CES University in Medellin, Colombia, where I am in charge of several courses both in school of engineering and masters, basically : cell biology, tissue engineering, modern materials in health and research methodology. In terms of research, I am currently involved in different projects such as the hemocompatibility and genotoxicity study of a new root sealer for dentistry, the encapsulation of natural antioxidant extracts in solid lipid particles, the development of a periosteum-based matrix for regenerative medicine as well as isolation of this tissue stem cells, and the development of a fibroin matrix for tissue engineering.