Diego VELASQUEZ
Date of birth: 5/10/1983
dvelasquez@ces.edu.co

EDUCATION

- **2011-2014:** PhD in Biomaterials and Biotechnology – University of Nantes, France.
- **2009-2011:** MSc in Biomaterials and Biotechnology – University Paris 13, France.
- **2001-2006:** Biomedical Engineering – CES University, Colombia.

WORK EXPERIENCE

- **2015-currently: Assistant professor – CES University, Colombia –** Courses of Health Biotechnology, Tissue Engineering, Cell Biology, Biomaterials.
- **2011-2014: PhD student – INRA, Nantes, France** – Project: Starch-based materials for biomedical applications.
- **2007-2009: Young Researcher – CES University, Colombia –** Project: Dermis and epidermis culture for skin regeneration.
- **2006-2007: Antioquia School of Engineering –** Project coordinator "Little Scientists", an inquiry-based methodology for teaching sciences in elementary school.

INTERNSHIPS

- **2011: INSERM Unit 1148, France** – Delivery of Tacrolimus from a Dextran-BMA coploymer for stent coatings (6 months).
- **2010: CSPBAT laboratory, France –** Bio-functionalization of PCL surfaces with PolyNASS to enhance cell adhesion (6 months).
- **2005-2006: University CES, Colombia –** Evaluation of the biocompatibility of calcium hydroxyde for a potential use in dentistry (1 year).
- **2005: National University of Colombia, Campus Medellin -** Evaluation of the anti-tumoral effect of algae extracts (6 months).

SCIENTIFIC SKILLS AND RESEARCH AREAS

- *In vitro* studies: cell culture, primary culture, *in vitro* toxicology assays (ISO 10993), skin culture, stem cells. *In vivo* studies: local pharmacology, histology, immunohistochemistry.
- Copolymer synthesis (Dextran-BMA), surface modification, extrusion of polysaccharides.
- Leader in health innovation processes, within hospitals (General Hospital of Medellin, CES Clinic)
- Nanotechnology: synthesis and characterization of solid lipid nanoparticles
- Materials characterization: DRX, thermo-mechanical and chemical analysis, (elastic modulus, DMA, TGA, HPLC, FTIR).
- Responsible for undergraduate interns in research and laboratory technicians.
- Research proposals and projects coordination.

PERSONAL INTERESTS

- Languages:
  - ✓ English: TOEIC: 990
  - ✓ French: bilingual (5 years of residence in France)
  - ✓ Spanish: native speaker
- Hobbies: cinema, swimming, scuba diving, literature reading, art and expositions, travelling
- Founder member of COLIFRÍ: Colombo-French Association of Researchers, supported by the French Embassy in Colombia.
- Member of the scientific committee and logistics committee of the Second Scientific Meeting of the Doctoral School VENAM, Nantes, France, 2012.
- Member of the scientific committee of the Cocreation Lab of the General Hospital of Medellin.
- Member of the consortium SimDesign – BioDesign with Stanford University

PUBLICATIONS

- Publications in indexed journals (5):

  C. Delattre, D. Velasquez, C. Roques, G. Pavon-Djavid, V. Ollivier, A. Lokajczyk, T. Avramoglou, V. Gueguen, L. Louedec, G. Caligiuri, M. Jandrot-Perrus, C. Boisson-Vidal, D. Letourneur, A. Meddahi-Pelle. In vitro and in vivo evaluation of a dextran-graft-polybutylmethacrylate copolymer coated on CoCr metallic stent. **Bioimpacts.** ***Recently accepted***

  R. Fernandez, C. Berruecos, M. C. Cortés Motta, D. Velasquez. Genotoxicity and hemocompatibility of a novel calcium aluminate-based cement.
  European Endodontic Journal. Volume 3, 2018, Pages 87-92

  D. Velasquez, L. Chaunier, S. Guessasma, F. Faure, A. Bizeau, G. Pavon-Djavid, A. Meddahi-Pellé, D. Lourdin. Design, fabrication, and implantation of tube-shaped devices for the treatment of salivary duct diseases.
  Bioimpacts. Volume 8, 2018, Pages 91-98.

  D. Velasquez, G. Pavon-Djavid, L. Chaunier, A. Meddahi-Pellé, D. Lourdin. Effect of crystallinity and plasticizer on mechanical properties and tissue integration of starch-based materials from two botanical origins.
  Carbohydrate Polymers. Volume 124, 25 June 2015, Pages 180–187.

  D. Velasquez, C. Pineda, M. Cardona, N. Gómez, G. Gartz, I. Usuga, D. Trochez, C. Londoño.
  Therapeutic solutions for dermis and epidermis reconstruction. Opportunities in Antioquia.
  Revista Ingeniería Biomedica 2(3), 2008. http://revistabme.eia.edu.co/

- Oral communication in international congress (1) :

  D. Velasquez, L. Chaunier, G. Pavon-Djavid, A. Meddahi-Pellé, D. Lourdin.
  In vivo *and* in vitro *studies of corn and potato starch thermoplastic materials for a further biomedical application*. **Biopolymers 2013, Nantes (France), 4th – 6th December 2013.**
  https://colloque.inra.fr/biopolymers2013

- Oral communication in a national (French) meeting (1):

  D. Velasquez, L. Chaunier, G. Pavon-Djavid, A. Meddahi-Pellé, D. Lourdin.
  Matériaux à mémoire de forme à base d'amidon pour un usage biomédical.
  Second Scientific Meeting of the Doctoral School VENAM, 25th – 26th October 2012.

- Poster communication in international congress (4):

  D. Velasquez, L. Chaunier, G. Pavon-Djavid, A. Meddahi-Pellé, D. Lourdin.
  In vivo *and* in vitro *studies of corn and potato starch thermoplastic materials for biomedical applications*.
  23rd European Tissue Repair Society Meeting, Reims (France), 23th - 25th October 2013.
  http://www.alphavisa.com/etrs/2013/

  D. Velasquez, G. Pavon-Djavid, V. Gueguen, T. Avramoglou, A. Barrère, G. Caligiuri, D. Letourneur, A. Meddahi-Pellé.
  New Dextran-Poly(butyl methacrylate) polymer for drug-eluting stents: effect of physiological flow rate on D-PBMA polymer coating and drug releasing.
  2nd Interrogations at the Biointerface Advanced Summer School, Barcelone (Espagne), 25th - 29th June 2012.

  D. Velasquez, C. Londoño, C. Pineda.
  Aislamiento de queratinocitos y fibroblastos para producción de sustitutos de piel
  Fourth symposium about Biofactories, Medellin (Colombia), 4th – 6th August 2009.

  D. Velasquez, C. Pineda, C. Londoño. *Cultivo de dermis y epidermis humanas: experiencia de un grupo de profundización en biotecnología*.
  Fourth Seminar in Biomedical Engineering, Universidad de Los Andes, Bogota (Colombia), 8th – 9th November 2007.