

ALVARO PENA PEREA

EDUCATION

Universidad Politécnica de Valencia, Valencia, Spain

Dip, University Specialist Diploma in Research Management and Knowledge Transfer, May 2014.

Dissertation: "Institutional Development of the Scientific Environment in the Innovation System of Uruguay."

Universidad de la República, Montevideo, Uruguay

MSc, Bioinformatics, April 2012.

Thesis approved with distinction: "Bioinformatics of small non-coding RNAs" Advisor: Hugo Naya (Pasteur Institute of Montevideo), and Jean-Luc Minel (University Paris Nanterre).

Committee: Dina Wonsever, Beatriz Garat, and Fernando Álvarez.

Class Rank: 1

Universidad de la República, Montevideo, Uruguay

BS, Biological Sciences, September 2009.

Dissertation: "Bioinformatic analysis of new microRNAs involved in Chronic Lymphocytic Leukemia" Advisor: Hugo Naya (Pasteur Institute of Montevideo).

Class Rank: 1

GLOBAL EDUCATION PROGRAMS

Massachusetts Institute of Technology, Cambridge, MA, USA. J-WEL Week. Abdul Latif Jameel World Education Lab (MIT J-WEL). From 22nd to 25th October 2018.

Stanford University. Faculty Fellows Program: Empowering Global Educators. Stanford Technology Ventures Program. From 18th to 29th April 2016.

RESEARCH INTERESTS

Inequality in Higher Education; Higher Education change in developing countries; University roles in regional technological and economic development; Multidisciplinary innovation in Higher Education.

PUBLICATIONS

Palma, A., Elbaum, E., Pacheco M, Aleman, E., **Pena, A.** (2018). 21st Century Skills in the institutional development of Uruguay's Technological University. *Vocational education and productive development: cases of innovation in Latin America*. International Labour Organization, CINTERFOR. Montevideo, Uruguay. <http://www.oitcinterfor.org/publicaciones/panoramaFP13>

Pena, A. (2014). *Institutional Development of the Scientific Environment in the Innovation System of Uruguay* (diploma dissertation). Universidad Politécnica de Valencia, Valencia, España. <http://bit.ly/innovationuy>

Fernandez-Calero, T., Garcia-Silva, R., **Pena, A.**, Robello, C., Persson, H., Rovira, C., Naya H. & Cayota, A. (2015). Profiling of small RNA cargo of extracellular vesicles shed by *Trypanosoma cruzi* reveals a specific extracellular signature. *Molecular and biochemical parasitology*, 199(1), 19-28. <http://bit.ly/1f7wSmo>

Rego N., Bianchi S., Moreno P., Persson H., Kvist A., **Pena A.**, Oppezzo P., Naya H., Rovira C., Dighiero G., Pritsch O. (2012). Search for an aetiological virus candidate in chronic lymphocytic leukemia by extensive transcriptome analysis. *Br J Haematol* Jun;157(6):709-17. <http://bit.ly/109X6VC>

Pena, A. (2012) *Bioinformatics of small non-coding RNAs* (master's thesis). PEDECIBA-Universidad de la República, Montevideo, Uruguay.

Da Silva M., **Pena A.** (2010). From cyberspace to the sense of community: Interactions between children and university students mediated by the technologies of Plan Ceibal. *Social mobilization for the Plan Ceibal - National and international context of projects of One Laptop Per Child* (Chap 3). UNESCO. Montevideo, Uruguay. <http://unesdoc.unesco.org/images/0022/002241/224103s.pdf>

LAST PROJECTS

“Latin-American practices and soft skills for an innovation-oriented network.” European Union. Erasmus+ Capacity Building in Higher Education. 13 Universities from Portugal, Spain, Finland, Brazil, Chile, and Uruguay. UTEC Director. € 999.310. 2018 – 2020.

“Innovation Skills and Regional Development.” Office for Planning and Budget (OPP) [Executive entity of the Presidency of the Republic], and UTEC. Director. US\$45.000. 2018.

“Support for the implementation of the Technological University.” International Development Bank. IDB UR-T1115. Technical Cooperation. UTEC Coordinator. US\$400.000. 2014 – 2017.

“Promoting Entrepreneurial Culture in Uruguay.” National Development Agency, Uruguay. 3 Projects granted. Coordinator and Teacher. US\$20.000. 2017.

LAST PRESENTATIONS

“21st Century Skills in the institutional development of Uruguay's Technological University,” IX International Forum of Education and Innovation, *Virtual Educa* OAS, Buenos Aires, Argentina, September 2018.

“Development of Innovation skills in Higher Education for Regional Development applying Design Thinking,” Symposium on Educational Innovation for Learning, Montevideo, Uruguay, May 2018.

“Innovative Universities.” *Montevideo Open Conference*. TEDx Montevideo, Uruguay, October 2016. <http://bit.ly/MvdOpenConf>

“Institutional development of the Technological University: more equitable access to university tertiary education”, *CILAC 2016*, Open Science Forum for Latin America and the Caribbean, UNESCO, Montevideo, Uruguay, September 2016.

LEADERSHIP EXPERIENCE

Director of the Academic Department of Special Programs. Universidad Tecnológica – UTEC, Uruguay. August 2014 to Present.

- Higher Education Administration. Responsible for proposing and implementing the offer of teaching, research, innovation, and links with Organizations and the Society, in the Special Academics Programs Department, to ensure compliance with institutional goals and the achievement of strategic objectives.
- Strategic planning, as well as the design, implementation, and evaluation of plans, programs, and projects within the Department.

- Management of five cross-curricular programs: 1. Undergraduate Research and Innovation Program; 2. Technological Entrepreneurship; 3. Languages; 4. Data Science; 5. Interactive STEAM, as well as UTEC Global, the International Relations Unit.
- Develop, lead and coordinate projects with external financing. Managed external funds for projects, programs and plans: 1.065.000 dollars, obtaining and directly executing grants for 200.000 dollars.

Project Leader. Plan Ceibal, August 2011 to August 2014.

- Coordinated programs and projects for digital inclusion. Planned and coordinated the necessary activities for the fulfillment of the goals of the programs and projects, integrating them into the rest of the areas and objectives of the Plan Ceibal.
- Project leader of the “Espacio Ceibal” program developed in 55 towns and villages in coordination with 11 organizations, and joint community projects with Universidad de la República.
- Executed and supervised the activities and management methods. Linkage with the organizations. Analyzed and supervised the actions and results obtained. Elaborated reports and management indicators.
- **International Consulting Services.** Member of the Plan Ceibal's Global Services team for international consulting in “Clickeados Project” – Argentina [clickeados.gob.ar], Digital Plan TESO – Colombia [planteso.edu.co], “Mi Compu” – Ecuador [bit.ly/micompu]. 2012 – 2013.

ACADEMIC SERVICE

Member, Universidad Tecnológica - UTEC Strategic Board, since its creation in 2018.

Member, Universidad Tecnológica - UTEC Gender Equality Committee, since its creation in 2018.

Member, Universidad Tecnológica - UTEC Undergraduate Research & Innovation Committee, since 2016.

TEACHING EXPERIENCE

2014 - Present. Associate Professor and Director of the Academic Department of Special Programs. Universidad Tecnológica – UTEC, Uruguay.

Courses taught in the Undergraduate Research & Innovation Program, and the Entrepreneurship Program.

2015. Adjunct Professor. Higher Education, Technologies, and Human Development. “Flor de Ceibo” Program - Universidad de la República, Uruguay. <http://www.flordeceibo.edu.uy/node/18>

2012 & 2009 - Teaching assistant. Genetics and Evolution. Master of Science in Bioinformatics. Universidad de la República, Uruguay.

2011 - Teaching assistant. High-Throughput Sequencing Technologies. Institut Pasteur in Montevideo, Uruguay.

2009 - Adjunct Professor. Higher Education, Technologies, and Human Development. "Flor de Ceibo" Program - Universidad de la República, Uruguay.

RESEARCH EXPERIENCE IN BIOINFORMATICS

Research assistant. Pasteur Institute of Montevideo, Uruguay. March 2007 to August 2011.

- Bioinformatics of small non-coding RNAs; trypanosomes & neglected infectious diseases (Chagas disease and sleeping sickness); transcriptomics & genomics; next generation sequencing data analysis; chronic lymphocytic leukemia.

RESEARCH INTERNSHIPS ABROAD

Université Paris-Descartes. Paris, France, October 2008.

Lund University. Lund, Sweden, March to May 2010.

FELLOWSHIPS

Fulbright U.S. Student Program. Fulbright Commission & National Research and Innovation Agency of Uruguay (ANII). Uruguay, 2018.

National Research and Innovation Agency of Uruguay - International Mobility Scholarship 2009. 5800 USD. Lund University - Sweden. From March to May 2010.

National Research and Innovation Agency of Uruguay - Master's scholarship in Uruguay, 2009. 304500 UYU (total amount for 21 months). Montevideo, Uruguay. From August 2009 to April 2011.

PROFESSIONAL SOCIETIES OR ORGANIZATIONS

Society of Friends of Popular Education - SAEP. Active Member: 2004 - Present. NGO founded in 1868 by Jose Pedro Varela to promote the educational reform in Uruguay.

AECien. Alumni Association - School of Science, Universidad de la República (Uruguay). 2014 - Present. Founder, 1st President, and current member of the board of directors. Non-profit association.