Verónica Crespo-Pérez, PhD

Curriculum Vitae

(Last update: May 27, 2020)

Date and place of birth: November 19, 1981, Quito, Ecuador
E-mail: mvcrespo@puce.edu.ec; verocrespoperez@gmail.com
Work address: Pontificia Universidad Católica de Ecuador (PUCE), Museo de Zoología, 5to piso, Edificio de Ciencias, of. C2. Av. 12 de Octubre 1076 y Roca, Quito, Ecuador.
Home address: Madrid y Toledo s/n, edificio ZON, dep. 61, Quito, Ecuador.
Telephone: +00 593 2 2991700 ext. 2950 (work), +00 593 9 93604435 (mobile).

RESEARCH INTERESTS

- Limnology with emphasis on the structure and function of freshwater ecosystems within a human impact and climate change context.
- Invertebrate population and community ecology, functional ecology, ecosystem ecology, invasive ecolgy.
- Species distribution modelling within a human impact and climate change context.
- Applied Ecology: pest risk mapping, influence of human practices on pest propagation, role of invertebrates in the provision of ecosystem services and in sustainable development.

EDUCATION

2012 **PhD in Ecology**, University Pierre et Marie Curie (UPMC), Paris VI, France.
Doctoral dissertation: "Global changes and distribution models of invasive insect pests in the Tropical Andes." Supervisor: Dr. O. Dangles (IRD, France c/o Pontificia Universidad Católica del Ecuador). Co supervisor: Dr. I. Chuine (CNRS, Montpellier, France). External Referents: Dr. H. Jactel (INRA Cestas, F),Dr. J. Travis (Aberdeen Univ., UK), Dr. C. Magal-Suppo (IRBI, Tours, F).

2008 **MSc. in Biology, evolution and control of populations**, Université François-Rabelais, Tours, France.

2007 **BSc. in Biological Sciences**, Pontificia Universidad Católica del Ecuador (PUCE)

2000 **High school degree**, American School of Quito, specialization: Math – Biology – Chemistry, high-honors student.

PROFESSIONAL HISTORY

Since June 2017
Principal professor, Department of Biological Sciences, PUCE.

October 2013 to June 2017
Associate professor, Department of Biological Sciences, PUCE.

August 2012 to October 2013
Assistant professor, Department of Biological Sciences, PUCE.

Since April 2012
Associate Researcher at the Entomology Laboratory of the PUCE.

Classes taught:
Masters in Conservation Biology: Conservation Ecology, Invasive Species

Bachelor in Biological Sciences: Community and Ecosystem Ecology, Applied Ecology, Limnology, Invasive Species, Scientific Research, Biology

PUBLICATIONS

Peer Reviewed (Google Scholar metrics: citations=406, h-index=9, i10 index=9)

1. Dangles, O., **Crespo-Pérez, V**. Devastating locust swarms and pandemics: the same pressing need for sustainability science. *Aceptado en* **Current Opinion in Insect Science**.
2. **Crespo-Pérez, V.**, Kazakou, E., Roubik, D.W., and Cárdenas, R.E. The importance of insecs on land and in water: a tropical view. *Aceptado en* **Current Opinion in Insect Science**.
3. Espinosa, R., Andino, P., Cauvy-Fraunié, S., Dangles, O., Jacobsen, D. and **Crespo-Pérez, V**. Diversity patterns of aquatic macroinvertebrates across stream types and glacial influence in a tropical high-Andean catchment. *Aceptado en* **Revista de Biología Tropical**.
4. **Crespo-Pérez, V.**, Dangles, O., Ibarra, C., Espinosa, R., Andino, P., Jacobsen, D. and Cauvy-Fraunié, S. (2020) Functional structure and diversity of invertebrate communities in a glacierized catchment of the tropical Andes. **Freshwater Biology.** DOI: 10.1111/fwb.13504.
5. Ortega-Paredes, D., Barba, P., Mena-López, S., Espinel, N., **Crespo-Pérez, V.** and Zurita J. (2020) High quantities of multi-drug resistant Escherichia coli carried by Machángara urban river in Quito, Ecuador. Enviado a **Journal of Water and Health** 18:67-76.
6. Morabowen, A., **Crespo-Pérez, V**. y Ríos-Touma, B. (2019) Effects of agricultural landscapes and uses in highly biodiverse tropical streams of the Ecuadorian Chocó. **Inland waters**.
7. Tiegs, S., Costello, D., Isken, M., Woodward, G., McIntyre, P., Chauvet, E., ... **Crespo-Pérez, V.**, ... [152 authors]. (2019) Global patterns and drivers of ecosystem functioning in rivers and riparian zones. Science Advances 5(1): eaav0486. DOI: 10.1126/sciadv.aav0486.
8. Ocaña-Mayorga, S., Lobos, S., **Crespo-Pérez, V**., Villacís, A.G., Pinto, C.M., y Grijalva, M.J. (2018) Influence of ecological factors on the presence of a triatomine species associated with the arboreal habitat of a host of *Trypanosoma cruzi*. **Parasites and Vectors** 11:567. DOI: https://doi.org/10.1186/s13071-018-3138-4.
9. **Crespo-Pérez, V.**, Pinto, C.M., Carrión, J.M., Jarrín-E, R.D., Poveda, C, & de Vries, T. (2016) The Shiny Cowbird, *Molothrus bonariensis* (Gmelin, 1789) (Aves: Icteridae), at 2,800 m asl in Quito, Ecuador. **Biodiversity Data Journal** (4): e8184. DOI: 10.3897/BDJ.4.e8184.
10. **Crespo-Pérez, V.**, Andino, P., Espinosa, R., Dangles, O. & Jacobsen, D. (2016). The altitudinal limit of *Leptohyphes* Eaton, 1882 and *Lachlania* Hagen, 1868 (Ephemeroptera: Leptohyphidae, Oligoneuriidae) in Ecuadorian Andes streams: searching for mechanisms. **Aquatic Insects** 37: 69-86. DOI: 10.1080/01650424.2015.1109128.
11. **Crespo-Pérez, V.**, Chuine, I., Régnière, J., Rebaudo, F. & Dangles, O. (2015) Changes in the distribution of multispecies pest assemblages affect levels of crop damage in warming tropical Andes. **Global Change Biology.** DOI: 10.1111/gcb.12656.
12. Rebaudo, F., Carpio, F.C., **Crespo-Pérez, V.**, Herrera, M., Mayer de Scurrah, M., Canto, R., Montañez, A.G., Bonifacio, A., Mamani, M., Saravia, R. & Dangles, O. (2014) Agent-Based Models and Integrated Pest Management Diffusion in Small Scale Farmer Communities. In: Peshin R, Pimentel D (eds) **Integrated Pest Management** (ISBN 978-94-007-7802-3). Springer, Netherlands, pp 367–383.
13. Parsaa, S., Morse, S., Bonifacio, A., Chancellor, T.C.B., Condori, B., **Crespo-Pérez, V.**, Hobbs, S.L.A., Kroshel, J., Bai, M.N., Rebaudo, F., Sherwoodk, S.G., Vanek, S.J., Faye, E., Herrera, M. & Dangles, O. (2014) Obstacles to IPM adoption in developing countries. **PNAS** 111: 3889–3894.
14. Gritti, E.S., Gaucherel, C., **Crespo-Pérez, V**. & Chuine, I. (2013) How can model comparison help improving species distribution models? **PLOS ONE** 8: 1-12.

15. **Crespo-Pérez, V.**, Chuine, I., Dangles, O. & Régnière, J. (2013) Modeling temperature-dependent survival with small data sets: Insights from tropical mountain agricultural pests. **Bulletin of Entomological Research** 103: 336-343.
16. **Crespo-Pérez, V.**, Rebaudo, F., Silvain, J.F. & Dangles, O. (2011) Modeling invasive species spread in complex landscapes: the case of potato moth in Ecuador. **Landscape Ecology** 26: 1447–1461.
17. Dangles, O., **Crespo-Pérez**, **V.**, Andino, P., Espinosa, R., Calvez, R. & Jacobsen, D. (2011) Predicting richness effects on ecosystem function in natural communities: insights from high elevation streams. **Ecology** 92, 733-743.
18. Rebaudo, F., **Crespo-Pérez, V.**, Silvain J.F. & Dangles, O. (2011) Agent-based modeling of human-induced spread of invasive species in agricultural landscapes: insights from the potato moth in Ecuador. **Journal of Artificial Societies and Social Simulation** 14 (3) 7.
19. Dangles, O., Mesías, V., **Crespo-Pérez, V.** & Silvain, J.F. 2009. Crop damage increases with pest species diversity: evidence from potato tuber moths in the tropical Andes. **Journal of Applied Ecology** 46: 1115–1121.

Under review or in preparation

1. Fell, S.C., Carrivick, J.L., Cauvy-Fraunié, S., **Crespo-Pérez, V.**, Hood, E.W., Randall, K.C., Matthews Nicholass, K.J., Dumbrell, A.J., Tiegs, S.D. and Brown, L.E. Glacier loss accelerates fungal decomposition of river organic matter. *Under review in* **Nature Climate Change**.
2. Cauvy-Fraunié, S., Rosero, P., Espinosa, R., Andino, P., Barragán, A. Moret, P., Gobbi, M., Ficetola, G. F., Jaramillo, R., Muriel, P., Anthelme, F., Jacobsen, D., Dangles, O., Condom, T., Gielly, L., Poulenar, J. and **Crespo-Pérez, V**. Patterns of primary succession along an equatorial glacier foreland: a multi-taxa approach (*In prep.*).
3. **Crespo-Pérez, V.**, Cueva, D., and Dangles, O., Abad, R., Jacobsen, D. and Cauvy-Fraunié, S. Drift patterns in high Andean streams with varying levels of glacial influence and presence of an introduced predator. (*In prep.*).
4. **Crespo-Pérez, V.**, Amores, S., Espinosa, R., Andino, P., Jacobsen, D., Dangles, O., Cauvy-Fraunié, S. and Ron, S. Phylogenetic structure of macroinvertebrate communities in an Andean catchment with glacier influence. (*In prep.*).
5. **Crespo-Pérez, V.**, Dangles, O., Chuine, I. and Régnière, J. Modeling insect oviposition rate in heterogeneous thermal environments: Insights from potato tuber moth in the tropical Andes. (*In prep.*).

Posters

1. Rivadeneira, G., Andino, P., Espinosa, R. & **Crespo-Pérez, V**. (2018) Hábitos alimenticios de macroinvertebrados en dos ríos de una cuenca glaciar. **AQUATROP Congress**. Quito, Ecuador.
2. Ortega-Paredes, D., Mena-López, S., **Crespo-Pérez, V**., Espinel-Díaz, N., Barba, P. & Zurita, J. (2015) *E. coli* productora de β-lactamasas de espectro extendido (BLEE) en el Río Machángara. **XXXIX Jornadas Nacionales de Biología**. Loja, Ecuador.
3. Steinmetz, J., A. Stoeckmann, T.A.G. Quezada & **V. Crespo-Pérez.** (2015). Aquatic biodiversity around Wildsumaco Biological Station, Ecuador. **Ecological Society of America 100th Annual Meeting.** Baltimore, MD.
4. **Crespo-Pérez, V.**, Rebaudo, F., Silvain, J.F & Dangles, O. (2010) Dispersion d'un insecte invasif dans un paysage socio-écologique tropical. **Ecologie 2010**. Montpellier, Francia, septiembre 2010. (*En francés*).
5. Rebaudo F., **Crespo-Pérez, V.**, Silvain, JF. & Dangles, O. 2010. Intégrer les interactions interspécifiques dans la modélisation de la dynamique de la biodiversité, le cas de ravageurs des cultures en

Équateur. **11th Orsay's pluridisciplinary conference** "Biodiversité : de la Molécule à l'Ecosystème." March 2010, Orsay, Francia. (*En francés*).

Miscellaneous

Crespo-Pérez, V. (2017) Mujeres en la Ciencia. **Nuestra Ciencia** 19.

Crespo-Pérez, V. (2015) ¡Alerta con las especies exóticas invasoras de agua dulce! **Nuestra Ciencia** 17.

Ghia, T. & **Crespo-Pérez, V.** (2014) Conociendo a los Macroinvertebrados de los ríos del Ecuador: La nueva colección del Museo QCAZ, sección Invertebrados. **Nuestra Ciencia** 16.

Crespo-Pérez, V. 2012. Global changes and distribution models of invasive insect pests in the Tropical Andes. **Doctoral dissertation**, University Pierre et Marie Curie, Paris VI, France.

Carpio, C., **Crespo-Pérez, V.,** Herrera, M., Barragán, A., Rebaudo, F. & Dangles, O. (2011) Innovative approaches for pest management in the Andes. PUCE-IRD-Fundación McKnight, Quito, Ecuador. (**Booklet** *in Spanish*).

Crespo-Pérez, V., Rebaudo, F. & Dangles, O. (2009). Modeling propagation of invasive pests. N**uestra Ciencia** 11:18-21. (*In Spanish*).

Crespo-Pérez, V. (2008). Comparison of two approaches for distribution modeling of European trees. **Master Thesis**, University François-Rabelais, Tours, France. (*In French*).

Crespo-Perez, V. (2007). Dispersal of adult aquatic insects in high altitude streams. ***Licenciatura* Thesis**, Pontificia Universidad Católica del Ecuador. Quito, Ecuador. (*In Spanish*).

RESEARCH PROJECTS

February 2018 – February 2020

PI: Diversidad de Ríos Ecuatorianos de Alta Montaña (DREAM). **PUCE 2018 Project ($39,250)**

May - December 2018

Co-PI: Efecto del rápido retroceso del glaciar en las comunidades de macroinvertebrados en ríos tropicales de altura. **IRD-LMI GREATICE Project (€5,000).**

August 2016 – November 2017

PI: Efecto del rápido retroceso glaciar sobre la biodiversidad en ecosistemas tropicales de altura. **PUCE-IRD-LMI GREATICE Project** (**$43 600)**.

November 2014 – September 2016

Co-PI: Genetic characterization and bioinformatic analysis of biodiversity in four national parks: Parque Nacional Podocarpus, Parque Nacional Sangay, Parque Nacional Yacuri and Parque Nacional Llanganates. **SENCESCYT-PUCE Project, $3'225,600.** Role: **Entomology component coordinator.** PI: Santiago R. Ron, PhD, PUCE, Ecuador.

March – August 2015

Co-PI: Organic matter decomposition in streams: Standardized methods for a global synthesis. **PROMETEO/SENESCYT Project**. Role: PI: Scott Tiegs, PhD, U. Oakland, Michigan, US.

February – November 2015

PI: Contribution of headwater streams to river network biodiversity. **PUCE 2015 project ($25,425)**.

February – November 2014

PI: "Macroinvertebrate functional diversity along a gradient of glacial influence: possible consequences of climate induced glacier retreat." **PUCE 2014 project ($19,800)**.

February – November 2014

PI: "Advances in the management and cataloging of the macroinvertebrate collection of the Invertebrate Museum of the PUCE." **PUCE 2014 project** (**$19,382).**

February – November 2013

PI: "Influence of glacier retreat on the physiology of macroinvertebrates from paramo streams: possible consequences of climate induced glacier retreat." **PUCE 2013 project ($14,710)**.

February – November 2013

PI: "Management and cataloging of the macroinvertebrate collection of the Invertebrate Museum of the PUCE." **PUCE-FCEN project 2013** (**$12,812).**

EDITORIAL ACTIVITY

Reviewed manuscripts for the following journals (number of reviewed manuscripts in parenthesis).

Acta Oecologica (1), Bulletin of Entomological Research (1), Freshwater Biology (2), Fundamental and Applied Limnology (2), Global Change Biology (2), Hydrobiología (1).

Coeditor of special section on Insects and the UN sustainable development goals, *in press* at Current Opinion in Insect Science

Book reviews:

1. Déley, R. Y Santillán S. (2016) Macroinvertebrados bentónicos de las microcuencas Jubal, Ozogoche y Zula. UNACH, Riobamba, Ecuador.

Evaluation of research proposals:

1. Fondos de investigación del Programa Bosques Andinos, CONDESAN. Proposals evaluated for the 2016 and 2017 calls (five proposals reviewed each year).

Scientific committees

1. AQUATROP congress. 21 abstracts revised.

PRESENTATIONS AT CONFERENCES

Invited Oral Presentations

Crespo-Pérez, V. (2019) Glacierized catchments in the Tropical Andes: possible implications of climate change. Society of Freshwater Science (SFS) Annual Meeting. Salt Lake City, Utah, May 22, 2019.

Crespo-Pérez, V. (2018) Ríos tropicales de altura: Estructura, biodiversidad, funcionamiento y amenazas. **V Jornadas de Ingeniería Civil y Ambiental.** Quito, December 3-4, 2018, Escuela Politécnica Nacional.

Crespo-Pérez, V. (2018) Retroceso glaciar y su efecto sobre ecosistemas acuáticos y terrestres. **Presentación de resultados de investigación, Fase 2, Laboratorio Mixto Internacional (LMI) GREATICE**. Quito, November 7, 2018, Escuela Politécnica Nacional.

Crespo-Pérez, V. (2018) Ríos tropicales de altura: Estructura, biodiversidad, funcionamiento y amenazas. **Expositora invitada Museo de Historia Natural, Gustavo Orcés, Escuela Politécnica Nacional.** Quito, January 2018.

Crespo-Pérez, V., Andino, P., Espinosa, R. (2017) Macroinvertebrados en ríos con influencia glaciar. **Taller Biomonitoreo de ríos en Ecuador**. Quito, December 7, 2017, UDLA.

Crespo-Pérez, V. (2017) Climate change impacts on biodiversity and human well-being. **Invited talk at the symposium: "Emprender sin destruir: la emergencia de la Ecolonomía"** organized by PUCE, Ecuador & Saint Jude University, France. Quito, October 2017.

Crespo-Pérez, V. (2017) Ecología de ríos en una cuenca con influencia glaciar. **Symposium of the Agua y Páramos Research Station, EPMAPS-FONAG**. Quito, March 2017.

Crespo-Pérez, V. (2016) Ríos tropicales de altura: Estructura, biodiversidad, funcionamiento y amenazas. **Semana de la Tierra, PUCE.** Quito, May 2016.

Crespo-Pérez, V. (2015) Global changes and invasive pest distribution in the Tropical Andes. Oral presentation at the "**18st TWAS-ROLAC Young Scientists Conference**," Rio de Janeiro, 4-5 November, 2015.

Crespo-Pérez, V. (2014) Global changes and invasive pest distribution in the Tropical Andes. Presentación oral en el **International Symposium: Embryology and Ecology**, Quito, September 18, 2014, PUCE.

Crespo-Pérez, V. (2014) Insect Ecology in a changing World. Oral presentation at the **Biology Simposium of the Biology Department at PUCE**, Quito, August, 2014.

Crespo-Pérez, V. and Dangles, O. (2011). Pest management in the Tropical Andes. Oral presentation at the **CGIAR Science Forum 2011, The Agriculture-Environment Nexus**, Beijing, China, 17–19 October, 2011.

Oral Presentations

Crespo-Pérez, V., Andino, P., Cauvy-Fraunié, S., Dangles, O., Espinosa, R. & Jacobsen, D. (2019) Glacierized catchments in the tropical Andes: possible implications of climate change. SFS Annual meeting, Salt Lake City, Utah, USA, May 22, 2019.

Crespo-Pérez, V., Ibarra, C., Espinosa, R., Andino P., Dangles O., Jacobsen D. & Cauvy-Fraunié S. (2018) Functional diversity of stream macroinvertebrate communities in a glaciarized catchment in the tropical Andes. **AQUATROP Congress**, Quito, July 23-26, 2018.

Crespo-Pérez, V. (2016) Retroceso glaciar y biodiversidad en ecosistemas tropicales de altura. **I Simposio: Cambio climático en los Andes del Ecuador.** Quito, octubre 2016.

Crespo-Pérez, V., Rebaudo, F., Silvain, J.F. Chuine, I. and Dangles, O. (2009). A cellular automata model of invasive pest dynamics in an agricultural landscape of the tropical Andes. Oral presentation at the **94$^{th\ annual}$ meeting of the ECOLOGICAL SOCIETY OF AMERICA (ESA)**. August 2009 at the Albuquerque Convention Center, Albuquerque, USA.

Crespo-Pérez, V., Andino, P., Espinosa, R., Jacobsen, D., and Dangles, O. (2009). Aquatic invertebrate diversity in Equadorian highland streams. Oral presentation at the **2nd International Conference on Páramos, PARAMUNDI.** June 2009, Loja, Ecuador.

Crespo-Perez, V. (2007). Dispersal of adult invertebrates in high altitude streams. Oral presentation at the **30$^{th\ Annual}$ Congress of Biology**. November 2007, PUCE, Quito, Ecuador.

Oral presentations as coauthor (presenter is underlined)

Espinosa, R., Andino, P., Cauvy-Fraunié, S., Dangles, O., Jacobsen, D. & **Crespo-Pérez, V.** (2018) Diversity patterns of aquatic macroinvertebrates across stream types and glacial influence in a tropical high-Andean catchment. **AQUATROP Congress**, Quito, July 23-26, 2018.

Amores, S., Espinosa, R., Andino, P., Jacobsen, D., Dangles, O., Cauvy-Fraunié, S. & **Crespo-Pérez, V.** (2018) Estructura filogenética de comunidades de macroinvertebrados en una cuenca altoandina con influencia glaciar. **AQUATROP Congress**, Quito, July 23-26, 2018.

Andino, P., Espinosa, R., **Crespo-Pérez, V.,** Cauvy-Fraunié, S., Dangles, O., Tiegs, S. & Jacobsen, D. (2018) Effects of glacial influence on trophic function of benthic fauna in tropical high-Andean streams. **AQUATROP Congress**, Quito, July 23-26, 2018.

Lobos, S.E., Ocaña-Mayorga, S., **Crespo-Pérez, V**, Villacís, A., Pinto, C.M. & Grijalva, M. (2016) Factores ecológicos de la distribución de *Rhodnius ecuadoriensis* asociados a nidos de *Sciurus stramineus*. **IV**

Encuentro Internacional de Investigación en Enfermedades Infecciosas y Medicina Tropical. Quito, June 13-15, 2016.

ADDITIONAL PROFESSIONAL EXPERIENCE

June – July 2014 Instructor in a course about invasive pests to technicians and employees of the Galapagos Biosecurity Agency (ABG).

August – December 2013
Lecturer at the **Forensic Entomology Workshop** organized by the Entomology Laboratory of the PUCE**.**

March – June 2013
Instructor in a course for Agronomic Engineers about basic GIS tools and pest distribution modeling.

April 2009 6 hours of course on invasive insect distribution modeling to undergraduate Biology students at the Biology Faculty of the PUCE.

November 2007 – June 2008
Master research with the BIOFLUX team at the CEFE (Center of Evolutionary and Functional Ecology), CNRS, Montpellier, France. Research project: "Comparison of several modeling approaches to predict the distribution of European trees under current and future climate."

January – August 2007
Principal investigator in the project "Structure and functioning of high altitude streams" Institute de Recherche pour le Développement (IRD) / EMAAP-Quito (Project director Dr. O. Dangles)

July 2005 – January 2007
BSc. research at the PUCE (specialization in Ecology). Research Project: "Aquatic insects' dispersal in high altitude Andean streams."

September 2005 – July 2006
Science teacher in the "Los Pinos" High school of Quito.

April 2004 - January 2005
Internship at the Hydrobiology laboratory of the PUCE. Laboratory director: Dr. Dean Jacobsen.

2003-2006 Private Science and English courses to high school students of the American school of Quito.

2002-2003 Internship at the Natural Science Museum of the PUCE (QCAZ), Herpetology Section.

STUDENT SUPERVISION

- **Master students**

2016 Isabel Domínguez (PUCE): *Cedrella odorata* invasion in the Galápagos Islands.

2016 Vladimir Carvajal (PUCE): Conservation and Management of Andean streams**.**

2016 Cristina Ibarra (PUCE) Macroinvertebrate functional diversity in glacier streams.

2014 Santiago Villamarín (PUCE) Dung beetles as indicators of deforestation.

2014 Patricio Andino (PUCE) Glacier influence on trophic function in high Andean streams.

2014 Rodrigo Espinosa (PUCE) Alpha, Beta and Gamma diversity in high Andean streams.

- **Undergraduate students**

2019 Gabriela Rivadeneira (PUCE): Macroinvertebrate feeding habits in a glacierized catchment.

2018 Sofía Amores (PUCE) Phylogenetic diversity of high altitude stream communities.
2017 Ana Carolina León (PUCE) Influence on dispersal distance on aquatic communities composition.
2016 Andrés Morabowen (PUCE): Effects of land-use on macroinvertebrate communities.
2015 Rubén Abad (PUCE) Abundance and distribution of invasive trout in high Andean streams.
In preparation Carla Rodríguez (PUCE): Functional diversity of macroinvertebrates from high-Andean streams.

COURSES, WORKSPHOPS AND SEMINARS

December 2018 **ALPINE RACE workshop**: Vanishing glaciers and the formation of novel alpine ecosystems: ecological and societal challenges. Chartreuse, France.
November 2018 **Paramo workshop**:
July 2018 **Course:** Introduction to stable isotopes in aquatic systems. Pre-congress course, AQUATROP, 2018.
March 2018 **Course:** Inducción a la asignatura Fundamentos de la Investigación. PUCE.
September 2015 Course: **Herramientas para el diseño de recursos didácticos - Herramientas de autor.** Centro de Educación Continua, Escuela Politécnica Nacional.
May 2013 **International Functional Traits Course** organized by the Universidad del Rosario and the Conseil Franco-Québécois de Cooperation Universitaire. Villa de Leyva, Colombia.
July 2012 Community of Practice (CoP) for projects of the Collaborative Crop Research Program in the Andean Region, financed by the McKnight Foundation, Cuenca, Ecuador.
November 2011 Workshop: **Integrated pest management in developing countries**, PUCE, Quito- Ecuador.
May 2011 Workshop: **Social research methods for agronomic engineers**, organized by the INNOMIP project, PUCE-IRD-McKnight Foundation. Quito, Ecuador.
March 2011 Workshop: **Research methods for projects of the CCRP** (Collaborative Crop Research Program) organized by the McKnight Foundation, dictated by Carlos Barahona (Agronomic Engineer, M.Sc.) Reading University, UK. Quito, Ecuador.
September 2010 Ecology Congress: **Ecology 2010**, Montpellier, France.
June 2010 Researchers' school: **Sensitivity analysis and model exploration** organized by the INRA (Institut National de la Recherche Agronomique), Presqu'ile de Giens, France.
May 2009 Summer school: **The Mathematics of Invasions in Ecology and Epidemiology** at the Banff International Research Station (BIRS), Banff, Alberta, Canada.
April 2009 Workshop: **Project Development** organized by the McKnight Foundation, Quito, Ecuador.
November 2008 Workshop: **Adaptation to Climate Change in the "Cordillera Real Oriental"** organized by the WWF and "Fundación Natura," Quito, Ecuador.
April 2008 Congress: **Functional Ecology** (Journées de l'Ecologie Fonctionnelle, JEF), La Grande Motte, France.
February 2008 Course: **Initiation to ArcGis**, Hervé Bobot, CEFE, Montpellier.
February – June 2007 Course: **Applied Mathematics** at the Economics Faculty of the PUCE, G. Rasa (Director of the Mathematics Department).
July – August 2005 Course: **Diversity and identification of aquatic insects**, Dr. Axel Bachmann, Buenos Aires University, Argentine.
2004 Optional course: **Stream Ecology**, Dr. Dean Jacobsen, PUCE, Quito, Ecuador.
November 2001 **25th Annual Congress of Biology**, Guayaquil University, Guayaquil, Ecuador.

ACADEMIC PRICES AND SCHOLARSHIPS

2010 **PhD scholarship** for 24 months – January 2010 to January 2012 – from the DSF (Département Soutien et formation des Communautés Scientifiques du Sud – Department for Training and Capacity-Building for Research in Developing Countries) of the IRD (Institute de Recherche pour le Développement), France.

2008 **PhD scholarship** from the French Embassy in Ecuador (December 2008 to December 2009).

2007 **Scholarship** from the French Embassy in Ecuador for the second year Master studies at François Rabelais de Tours University, France (September 2007 to July 2008).

2005 **Academic excellence scholarship** for the second semester 2004-2005 - PUCE

2003 **Academic excellence scholarship** for the second semester 2002-2003 - PUCE

2002 **Academic excellence scholarship** for the second semester 2001-2002 - PUCE

SYNERGISTIC ACTIVITIES

Dr. Crespo-Pérez participates in various scientific and outreach activities outside of her university. She has thus, developed an important network of collaborators and partners and is acknowledged as an active member of the scientific community in her region.

Main activities

Since January 2018	Member of the International Mixed Laboratory (LMI) BIO INCA (IRD, PUCE, UniAndes).
Since January 2017	Member of the International Mixed Laboratory (LMI) GREATICE (IRD, EPN, PUCE, UMSA).
Since May 2017	Vicepresident and co-founder: **Red Ecuatoriana de Limnología**.
Since March 2017	Co-coordinator of the PUCE-Yaku Water Museum outreach project.
September 2016 - November 2017	Focal point for Ecuador for the Women for Science group of IANAS (Interamerican Network of Academies of Science).
2015-present	Part of **CELLDEX** (CELLulose Decomposition EXperiment) research network.
2015	Host for a Prometeo scholar (http://prometeo.educacionsuperior.gob.ec)
2014-present	Research collaborator and capacity builder for the Galápagos Biosecurity Agency (ABG)
2012-2014	Research collaborator and capacity builder for the Ecuadorian Agronomy Institute (INIAP)
2012-present	Lecturer for elementary and high-school students about science and life as a scientist

LANGUAGES

Fluent in written and spoken **Spanish** (native language), **English** and **French**.

AREAS OF TECHNICAL EXPERSTISE

Fieldwork experience in the Neotropics, with emphasis on high altitude Andean agroecosystems and streams.

Laboratory and field experiments about insect climate related responses and ecosystem functioning.

COMPUTER SOFTWARE AND PROGRAMMING

- Basic software: *Word, Excel, Power Point, Explorer*
- Statistical software: *R, SPSS, CANOCO, CAP* (Community Analysis Package), *Species Diversity and Richness*, *ECOM* (Environmental Community Analysis), *PAST* (Paleontological Statistics), and *Minitab*.

- SIG: *ArcMap* and *ArcCatalog* from ArcGIS.
- Modeling software: *BioSIM* modeling platform (J Régnière, Canadian Forest Service, Canada, http://cfs.nrcan.gc.ca/publications?id=28768), *Cormas* modeling platform (http://cormas.cirad.fr/index.htm). *MaxEnt* (Maximum Entropy Modeling).
- Good knowledge and skills with the SmallTalk programming language.
- Basic knowledge and skills of the Pascal programming language.
- Basic skills of Delphi

REFERENCES

Dr. Olivier Dangles

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Dr. Dean Jacobsen

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Dr. Scott Tiegs

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