

Carlos J. Pasiche-Lisboa  
General Office 212B Bio-Sci Bldg., 50 Sifton Road  
University of Manitoba, Winnipeg, MB R3T 2N2 Canada  
May 14, 2018

Dr. Theresa Culley, Editor-in-Chief  
Applications in Plant Sciences  
Office of Nationally Competitive Awards  
703 Rieveschl Hall, 318 College Dr  
Cincinnati, OH 45221, USA  
theresa.culley@uc.edu

Dear Dr. Culley,

I was pleased to find your posting for Reviewing Editor within the Applications in Plant Sciences Journal. This opportunity, I find, is an incredible one as it would allow me to further understand both the process that goes into editing an article, as well as the process of properly communicating science-related topics with the public. In addition, it would provide me with experience in scientific writing, keep me up-to-date with the most innovative research in plant sciences, and help me further become an independent researcher with the mentorship that will be provided. During the different phases of my degrees, and the jobs in between, I have acquired skills related to this posting which I have highlighted below:

- Taught and prepared presentations and exams, and made online forums to help undergraduate students learn the subject in their respective courses.
- Performed research which gathered thousands of data points that required great observation to do proper statistical analyses.
- Applied and received grants and fellowships, which required attention to detail and interest in gaining experience in research.
- Developed new in vitro protocols for the micropropagation of tropical mosses, based on studies on temperate and boreal bryophytes.
- Strengthened and edited STEAM-based lesson plans for a summer camp directed towards reverse learning of minority students in Pre-K to 5<sup>th</sup> grade.
- Supervised an online forum (Planting Science) as a liaison and as a mentor, edited information, and maintained the frequency of communication to facilitate students from middle school to high school in learning the scientific method.
- Wrote, edited, and reviewed scientific articles for publication in referred journals.

My *Curriculum Vitae* shows in greater detail my experiences in different areas, which include academic and non-academic writing, management/supervision, and scientific communication in different forums. Thank you for taking the time to read and consider my application, and I look forward to hearing from you soon.

Regards,

*Carlos J. Pasiche-Lisboa*

[pasichcj@myumanitoba.ca](mailto:pasichcj@myumanitoba.ca)  
(204) 510-0335

## Carlos J. Pasiche-Lisboa

7a Broadway, Corner Brook, NL A2H 2C4  
204-510-0335  
pasichcj@myumanitoba.ca

## Education

- Ph.D. candidate, Biological Science, University of Manitoba, Winnipeg, Manitoba, CA Sept, 2014–Dec, 2018 (Expected)  
Visiting student, Memorial University (Grenfell Campus), Corner Brook, Newfoundland, CA Jan, 2017–Dec, 2018  
**Thesis: The influence of moss and lichen asexual propagule dispersal on community structuring in boreal forests**  
Advisors: Michele D. Piercey-Normore and René J. Belland
- M. S. Biology, University of Puerto Rico, Mayagüez Campus, P.R. Dec, 2013  
**Thesis: Dispersal of moss protonemata**  
Advisors: Inés Sastre-De Jesús
- B. S. Biology, University of Puerto Rico, Mayagüez Campus, P.R. May, 2012

## Research and Educational Goals

*Research:* My goal is to understand the influence of abiotic (dispersal, habitat filtering) and biotic factors (competition, dispersal, genetic diversity, reproduction) that determine moss and lichen community structuring.  
*Education:* My goal is to be a link between science and the community by giving workshops, having discussions in online platforms (blogs), teaching, and consultations.

## Professional Experience

- Researcher** Aug, 2014 to Present  
**University of Manitoba and Memorial University, Canada** Dr. Michel D. Piercey-Normore  
Extracted DNA, performed PCR, and sequenced specimens in the *Physcia aipolia* var *alnophila* (Vainio) Lynge complex.  
Extracted and performed PCR on the *Bartramia pomiformis* Hedwig- *B. halleriana* Hedwig complex.  
Collected, identified, and stored the lichen and bryophyte diversity from the west of Newfoundland to update the cryptogam section of the Grenfell Herbaria (MUN).
- Liaison** Fall, 2017  
**Digging Deeper Fellowship, Planting Science** Catrina Adams  
Worked as a liaison to facilitate the communication among students, teachers, and mentors on the online platform of Planting Science. <https://plantingscience.org/>
- Consultant** Aug, 2014–Aug, 2015  
**Latin American Community Center and Teachers For America (Wilmington, Delaware)** Maria Matos and Catherine Lindroth  
Coordinated along with the TFA the 2015 LACC summer camp. Prepared STEAM-based lesson plans and activities for the summer camp. [https://www.instagram.com/lacc\\_sc/](https://www.instagram.com/lacc_sc/)
- Before and After School Counselor; Summer Camp Coordinator** Dec, 2013–Aug, 2014  
**Latin American Community Center (LACC; Wilmington, Delaware)** Gisele Torres and Melissa Browne  
Tutored for the B and F school program at Oberle Elementary School. Developed STEAM-based lesson plans for the 2014 LACC Summer Camp
- Researcher** Sep, 2011–Dec, 2013  
**University of Puerto Rico, Mayagüez Campus, Department of Biology (Bryology Laboratory)** Dr. Inés Sastre-De Jesús  
Cultured and experimented on the dispersal of moss protonema

Collected and cultured soil samples to germinate diaspore and assess the diversity and abundance of moss diaspore in the Guajataca State Forest  
 Collected and analyzed the gastropod diversity associated with *Spathodea campanulata* (Palisot de Beauvois) forests on karst and alluvial-derived soils

**ERDC Internship****U.S. Army Engineer Research and Development Center (CERL)**

Built a trait-based database and did an analysis of the flora of Fort Bragg in North Carolina

Jun–Aug, 2013  
 Matthew Hohmann

**Researcher Volunteer****University of Puerto Rico, Mayagüez Campus, Department of Biology (Symbiosis Laboratory)**

Cultured and extracted the DNA of microorganisms associated with the gut of fiddler crabs

Jan–May, 2011  
 Dr. Matías Cafaro

**BIOMIND and PRLSAMP Fellow****University of Puerto Rico, Mayagüez Campus, Department of Biology (Bryology Laboratory)**

Developed and optimized the axenic technique and in vitro culture of a few neotropical bryophytes.

<http://biominds.uprm.edu/>, <https://goo.gl/XMC37Q>, <http://cjpas.wordpress.com/>, <https://goo.gl/c8j6zn>

Aug, 2009–May, 2011  
 Dr. Inés Sastre De Jesús

**Field Assistant****University of Puerto Rico, Mayagüez Campus, Department of Biology (Plant Molecular Biology Laboratory)**

Aided in harvesting non and GMO cassava (*Manihot esculenta* Crantz)

Jan–Oct, 2010  
 Dr. Dimuth Siritunga

**Summer Studentship and Research Assistant****University of Puerto Rico, Mayagüez Campus, Department of Biology (Limnology Laboratory)**

Collected, stored, organized, and analyzed the arthropod diversity and abundance associated with the bryophyte canopy in rainforests in Cachote, Dominican Republic

<http://goo.gl/XVEVjx>

Aug, 2007–Dec, 2009  
 Dr. Carlos J. Santos

**R.E.U. Summer Studentship****Smithsonian Environmental Research Center, Maryland (Phytoplankton Ecology Laboratory)**

Cultured different green and brown algae strains (*Chlorella* spp. and *Karlodinium veneficum* (D. Ballantine) J.

Larsen) and rotifers (*Brachionus plicatilis* Muller and *Synchaeta oblonga* Ehrenberg) to understand the influence of algal blooms on rotifer abundance and reproduction

May–Aug, 2008  
 Dr. Kevin Sellner

**Teaching****University of Manitoba, Department of Biological Science and General Agriculture Department**

Was a teaching assistant for the laboratory experiments and field work, and an invigilator for the exams

Principles of Ecology laboratory (2 sections, ~50 students)

Fall, 2015 and 2016

Biology 1: Principles and Themes laboratory (2 sections, ~50 students)

Fall, 2016

**University of Puerto Rico, Mayagüez Campus, Department of Biology**

Made and gave presentations on the topic of the day, prepared exams and quizzes, assisted in laboratory experiments, guided field work and nature walks, and was an invigilator for the exams

Botany laboratory for biology majors (2 sections, ~46 students)

Spring and Fall, 2013

Elemental Botany laboratory for non-biology majors (2 sections, ~46 students)

Fall, 2012 and Spring, 2013

Biology II for major (2 sections, ~45 students)

Spring, 2012

Biological Science (I and II) for non-major (4 sections, ~90 students)

Fall, 2011

**Facebook pages created to facilitate communication with students:** BIOL 3417 (040L and 016L) -Fall 2013, Biol. 3435- C.

Pasiche, 2013, Biol. 3417- C. Pasiche, Cibi 3032- C. Pasiche, Cibi 3031- C. Pasiche, Biol. 3052-C. Pasiche, Biol. 3435-C. Pasiche

## Publications

- 2018** Pasiche-Lisboa, C. J., and Sastre- DeJesús, I. (2018). Moss protonemata are dispersed by water, wind, and snails. *American Journal of Botany*. 101 (5): 1-8.
- 2014** Pasiche-Lisboa, C. J., and Sastre-De Jesús, I. (2014). Moss Propagules Banks in a Secondary Subtropical Moist Forest in Puerto Rico: A First Description. *American Journal of Plant Sciences*, 5 (09): 1394-1402.
- 2013** Pasiche, C.J. and Sastre De Jesús, I. (2013). The effect of pH on *in vitro* growth of protonemata, asexual propagules, or gametophytes fragments of four Neotropical moss species. *Journal of Tropical Bryology*. 35(1): 64-71.

## Research Presentations

- 2017**  
 Pasiche, C.J. Hulshof, C., and Sastre-De Jesús, I. **Elevation and historical events shape moss community traits and functional diversity in Puerto Rico**  
 Oral Presentation at Botany 2017, Fort Worth, Texas, U.S.A. Jun
- Pasiche, C.J. Belland, R.J., and Piercey-Normore, M.D. **Survival of fragments from three boreal mosses to extreme temperatures**  
 Oral Presentation at Botany 2017, Fort Worth, Texas, U.S.A. Jun
- 2016**  
 Pasiche, C.J., Doering, J., Booth, T., Belland, R.J., and Piercey-Normore, M.D. **Bryophyte and lichen dispersal in boreal forests: a story about asexual propagules captured using Petri dishes.**  
 Oral Presentation at BSGSA Crackerjack Seminar Series, Winnipeg, Manitoba. Ca Oct
- Pasiche, C.J., Doering, J., Booth, T., Belland, R.J., and Piercey-Normore, M.D. **The dispersal dynamics of lichen and moss asexual propagules in boreal forests of northern Manitoba, Canada.**  
 Oral Presentation at Botany 2016, Savannah, Georgia, U.S.A. Jul
- 2014**  
 Pasiche, C.J. and Sastre-De Jesús, I. **Dispersal of moss protonemata by water**  
 Poster Presentation at Botany 2014, Boise, Idaho, U.S.A. Jul
- 2013**  
 Pasiche, C.J. and Hohmann, M. **Trait-based analysis of Fort Bragg's Flora, North Carolina**  
 Oral presentation at the AGMUS Research Symposium, San Juan, P.R. Sep
- Pasiche, C.J. and Sastre De Jesús, I. **Soil bank propagules diversity of Guajataca State Forest**  
 Poster Presentation at the 33<sup>rd</sup> PRISM, University del Turabo, P.R. Mar
- 2011**  
 Pasiche, C.J. and Sastre De Jesús, I. **Effect of pH on bryophyte growth: A study for protocol optimization**  
 Oral presentation at the 1<sup>st</sup> Biology Undergraduate Symposium-UPRM, P.R. May  
 Oral presentation at the 31<sup>st</sup> PRISM, Inter American University-Bayamon Campus, P.R. Mar
- 2010**  
 Pasiche, C.J. and Sastre De Jesús, I. **Effect of pH on bryophyte growth: A study for protocol optimization**  
 Poster presentation at the ABRCMS, Charlotte, North Carolina, U.S.A. Nov  
 Poster presentation at the X Latino American Congress of Botany, La Serena, Chile. Oct  
 Poster presentation at the XV SIGMA XI, University of Puerto Rico, Mayagüez Campus, P.R. Apr  
 Oral presentation at the 30<sup>th</sup> PRISM, University of Puerto Rico, Mayagüez Campus, P.R. Mar  
 Poster presentation at the North Eastern Alliance Science Day, UPRM, P.R. Feb
- 2009**  
 Eposito, L., Pasiche, C.J., Place, A., and Sellner, K. **Karlotidium impacts on rotifers and crab larvae: Further indication of a cosmopolitan foodweb manipulator.**  
 Oral presentation at the Fifth Symposium on Harmful Algae in the U.S.A. Nov
- 2008**  
 Pasiche, C.J. and Sastre De Jesús, I. **Optimización de protocolo para la conservación y reintroducción de Neckeropsis distica.**  
 Oral presentation at the βββ Convención Distrital del Caribe, University of Puerto Rico, Rio Piedras Campus, P.R. Apr

## Honors

Tropical Biology Section award, best presentation at Botany 2017, Fort Worth, Texas	Jul, 2017
Hassel de Menéndez award, best poster in Bryology at the Latin American Congress of Botany, La Serena, Chile p://goo.gl/E6J4Nn	Oct, 2010
Induction in the βββ society, ZETA ALPHA chapter at the University of Puerto Rico	2007
Induction in the Sociedad de Estudiantes de Botánica	2007

## Awards (Fellowships, Grants, Scholarships)

GETS (University of Manitoba, Faculty of Science Scholarship)	? CAD	Aug, 2014 to Present
Planting Science, Digging Deeping Fellowship	\$2,000 USD	Fall and Winter, 2017–2018
Tropical Biology Section award, best presentation at Botany 2017	\$300 USD	Jul, 2017
Ecological Section Student Travel Awards for Botany 2017	\$500 USD	Jul, 2017
Intercultural Development & Leadership Program		Fall, 2016
Travel awards from the University of Manitoba		
Department of Biological Science	\$500 CAD	2016 and 2017
Faculty of Science	\$500 CAD	2016 and 2017
Faculty of Graduate Studies	\$750 CAD	2017
University of Manitoba Graduate Student Association	\$500 CAD	2017
PRISM and BIOMINDS Fellow	\$9,400 USD	Aug, 2009–May, 2011
ABRCMS Travel Award, North Carolina	\$? USD	Nov, 2010
BIOMINDS Travel Award, La Serena, Chile	\$2,400 USD	Oct, 2010
NEA Travel Award, Amherst, Massachusetts	\$? USD	Oct, 2009
National Science and Mathematics Access (SMART)	\$4,000 USD	Aug, 2008–May, 2009
Academic Competitiveness Grant (ACG)	\$600 USD	May, 2006

## Community Service

<i>Planting Science Mentor</i> <a href="http://goo.gl/uVvKjK">http://goo.gl/uVvKjK</a>	2010 to Present
Guided middle to high school students from various backgrounds and ethnicities to do research and understand the scientific method by experimenting on the biology of plants	
<i>Counselor for Let's Talk Science (Memorial University of Newfoundland, Grenfell Campus)</i>	May, 2018
Guided middle school students through the STEAM activities for the Let's Talk Science event	
<i>Mentor for the PLANTS program at Botany (2018)</i>	Jul, 2018
Guided undergraduate students from underrepresented communities through the settings of a conference	
<i>Foray Newfoundland and Labrador</i>	Aug, 2017
Collected and identified fungi (lichens and non-lichens)	
<i>Chaired the Tropical Biology Section in Botany 2017</i>	Jun, 2017
Server at the Spain Pavilion as part of Folkorama 2016, Winnipeg, Manitoba, Canada	Aug, 2016

## Community Service at the University of Puerto Rico, Mayagüez Campus

<i>Chaired the Plant Ecology section of the Third Annual Undergraduate Research Symposium in Biology at the University of Puerto Rico, Mayagüez Campus</i>	May, 2013
<i>Liaison of the Gamer's Guild at the University of Puerto Rico, Mayagüez Campus</i>	Aug, 2012–Dec, 2013
Supervised the members of the society, and helped bridge the communication between the members and the university	
<i>Centro Universitario para el Acceso at the University of Puerto Rico, Mayagüez Campus</i>	Jan–May, 2013

Gave a talk on microscopy and a nature walk in a forest next to the university to low-income high school students interested in pursuing higher education

*Chairperson of the  $\beta\beta\beta$  society at the University of Puerto Rico, Mayagüez Campus* Aug, 2008–May,2009  
Organized activities (field trips, donations, beach cleaning, conventions, talks, sales) that helped fulfill the goals of the society

*President of the Sociedad de Estudiantes de Botánica (Botanical Society) at the University of Puerto Rico, Mayagüez Campus* Aug, 2008–May,2009  
Presided over the activities that helped promote interests in botany

*Institute for Community Development at the University of Puerto Rico, Mayagüez Campus* Jan–May, 2008  
Añasco Beach Community Garden, P.R.  
Helped prepare a garden to sustain low-income families in the community. Presented information on energy efficient modifications for homes to benefit the community

*Institute for Community Development at the University of Puerto Rico, Mayagüez Campus* Jan–May, 2006  
Elder Center of San Sebastián, P.R.  
Prepared activities and accompanied elders at the elder center.

## Affiliations

*Present:*  
Botanical Society of America 2010 to Present  
*Past:*  
International Association of Bryologists 2016  
Toastmasters, University of Manitoba chapter 2016  
Manitoba Orchid Society 2016  
Delaware Orchid Society 2014  
Asociación Latinoamericana de Botánica 2011  
 $\beta\beta\beta$  National Honor Biological Society, UPRM chapter 2007–2009

## Academic Mentoring

### Graduate students

#### University of Manitoba

*Kamaldeep Chokker* Winter– Fall, 2016  
Techniques: Moss identification

#### Undergraduate students

#### Memorial University, Grenfell Campus

*Duleeka Gunawardana* Winter 2018 to Present  
Techniques: Lichen collection and identification, DNA extraction, and PCR amplification

*Brittany Ropson* Summer 2017 to Present  
Techniques: Moss identification, media preparation, *in vitro* culture, axenic technique, DNA extraction, and PCR amplification

*Katherine Flores-Hutten* Spring 2017–Spring 2018  
Techniques: Lichen identification and thin layer chromatography

*Jasmine R. Pinksen* Winter, 2017  
Technique: Wind tunnel experiment on moss and lichen propagules

#### University of Manitoba

*Jennifer Otisi* Summer, 2016  
Techniques: Randomize sampling techniques, cover estimation, moss and lichen sample preparation for storage in herbaria, media preparation, *in vitro* culture, axenic technique, DNA extraction, PCR amplification, and sequencing

**C. Pasiche-Lisboa CV**

May 2018

*Umi Aden*

Summer, 2016

Techniques: DNA extraction and PCR amplification

*Samidha Arekar*

Summer, 2016

Techniques: DNA extraction and PCR amplification

*Ahn Dang*

Summer, 2016

Techniques: Randomize sampling techniques, cover estimation, and moss and lichen sample preparation for storage in herbaria

**University of Puerto Rico, Mayagüez Campus**

*David Repollet*, MS candidate

Fall, 2012–Fall, 2013

Topic: Can hydrochory disperse protonemata?

Techniques: Media preparation, in vitro culture, axenic technique, rain simulation experiment on moss propagules, and oratory

*Frank Suarez*, MS

2009–2010?

Techniques: Media preparation, in vitro culture, and axenic technique

*Angelica Olmo*, MS

2009–2010?

Techniques: Media preparation, in vitro culture, and axenic technique

GRENFELL  
CAMPUS



School of Science and the Environment  
Corner Brook, NL Canada A2H 5G4  
Tel: (709) 637-7166

14 May 2018

To whom it may concern,

This is a letter of reference for Mr. Carlos Pasiche-Lisboa who is applying for the student position available in the APPS Reviewing Editor Board 2018-2020. Carlos is a PhD candidate under my supervision. He has completed his candidacy exam and all research required for his doctorate, and he is currently writing the last couple of chapters for his thesis. I have known Carlos since January 2014 when he joined my lab at the University of Manitoba. I recently accepted a position at Memorial University of Newfoundland and he is currently with me in Newfoundland. Carlos plans to continue with an academic career and I believe he would fit well as a graduate student member of the editorial board of your journal.

Carlos has co-reviewed papers with me in the past and has done a good job of those reviews. He has a very good attention to detail especially with respect to experimental design and statistical analyses. He would benefit greatly from the experience you offer and would serve the academic community well as he progresses through his career.

Please contact me if you have questions.

Sincerely,

A handwritten signature in cursive script that reads "Michele Piercey-Normore".

Michele Piercey-Normore  
Professor and Dean, School of Science and the Environment