#### Jose M. Pavez

# Assistant professor in Elementary Science Education, Western Illinois University <u>ORCID 0000-0002-4946-5496</u>|<u>Google Scholar</u> josemanuel.pavez@uga.edu|josemanuelpavez@gmail.com

#### 1. ACADEMIC HISTORY

a. Education	
Doctor of Philosophy, Science Education University of Georgia, Athens, Georgia Dissertation: What to teach in my science methods course? Analysis of the design of elementary, middle school and secondary science methods courses by prospective science teacher educators through a PCK lens	2017-2022
<b>Diversity, Equity, and Inclusion Graduate</b> University of Georgia, Athens, Georgia	2021-2022
Interdisciplinary Qualitative Research Studies <u>Certificate</u> University of Georgia, Athens, Georgia	2017-2020
Master of Science, Science Education (concentration in biology) Pontifical Catholic University of Valparaiso, Curauma, Chile Thesis: History of science as a teaching strategy for improving views of nature of science in a group of in-service biology teachers	2012-2014
Bachelor's in Biology and Science Education Metropolitan University of Education Sciences, Santiago, Chile Thesis: Diversity of Diptera in two families from the Loma Los Colorados Landfill	2005-2009

## 2. SCHOLARLY ACTIVITIES

a. Publications	
Journal articles	*Peer reviewed

- Cofré, H., Núñez, P., Santibañez, D., <u>Pavez</u>, J., Valencia, M., & Vergara, C. (2019). A critical review of students' and teachers' understandings of nature of science. *Science & Education, 28*(3-5), 205-248.\*
- Nuñez, P., Pavez, J., Santibañez, D., Becerra, B., & Cofré, H. (2017). The history of science as a catalyst for teaching biology and nature of science (Spanish article). *Revista de Innovación* en Enseñanza de las Ciencias, 1(1).\*
- Pavez, J., Vergara, C. A., Santibañez, D., & Cofré, H. (2016). Using a professional development program for enhancing Chilean biology teachers' understanding of nature of science (NOS) and their perceptions about using history of science to teach NOS. Science & Education, 25(3-4), 383-405.\*

#### Journal articles in preparation

- Pavez, J., Luft, J., Navy, S. & Idsardi, R. (in progress). A review of resilience in science teacher education. *Studies in Science Education*.
- **Pavez, J.** (in progress). A case study of prospective secondary science teacher educators' challenges when designing science methods courses: Analysis through a PCK lens. *International Journal of Science Education.*
- **Pavez, J.** (in progress). What to teach on my science methods course: Experiences of prospective science teacher educators when designing elementary and middle-school science methods courses. *Journal of Science Teacher Education*.

# Chapters in books

- Pavez, J., Prince, A., Navy, S., Luft, J., Ayano, E., Borgerding, L., Idsardi, R. & Kulp, K. (accepted). Everyone Needs Somebody: What Social Resources Support Newly Hired Teachers of Science. In Sunal, D., Sunal, C. & Ogodo, J. (Eds.), Crossing the Border from Preservice to Inservice Science Teacher: Research-based Induction as Professional Development (pp. ) IAP.
- Cofré, H., Santibáñez, D., **Pavez, J.**, & Vergara, C. (2022). Pre-service science teacher education around the globe: trends, challenges, and future directions. In Luft, J. & Jones, G. (Eds), *Handbook of Research on Science Teacher Education* (pp. 163-177). Taylor & Francis.
- Pavez, J. (2022). Why do we need to study this? The case of arsenic in the school's soil. In S. Jeong, L, Bryan, D. Tippins & C. Sexton (Eds.), Navigating the challenges of elementary science teaching and learning: Using case-based pedagogy to understand dilemmas of practice (pp. ). Cham, Switzerland: Springer Nature.
- Cofré, H., Núñez, P., Santibañez, D., Pavez, J., & Vergara, C. (2018). Theory, evidence, and examples of teaching the nature of science and biology using the history of science: A Chilean experience. In M. E. de Brzezinski & C. Celestino (Eds.), *Teaching science with context* (pp. 65-84). Springer.

## Books Authored or Co-Authored

- Aguilera, P., Cuevas, B., Navarro, G., **Pavez, J**. & Poblete, N. (2017) Biology for 9<sup>th</sup> Grade. Ministry of Education Edition, Santillana Publisher.
- Aguilera, P., Cuevas, B., Navarro, G., **Pavez, J**. & Poblete, N. (2017) Biology for 9<sup>th</sup> Grade Teacher Edition, Ministry of Education Edition, Santillana Publisher.
- **Pavez, J.**, Herrera, M. y Coll, D. (2016) Natural Sciences for 3<sup>rd</sup> Grade Teacher Edition, Savia Project, SM Publisher.

- **Pavez, J.**, Herrera, M. y Coll, D. (2016) Natural Sciences for 4<sup>th</sup> Grade Teacher Edition, Savia Project, SM Publisher.
- **Pavez, J.**, Herrera, M. y Coll, D. (2016) Natural Science for 5<sup>th</sup> Grade Teacher Edition, Savia Project, SM Publisher.
- **Pavez, J.**, Herrera, M. y Coll, D. (2016) Natural Sciences for 6<sup>th</sup> Grade Teacher Edition, Savia Project, SM Publisher.
- Díaz, C., Durán, E., Espinoza, J., Fernández, E., Guerrero, M., Herrera, M., Jara, M. y **Pavez, J.** (2016) Science PSU test Preparation Textbook, Clave Project, SM Publisher
- Lopez, M., Navia, S., **Pavez, J.** y Navarro, G. (2014) Biology for 10<sup>th</sup> Grade, Puentes del Saber Project, Santillana Publisher.
- Lopez, M., Navia, S., **Pavez, J.** y Navarro, G. (2014) Biology for 10<sup>th</sup> Grade Teacher Edition, Puentes del Saber Project, Santillana Publisher.
- Lopez, M., Navia, S., **Pavez, J.** y Navarro, G. (2014) Biology 9<sup>th</sup> Grade, Puentes del Saber Project, Santillana Publisher.
- Lopez, M., Navia, S., **Pavez, J.** y Navarro, G. (2014) Biology for 9<sup>th</sup> Grade Teacher Edition, Puentes del Saber Project, Santillana Publisher.

#### b. Conference presentations

#### National / International Conferences

- Pavez, J., Navy, S., Luft, J., Ayano, E., & Prince, A. (2023, Apr 18-21-Submitted). Facing challenges as a new teacher: The case of new science teachers building up resilience in their early years of teaching. [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, Ill, United States.
- Huang, Y., Tran, H., Deluca, J.J., Pavez, J., Gorton, W.C., Luft, J.A., & Whitworth, B.A. (2023, Apr 18-21-Submitted). Investigating science teachers' professional vision of science and engineering practices [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, IL, United States.
- Huang, Y., Tran, H., Pavez, J., Deluca, J., Luft, J., & Whitworth, B. (2023, Apr 18-21). Investigating science teachers' professional vision of argumentation [Paper presentation]. Association for Science Teacher Education (ASTE) Annual International Meeting,
- Pavez, J., Singh, H., Huang, Y., Gorton, W., Kum, J., Luft, J. & Whitworth, B. (2023, Jan 11-14). The Work of District Science Leaders Over a Two-Year Period: What Did These Leaders Focus On? [Paper presentation]. Association for Science Teacher Education (ASTE) Annual International Meeting, Salt Lake City, UT, United States.
- **Pavez, J.** (2022, April 21-26). Curriculum design of science methods courses for pre-service science teachers: analysis of contents and decision-making process [Paper presentation].

American Educational Research Association (AERA) Annual Meeting, San Diego, CA, United States.

- Eldridge, S., Martin, S., Jeong, S., Steele, D., & Pavez, J. (2022, March 27-30). Queering science teacher education and research: Toward gender, sex, and sexuality inclusive science teaching practices [Workshop]. National Association for Research in Science Teaching (NARST) Annual International Conference, Vancouver, BC, Canada.
- Luft, J., Jones, G., & Pavez, J. (2022, March 27-30). The Handbook of Research in Science Teacher Education: Current and Future Directions for Research [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Vancouver, BC, Canada.
- Pavez, J. (2022, March 27-30). Design of Elementary, Middle School and Secondary Science Methods Courses by Prospective Science Teacher Educators: Contents, Decision Making Process and Challenges [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Vancouver, BC, Canada.
- Pavez, J., Singh, H., Huang, Y., Luft, J., & Whitworth, B. (2022, January 5-8). How do district science coordinators lead the districts during the pandemic? [Paper presentation]. Association for Science Teacher Education (ASTE) Annual International Meeting, Greenville, SC, United States.
- Cofré, H., Santibáñez, D., Vergara, C., & **Pavez, J.** (2021, August 30 September 3). *Pre-Service Science Teacher Education Around the Globe: Trends, Challenges and Future Directions* [Symposium]. European Science Education Research Association (ESERA) Annual International Conference, Online.
- Pavez, J. (2021, April 7-10). Challenges of Prospective Science Teacher Educators when designing Science Methods Courses: analysis through a PCK lens [Poster presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Orlando, FL, United States.
- Pavez, J. (2021, January 13-16). What to teach on my science methods course: Experiences of prospective science teacher educators when designing science methods courses [Paper presentation]. Association for Science Teacher Education (ASTE) Annual International Meeting, Salt Lake City, UT, United States.
- Pavez, J. (2020, March 15-18). In-service science teachers' understanding and practices of assessment of Nature of Science [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Portland, OR, United States (Conference canceled).
- Pavez, J. (2020 January 8-11). Promoting the Assessment of the Nature of Science Through an Assessment Literacy Model [Poster presentation]. Association for Science Teacher Education (ASTE) Annual International Meeting, San Antonio, TX, United States.
- **Pavez, J.**, & Sell, C. (2019, March 31 April 3). *How can Science Teachers Enhance their Knowledge* of Assessment of NOS Based on the development of NOS Tools by Researchers? [Poster

presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Baltimore, MD, United States.

- Green, K., Foster, B., Lucero, M., Pavez, J., Krishnan, S., & Jackson, D. (2019, March 31 April 3). *Thinking Influencing the Teaching and Learning of Evolution* [Symposium]. National Association for Research in Science Teaching (NARST) Annual International Conference, Baltimore, MD, United States.
- Pavez, J., Krishnan, S., & Jackson, D. (2019, January 2-5). Themes in Prospective Middle School Teachers' Personal and Professional Views About Evolution and Its Teaching [Symposium]. Association for Science Teacher Education (ASTE) Annual International Meeting, Savannah, GA, United States.
- Cofré, H., Nuñez, P., Santibáñez, D., **Pavez, J.**, Valencia, M., & Vergara, C. (2019, August 26-30). Let's be Practical: A Critical Review of Studies on Learning the Nature of Science among Students and Science Teachers [Paper presentation]. European Science Education Research Association (ESERA) Annual International Conference, Bologna, Italy.
- Pavez, J., Cofré, H., & Vergara, C. (2015, November 5-7). The role of the history of science in improving biology teachers' understanding of the nature of science: listening to teachers' voices [Paper presentation]. Chilean Association of Science Education (SCHEC) Conference, Valparaíso, Chile.
- Jiménez, J., Santibáñez, D., Vergara, C., Pavez, J., & Cofré, H. (2015, August 31 September 4). Professional development program on Biology Teacher's Nature of Science understanding and knowledge of NOS instructional strategies [Paper presentation]. European Science Education Research Association (ESERA) Annual International Conference, Helsinki, Finland.
- Jiménez, J., Santibáñez, D., Vergara, C., Pavez, J., & Cofré, H. (2015, April 11-14). Biology Teacher' professional development programs and the Nature of Science understanding and NOS instructional strategies [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, IL, United States.
- Cofré, H., Pavez, J., Vergara, C., & Santibáñez, D. (2015, April 11-14). Enhancing understanding of nature of science in Chilean biology teacher through history of science [Paper presentation]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, IL, United States.
- Pavez, J., & Navarro, G. (2009, October 7-10). Karyotypic studies between species Colliguaya salicifolia, Colliguaya integerrima y Colliguaya odorífera as evidence of species hybridization [Poster presentation]. Genetic and Evolutionary Biology Conference, Concepcion, Chile.
- Navarro, G., & **Pavez, J.** (2009, October 7-10). *Morphological studies between species Colliguaya* salicifolia, Colliguaya integerrima y Colliguaya odorífera as evidence of species hybridization [Poster presentation]. Genetic and Evolutionary Biology Conference, Concepcion, Chile.

# Regional / Local Conferences

- **Pavez, J.** (2020, February 7). *Improving science teachers' assessment literacy for the assessment of the nature of science* [Poster presentation]. College of Education Research Conference, Athens, GA, United States.
- **Pavez, J.** (2019, October 25). *Decisions involved in planning the assessment on nature of science: considerations from research on the assessment of NOS and general assessment practices* [Paper presentation]. Innovation in Teaching Conference, Athens, GA, United States.

## c. Special Lectures (invited)

## Guest Lecturer

<i>"The Diversity of Science Teacher Preparation Models around the Globe: Trends and Challenges"</i> in ESCI 9730 Science Teacher Education Theory and Practice, for doctoral students in science education, University of Georgia, Athens, GA, United States (Invited by Dr. Julie Luft)	Spring 2022
"Introduction to Scientific Literature: types of sources and the use of citation management software" in BIOL 2103H Concepts in Biology, for honors undergraduate students in STEM majors, University of Georgia, Athens, GA, United States (Invited by Dr. Jill Beyette)	Spring 2021
"Historical Foundations of the Nature of Science in Science Education: Some Milestones, Advocates and its Development" in ESCI9020 History and Theory of Science Education, for doctoral students in science education, University of Georgia, Athens, GA, United States (Invited by Dr. David Jackson)	Spring 2021
"Mapping a path from Comprehensives to Dissertation Completion", in ESCI8990 Research Seminar, for doctoral students in science education, University of Georgia, Athens, GA, United States (Invited by Dr. Georgia Hodges)	Spring 2021
"Past and present of science teacher education in Chile and the school system", in ESCI 8100 International Science Education for doctoral students in science education, University of Georgia, Athens, GA, United States (Invited by Dr. Deborah Tippins)	Fall 2020
"Controversies around the teaching of Evolution/Creationism: some international perspectives," in Science Method Course, for pre-service middle school teachers, University of Georgia, Athens GA, United States (Invited by Dr. David Jackson)	Spring 2017
"History of science as a teaching strategy for improving biology teachers' understanding of nature of science", for master students in science education, Pontifical Catholic University of Valparaíso, Curauma, Chile (Invited by Dr. Hernán Cofré)	Fall 2015

# Instruments development

- **Pavez, J.** Santibañez, D. (2016) Assessment of Scientific Knowledge Skills, PRIAVU project. Test for students admitted in education and psychology programs at Silva Henriquez Catholic University, Santiago Centro, Chile.
- **Pavez, J.** (2016) PSU science test preparation, Clave Project, SM Publisher. Practice test for the national university admission exam (PSU).

# Instruments validation

- Jara, A. (2020) Students' conceptions on sex and gender education. Instrument designed to assess elementary and middle school students' conceptions, in the context of a thesis presented for bachelors' in elementary education, Silva Henriquez Catholic University, Santiago Centro, Chile.
- Carrión, Y. & Silva, C. (2017) Biology teachers' beliefs about sex education. Instrument designed to measure content representations (CoRe) of in-service biology teachers, in the context of a thesis presented for master's degree in science education, Pontifical Catholic University of Valparaíso, Curauma, Chile
- Aravena, M. (2013) Evolution and nature of science questionnaire. Instrument designed to assess high-school students' conceptions, in the context of a thesis presented for master's degree in science education, Pontifical Catholic University of Valparaíso, Curauma, Chile

## **Curriculum & Instructional Resources Development**

Preuniversitario Pedro de Valdivia, Santiago, Chile

2011-2016

• Responsible for designing and evaluating teaching resources and assessment instruments. Co-author of the biology textbooks distributed nationwide in the institution.

e. Areas of expertise

Science Teacher Education, Pedagogical Content Knowledge, Science Methods Courses, Biology Education, Nature of Science, Teachers' knowledge of nature of science, History of Science, Teaching of Evolution, Assessment in Science Education, Qualitative Research Designs, Teaching Qualitative Methods, Culturally Responsive Pedagogy, and Diversity, Equity and Inclusion in education.

## f. Editorial Service

Handbook lead project assistant for Luft, J. & Jones, G. (2022) *Handbook of Research on Science Teacher Education*. Taylor & Francis.

Section editor for Díaz, C., Durán, E., Espinoza, J., Fernández, E., Guerrero, M., Herrera, M., Jara, M. y **Pavez, J.** (2016) *Science PSU test Preparation Textbook* (Spanish title), Clave Project, SM Publisher

g. Recognitions, awards, and scholarships

<i>Jhumki Basu Scholar Award</i> , granted to promising young scholars from underrepresented groups by NARST Equity and Ethics (E&E) Committee, to cover conference-related expenses of (~\$1.000).	2021
Department of Math and Science Education Travel award, for presenting at NARST, ASTE, Innovation in Teaching Conference, College of Education Research Conference (~\$1.200).	2018-2021
University of Georgia Graduate School Travel Assistance Award, for NARST and ASTE conferences (~\$4.800).	2018-2021
<i>Beca Chile Scholarship</i> , granted to outstanding international doctoral students by the National Research and Development Agency (ANID) of the Ministry of Science, Technology, Knowledge and Innovation, Chilean government (~\$150.000).	2017-2020
<i>Teacher of the year</i> award for a distinguished teacher based on students', principal' and pairs' evaluation, Preuniversitario Pedro de Valdivia, Melipilla, Chile.	2016
Solidarity Lent Grant, granted to salient students from each state by the Archbishop of Santiago, to finance their higher education expenses ( $\sim$ \$300).	2007-2009
<i>Municipal scholarship for university students</i> , granted to salient students by the Illustrious Municipality of Pichidegua, to finance higher education expenses (~\$150).	2005-2006
President of the Republic Grant, granted to outstanding students by the Ministry of Education, to fund secondary and higher education expenses (~\$7.500).	1999-2009

## **3. RESEARCH EXPERIENCES**

#### a. Research Internships

## At University of Georgia, Athens, GA, United States

Research Assistant on NSF-funded project entitled "*Resources Accessed to* 2021 - *Cultivate and Enhance Resilience*" (<u>RACER</u>) present

- PIs: Dr. Shannon Navy, Kent State University, SC; Dr. Julie Luft, University of Georgia, GA
- The study purpose is to understand the retention of newly hired secondary science Noyce teachers. Studying resilient teachers help us to understand how to slow turnover.
- I participated in the IRB process, project management, instrument development, reviews of literature, and data collection and analysis.

Research Assistant on NSF-funded project entitled "Science Coordinators2021 -Advancing a Framework for Outstanding Leadership Development" (SCAFFOLD)present

• Pls: Dr. Julie Luft, University of Georgia, GA; Dr. Brooke Whitworth, Clemson University, SC

- The study looks at the impact of district science coordinators (DSCs) on teachers, and the need of professional development programming to enhance DSCs work with teachers.
- I participated in instrument development, data management and analysis, developing proposals and presenting at conferences.

Research Assistant on NSF-funded <u>project</u> entitled *"Exploring Racial* 2021 *Microaggression in Science Education"* 

- Pi: Dr. Mary Atwater, University of Georgia, GA
- The study purpose is to identify activities that might lead to microaggressions, and to identify policies used by colleagues to minimize racial microaggressions.
- I participated in the recruitment of participants.

Research Assistant in research project on *Middle-school Teachers' Personal and* 2017-2018 *Professional Views About Teaching of Evolution*.

- Pi: Dr. David Jackson, University of Georgia, Athens, GA
- The study purpose is to characterize the challenges faced by middle school science teacher candidates when teaching evolution, based on cultural, political, and emotional considerations.
- I participated in data management and analysis, developing proposals and presenting at conferences.

# At Pontifical Catholic University of Valparaíso, Curauma, Valparaíso, Chile

Research Internship on a FONDECYT-funded <u>project</u> entitled "Understanding of 2013-2015 Nature of Science as a Factor to Improve the Learning of Evolution in Students and Science Teachers" (project #1131029)

- PIs: Dr. Hernán Cofré, Pontifical Catholic University of Valparaíso, Chile; Dr. Claudia Vergara, Alberto Hurtado University, Chile.
- The study purpose was to understand how the use of inquiry or history of science as teaching strategies could improve participants understanding of nature of science.
- I participated in designing teaching modules for PD, planning and designing activities and assignments, data collection and analysis, developing proposals and presenting at conferences.

# 4. TEACHING EXPERIENCE

a. Undergraduate and Graduate courses
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## At Western Illinois University, College of Education and Human Services, Moline, Ill, United States

SCED 364 Elementary School Science Methods (~12 students)	2022
SCED 464 Integrating Science Through Inquiry (~12 students)	2022
C&I 403 Curriculum and Instruction (~15 students)	2022

# At University of Georgia, Athens, GA, United States

MARS 1021e Biology of the Marine Environment Course for undergraduate students (~30 students). Teaching assistant, supervised by Dr. Catherine Teare. Participated in teaching, lesson planning and grading, as well as providing feedback to students. • BIOL 1103L Concepts in Biology Laboratory 2020-2021 • Course for non-major undergraduate students (~80 students). • Instructor of records, supervised by Dr. Kimberly Martin. Responsible for teaching the face to face laboratories, the synchronous and asynchronous • online sessions, as well as lesson planning and grading. **BIOL 2103H Concepts in Biology (Honors)** 2021 Course for honors undergraduate students (~10 students). • Teaching assistant, supervised by Dr. Jill Beyette. Participated in teaching, lesson planning and grading, as well as providing feedback to students. 2020 Course for Master's and Specialist degree students (~30 students). • Teaching assistant, supervised by Dr. Xiaoming Zhai.

ESCI 6230E Environmental Science Education

- Course for Master's and Specialist degree students (~30 students).
- Teaching assistant, supervised by Dr. Julie Kittleson.
- Assisted in designing the teaching modules and syllabus, as well as planning and designing teaching activities and assignments.

# At Universidad Alberto Hurtado, Santiago, Chile

Innovative Strategies for Developing Scientific Skills in Biology and Natural 2013-2014 Sciences

- Professional development program for in-service biology teachers (~10 students).
- Graduate assistant, supervised by Dr. Hernán Cofré.
- Assisted in designing teaching modules and materials, as well as planning and designing teaching activities and assignments. Responsible grading and conducting follow-up interviews with a sub-group of teachers to assess the program's effectiveness.

# At Pacific University, Melipilla, Chile

Concepts in Biology

Course for undergraduate students majoring in nutrition and dietetics (~50 students).

2011-2012

# ESCI 6990E Research Methods Seminar in Science Education

Assisted in lesson planning and grading, as well as providing feedback to students.

2019

2021

Instructor, responsible for designing the syllabus, resources, and assignments.

#### b. 5-12 Teaching Experience

Secondary Biology teacher

- Los Maitenes School of Legionary of Christ, Melipilla, Chile
- Taught biology to 9<sup>th</sup> to 12<sup>th</sup> grade students. Responsible for lesson planning, designing teaching resources and assessments. Though advanced biology courses for students interested in pursuing scientific or medical careers. Conducted laboratory and hands-on activities. Prepare a group of students for the college admission test (PSU).

Secondary Biology department head and biology teacher

- Preuniversitario Pedro de Valdivia, Santiago, Chile
- Taught biology to 11<sup>th</sup> and 12<sup>th</sup> grade students. Led face to face and online lessons with a focus on the college admission test (PSU). Responsible for designing and evaluating teaching resources and assessments. Co-author of the biology textbooks distributed nationwide in the institution.

Secondary Biology teacher

- Methodist Special Education School of Santiago, Santiago, Chile
- Taught biology to 7<sup>th</sup> and 10<sup>th</sup> grade students. Responsible for lesson planning, designing teaching resources and assessments. A portion of the classes were students with special education needs, for whom I designed special teaching resources and assessments.

Middle-school Natural sciences teacher

- Santa-Elena Catholic School, Santiago Chile
- Taught natural science to 5<sup>th</sup> to 8<sup>th</sup> grade students, including topics in biology, sex education, chemistry, physics, environmental sciences, earth sciences, and astronomy. Responsible for lesson planning, designing teaching resources and assessments. Conducted laboratory and hands-on activities.

Secondary Biology teacher

- Preuniversitario Cepech, Providencia, Chile
- Taught biology to 11<sup>th</sup> and 12<sup>th</sup> grade students. Led face to face and online lessons with a focus on the college admission test (PSU). Responsible for designing and evaluating teaching resources and assessments, distributed nationwide in the institution.

2010-2011

2011-2012

2009-2010

2016

2011-2016

# 5. Professional and Community Service

# a. National/International Service

## Reviewer for Journals

Reviewer for Journals	
Journal of Science Teacher Education (JSTE), the flagship journal of the Association for Science Teacher Education (ASTE)	2020-2023
<i>Contemporary Issues in Technology and Teacher Education</i> (CITE), jointly 2 sponsored by five professional associations (AMTE, ASTE, NCSS-CUFA, CEE, and SITE), reviewer for the science education section.	2020-present
Innovations in Science Teacher Education journal, the practitioner journal of the Association for Science Teacher Education (ASTE).	2019-2020
Journal Filosofia e História da Biologia, a publication of the Brazilian Association of Philosophy and History of Biology (ABFHiB)	2015-2016
Paulawar for Conforences	
<b>Reviewer for Conferences</b> National Association for Research in Science Teaching (NARST) Annual International Conference	2019-2020
Association for Science Teacher Education (ASTE) Annual International Meeting	2019-2020
Chilean Association of Science Education (SCHEC) Conference	2015-2021
Service to National and International Organizations	
NARST Strand 4 coordinator: teaching middle and high school	2021-2023
NARST keynote committee member to evaluate and select keynote speaker(s)	2021-2022
SCHEC Organizing committee	2021
NARST Graduate Students Communications and Networking Subcommittee	2020-2021
SCHEC Founding and organizing committee	2014
b. Service to department/ University	
School of Education at Western Illinois University	
Undergraduate Committee, Middle School level representative	2022-2025
c. Service to Other Universities	
Service to Organizations at the University of Georgia International Student Advisory Board ( <u>ISAB</u> ), graduate student representative in the committee of public relationships	2020-2021

the committee of public relationships

# Department of Math and Science Education at the University of Georgia

Science Education Graduate Association (SEGA), community representative	2018-2021
Undergraduate and Master's Thesis Committee Karen Anabalon, Master in Science Education, External Committee Member, Pontifical Catholic University of Valparaíso, Valparaíso, Chile. Title: "Debunking Myths: Impact of Understanding of Nature of Science on Scientific Literacy in a Group of High School Students"	2020
d. Outreach Activities	
Organized an experiential learning activity for undergraduate students in an honors biology class (BIOL 2103H Concepts in Biology) with a local garden community in the children's garden area. Georgia Botanical Garden, Athens, GA, United States.	2021
Organized and volunteered for National Science Bowl <sup>®</sup> (NSB) regional division, College of Education, University of Georgia, Athens, GA, United States.	2018-2019

## 6. Other Skills

#### **Other Languages**

• Spanish (native speaker)

# Software & Technologies

#### Research tools

- *NVivo*, qualitative data analysis (intermediate)
- Atlas.ti, qualitative data analysis (intermediate)
- *Qualtrics,* survey creation and management (advanced)
- *SurveyMonkey*, survey creation and management (advanced)
- V-note, for video analysis (intermediate)
- *Tableau*, for data visualization (intermediate)
- Otter.ai, for audio transcription (advanced)
- *Easy record and trim,* for audio editing (advanced)

#### Academic writing tools

- EndNote, reference manager (advanced)
- Mendeley, reference and pdf manager (advanced)
- *Zotero*, reference manager (advanced)
- Writefull academic, for academic writing (advanced)
- *Grammarly*, grammar checker (advanced)
- *Outwrite*, grammar checker (advanced)
- *ProWritingAid*, grammar checker (advanced)

#### Project management and teamwork tools

- *Trello*, for project management (advanced)
- *QuickPlan,* for project management and Gantt chart (advanced)
- *Teamgantt,* for project management and Gantt chart (advanced)
- Zoom, for videoconferencing (advanced)
- *Slack*, for team communication (advanced)
- *Doodle*, for meeting scheduling (advanced)
- *Calendly*, for online appointment scheduling (advance)

#### Course management tools

• D2L (advanced)

#### Teaching tools

- *Margin notes 3,* concept mapping and pdf manager (advanced)
- *SimpleMind*, concept mapping (advanced)
- *Canva*, graphic design for infographics/videos (advanced)
- *Powtoon,* for visual communication (intermediate)
- *Flipgrid*, for video discussion (advanced)
- *Moovly*, for video creation (advanced)
- *GoReact,* for video feedback/annotations (intermediate)
- *Tetra*, for video discussion and transcription (intermediate)
- Loom, for screen casting (advanced)
- *Padlet,* for content creation/sharing (advanced)
- Quizlet, quiz and flashcards (advanced)
- *Explain everything*, online whiteboard (advanced)
- Jamboad, interactive board and sticky notes (advance)
- *Mentimeter*, for interactive presentations and quizzes (intermediate)

#### Assessment tools

- *TestGen* (Pearson), for assessment creation (intermediate)
- Plickers, for interactive formative assessment (advanced)
- *ZipGrade*, for grading assessment (advanced)
- *Kahoot!*, for creating interactive quizzes (advanced)
- Quizzizz, for creating interactive quizzes (advanced)