

Joelyn de Lima

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CURRENT APPOINTMENTS

- 2021 - **Pedagogical Advisor**
EPFL, the Swiss Federal Institute of Technology in Lausanne, Switzerland
- 2021 - **Visiting Scientist**
W.K. Kellogg Biological Station, Michigan State University, USA

PROFESSIONAL PREPARATION

- 2021 **Ph.D.**
Department of Plant Biology, Michigan State University, Michigan, USA
Dissertation: Contextual Influences on Undergraduate Biology Students' Reasoning and Representations of Evolutionary Concepts
- 2009 **Bachelor of Education, specialisation in Mathematics and Science Education.**
First rank & distinction, Goa University, Goa, India.
Research project: 'A quasi-experimental study on introducing multiple intelligences in my lesson plans'
- 2008 **Master of Science in Marine Science, specialisation in Marine Biology.**
Distinction, Goa University, Goa, India.
Thesis: 'Studies on biochemical effects of drilling fluid additive (chromelignosulphate) on post-larvae of tiger prawn, Penaeus monodon'
- 2005 **Bachelor of Science in Zoology with Biotechnology**
First rank & distinction, Goa University, Goa, India
Dissertation project: 'Effect of Mussel and plant extract on selected cultured cells of Mus musculus'

CERTIFICATIONS:

- 2019 **University Graduate Certification in Community Engagement**
The Office of University Outreach and Engagement and The Graduate School, Michigan State University, Michigan, USA
- 2019 **University Graduate Certification in College Teaching in Natural Science**
The Graduate School, Michigan State University, Michigan, USA

ACADEMIC PUBLICATIONS

§ indicates undergraduate author

Schwarz, C. V., Cooper, M. M., Long, T. M., Trujillo, C. M., de Lima, J., Kesh, J.[§], ... Stoltzfus, J. R. (2020). Mechanistic Explanations Across Undergraduate Chemistry and Biology Courses. In M. Gresalfi & I.

Horne (Eds.), *The Proceedings from the Fourteenth International Conference of the Learning Sciences (ICLS) 2020*, Volume 1 (pp. 625–628).

Dolan, E. L., Borrero, M., Callis-Duehl, C., Chen, M., **de Lima, J.**, et al. (2020) Undergraduate Biology Education Research Gordon Research Conference: A Meeting Report. *CBE Life Sciences Education*, 19(2), Doi: 10.1187/cbe.19-09-0188

ACADEMIC PUBLICATIONS – SUBMITTED

de Lima, J., Long, T. M. Prompt context influences the content of students' narratives of evolution by natural selection. Manuscript submitted for publication

ACADEMIC PUBLICATIONS – IN PREPARATION

de Lima, J., Long, T. M. Effects of Contextual Differences on the Architecture and Content of Student-Generated Models

de Lima, J., Long, T. M. Model-based and narrative assessments elicit different ideas about evolution by natural selection.

OTHER PUBLICATIONS

de Lima, J., (2019) The Evolution of an Agriculture-Ecology Outdoor Activity Trail: Community Partnership in Action. *Graduate Certification in Community Engagement*, Michigan State University.

de Lima, J., (2019) Touching tomorrow through effective teaching. *University Graduate Certification in College Teaching in Natural Science*, Michigan State University.

Cole, S., **de Lima, J.**, Julie Doll, J., Drayton, B., Haas, D., Haas, K., Hanks, S., Holland, J., Klotz, M. (2017) Agriculture and Ecology Trail Student Activity Book Highlighting the KBS Long-term Ecological Research Program: Developed for grades 1- 4. W.K. Kellogg Bird Sanctuary & KBS LTER. Kellogg Biological Station Long-Term Ecological Research (LTER) Program and W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

de Lima, J., Haas, K. (Dec 2013) A Guide for the Guides – Agriculture and Ecology Activity trail. W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

de Lima, J., Haas, K. (2013) Agriculture & Ecology Student Activity Trail for Kindergarten/1st graders. W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

de Lima, J. (2013) A Guide for the Guides – Agriculture and Ecology Activity trail. W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

de Lima, J., Drayton, B., Haas, K., Doll, J. (2013) Teacher's Guide: Agriculture and Ecology Activity Trail at the W.K. Kellogg Bird Sanctuary. Kellogg Biological Station Long-Term Ecological Research (LTER) Program and W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

Cole, S., Drayton, B., Syswerda, S., Haas, K., **de Lima, J.**, Shaughnessy, S., Doll, J. (2013) Activity Book for the Agriculture and Ecology Activity Trail highlighting the KBS Long-term Ecological Research Program: Developed for grades 2, 3, 4, and 5 for use at the KBS LTER Activity Trail at the W.K. Kellogg Bird Sanctuary, 12685 East C Ave., Augusta, MI 49012. Kellogg Biological Station Long-Term Ecological Research (LTER) Program and W.K. Kellogg Bird Sanctuary, Hickory Corners, MI

de Lima, J., Cole, S., Drayton, B., Syswerda, S., Doll, J., (2012) Agriculture and Ecology Activity Trail Teacher's Guide: Kellogg Biological Station Long-term Ecological Research program. Kellogg Biological Station Long-Term Ecological Research (LTER) Program, Hickory Corners, MI.

SELECTED ACADEMIC PRESENTATIONS

PEER-REVIEWED PRESENTATIONS:

Presenter first; § indicates undergraduate student; * indicates high school student; ^λ indicates de Lima is PI

de Lima, J., Long, T. M. (2021) Model-Based and Narrative Assessments Elicit Different Ideas About Evolution by Natural Selection. European Science Education Research Association 2021 Conference. 30th August – 3rd September 2021. Virtual Conference (talk).

de Lima, J., Long, T. M. (2021) Item-feature context influences the content and architecture of student-constructed models. Society for the Advancement of Biology Education Research National Meeting. July 2021. (talk)

Persson-Gordon, E.[§], Beltran-Flores, E.[§], **de Lima, J.**, Long, T. M., Stoltzfus, J. R. (2021) Students' Mechanistic Explanations of Phenotypic Variation. Society for the Advancement of Biology Education Research National Meeting. July 2021. (poster)

Dumoulin, D.[§], **de Lima, J.**, Long, T. M. (2021) Analyzing Students' Choice of Mode of Representation. Society for the Advancement of Biology Education Research National Meeting. July 2021. (poster)

Marwede, J.[§], **de Lima, J.**, Long, T. M. (2021) Prompt Context Changes the Content of Students' Model-based Responses. Society for the Advancement of Biology Education Research National Meeting. July 2021. (poster)

de Lima, J., Beltran-Flores, E.[§], Persson-Gordon, E.[§], Noyes K., Carlson, C., Cooper M., Long, T., Schwarz, C., Stoltzfus, J. R. (2021) Exploring student construction of causal mechanistic explanations across chemistry and biology courses. Part 3 of 3: Explanations of causes and consequences of variation. X-DBER 2021 Conference. 1st – 3rd March 2021. University of Nebraska-Lincoln, NE, USA. (poster)

de Lima, J., Long, T. M. (2020). Mode of Representation Influences Content of Student Responses. Society for the Advancement of Biology Education Research National Meeting. July 2020. (talk).

de Lima, J., Long, T. M. (2020) Mode of Responses Influences Content of Student Responses. Graduate Academic Conference. 22nd February 2019. MSU, MI, USA (talk).

de Lima, J., Thomas, M. K., Long, T. M. (2019). Influence of Context on the Architecture of Student-Generated Models in Undergraduate Introductory Biology Courses. The European Conference on Educational Research 2019. 3rd – 6th September 2019. Hamburg, Germany (talk).

de Lima, J., Long, T. M. (2019). Influence of Context on the Architecture of Student-Generated Models in an Undergraduate Introductory Biology Course. European Science Education Research Association 2019 Conference. 26th – 30th August 2019. Bologna, Italy (talk).

de Lima, J., Long, T. M. (2019). Student constructed models: factors that predict the ‘who’ and influence the ‘what’. Gordon Research Conference - Undergraduate Biology Education Research. 23rd – 28th June 2019. Bates College, Lewiston, ME, USA (poster).

de Lima, J., Long, T. M. (2019). Factors predicting students' attempts at model construction. Gordon Research Seminars - Undergraduate Biology Education Research. 22nd - 23rd June 2019. Bates College, Lewiston, ME, USA (poster).

de Lima, J., Long, T. M. (2018). Contextual Differences Influence Model Architecture. Society for the Advancement of Biology Education Research National Meeting. 27th – 29th July 2018. University of Minnesota, MN, USA (talk).

de Lima, J., Distin, M.[§], Long, T. M. (2017). Contextual Influences on Student Reasoning about Natural Selection. Gordon Research Conference: Undergraduate Biology Education Research 9th -14th July 2017. Stonehill College, MA, USA (poster).

de Lima, J., Distin, M.[§], Long, T. M. (2016). Contextual Differences Influence Student Reasoning about Natural Selection. Society for the Advancement of Biology Education Research National Meeting. 14th – 17th July 2016. University of Minnesota, MN, USA (talk).

de Lima, J., Kjolvik, M., Schultheis, E., Mead, L., Long, T. M. (2016). Adapting Data Nuggets for College Introductory Biology Courses. Society for the Advancement of Biology Education Research National Meeting. 14th – 17th July 2016. University of Minnesota, MN, USA (poster).

de Souza, R.* , Maganlal, P.* , Rodrigues, J.* , Vas, K. S.* , **de Lima, J.**^λ (2009) Air quality changes from 2004 – 2009 in Panjim, India. 2nd Annual Conference on Earth System Science Research. 16th – 19th December 2009. Ayotthaya, Thailand (talk).

Da Silva Periera, D.* , de Sousa, M. U.* , D’Souza, G.* , Mendonsa, K.* , Rebello, C.* , **de Lima, J.**^λ (2009) Water quality changes from 2004 to 2009 in Goa, India. 2nd Annual Conference on Earth System Science Research. 16th – 19th December 2009. Ayotthaya, Thailand (talk).

CONTRIBUTED PRESENTATIONS:

Presenter first; § indicates undergraduate student; * indicates high school student; λ indicates de Lima is PI

de Lima, J. Context affects all (2019) Dept. of Plant Biology Graduate Professional Development Course 18th October 2019. MSU, MI, USA (talk).

Distin, M.[§], **de Lima, J.**, Trujillo, C. M., Long, T. M. (2016). Student Reasoning about Human Evolution. University Undergraduate Research and Arts Forum (UURAF). 8th April 2016. MSU, MI, USA (poster).

de Lima, J. Contextual differences and student reasoning about natural selection (2016) Graduate Seminar Series. 8th April 2016. Kellogg Biological Station, Hickory Corners, MI USA (talk).

de Souza, R.* , Maganlal, P.* , Rodrigues, J.* , Vas, K. S.* , **de Lima, J.**^λ (2009) Local air quality changes from 2004 – 2009. VIII Global Conference on Environmental Education. 4th – 8th November 2009. Panjim, Goa, India (talk).

Da Silva Periera, D.*, de Sousa, M. U.*, D'Souza, G.*, Mendonsa, K.*, Rebello, C.*, **de Lima, J.**^λ (2009) Changes in Mandovi river water quality. VIII Global Conference on Environmental Education. 4th – 8th November 2009. Panjim, Goa, India (talk).

de Lima, J. (2009) Effect of drilling fluids on the survival success, heavy metal profile and composition of the associated bacteria in *Penaeus monodon*. Graduate Student Presentation Series. April 2009. Department of Marine Sciences, Goa University, Goa, India (talk).

INVITED PRESENTATIONS:

Presenter first

de Lima, J., Martins, D., (2009). Leveraging multiple intelligences while designing instruction and assessment. Pedagogy refresher course for undergraduate lecturers. February 2009. University Grants Commission –Academic Staff College, Goa University, Goa, India

FUNDING

FELLOWSHIPS AND AWARDS:

Amounts shown in USD. Total amount awarded ~ 50K USD

COMPETITIVE FELLOWSHIPS:

2020	Science Education and Outreach Fellowship	\$6000
2018 - 19	Future Academic Scholars in Teaching (FAST) Fellowship	\$2000
2019	MSU Graduate School Fellowship	\$250
2017 - 18	Future Academic Scholars in Teaching (FAST) Fellowship	\$2000
2017	Long Research Fellowship	\$5400
2015 - 16	BEACON Fellowship	\$10,000
2016	MSU Graduate School Fellowship	\$350

COMPETITIVE AWARDS:

2020	Bessey Award for Outstanding Graduate Student Interdisciplinary Research.	\$550
2019	COGS Disciplinary Leadership Award	\$2000
2019, 2017	Gordon Research Conferences, Registration and Travel Support	\$4250
2016-20	Paul Taylor Funds	\$6300
2016-19	BEACON Travel Funding	\$4000
2016-19	Other Sources of Funding	\$500

GRANTS:

2021. € 1500.00 (~\$1700.00)

Assessing self-paced, self-directed, non-formal learning activities about evolution in Europe.
European Cooperation in Science and Technology Grant awarded to **de Lima**.

2021. € 4000.00 (~\$4750.00)

EuroCitizen Virtual Networking Support Manager Grant. European Cooperation in Science and Technology Grant awarded to **de Lima**.

2018 - 2021. **3.5 years of research funding** (Stolzfus (PI), Long, Cooper, Schwarz (Co-PIs))

2015 - 2016. **1 year of research funding** (Mead and Long (Co-PIs))

EXPERIENCE DELIVERING PEDAGOGICAL TRAINING

- 2021 **Building Indigenous Cultural Connections in the Classroom.** Developing a series of workshops for teachers designed to deepen understanding about historical context and trauma, culturally grounded interactions, cultural sensitivity, cultural grounding and how to incorporate these elements into the classroom. Michigan USA
- 2021 **Equity in Addressing Climate Science.** Developed a workshop for K-12 teachers ‘Teaching climate science through a lens of equity’, that is designed to help teachers explore the ethical and equity considerations of various solutions to the climate change. Michigan USA
- 2021 **ART + SCIENCE.** Developed and organised a 3-day Summer Institute during which K-12 teachers and informal science educators explored three major themes of art (movement, written/ spoken word, and visual art), their unique relationship to science and science education and communication, and ways to incorporate them in their classrooms. Michigan USA
- 2021 **Enhancing science education by incorporating indigenous knowledge and perspectives.** Developed, organised, and facilitated a book study to help formal and informal educators to enhance their instruction by reflecting on multiple perspectives about relationships with nature by unpacking the themes in the book *Braiding Sweetgrass* by Robin Kimmerer. Michigan USA
- 2020 - 21 **Climate Science.** Developed, organised, and hosted series of online workshops on Climate Science designed as professional development for K-12 educators. Michigan USA
- 2018 **Systems thinking skills.** Developed and conducted a workshop ‘*Quantifying systems thinking skills: Using modified Data Nuggets*’, for K-12 teachers. Michigan USA
- 2017 **Co-operative learning.** Developed and conducted a lesson that was intended to introduce graduate fellows to co-operative learning strategies in the undergraduate classroom. MSU, Michigan USA
- 2012 - 13 **Agriculture and Ecology.** Designed and conducted a series of training sessions for KBS volunteers to train them to lead tours and conduct hand-on activities on the Agriculture and Ecology Activity Trail. Michigan USA

TEACHING EXPERIENCE (FORMAL AND INFORMAL)

- 2021 **Data Management: Ethics & Logistics.** Developed and conducted a workshop for graduate students to engage them in thinking about ethical practices of data management. The University of Zurich, Switzerland.

- 2021 **Evaluating non-formal learning activities.** Developed and conducted a workshop for graduate students to introduce them to the basics of assessing non-formal learning activities. The University of Zurich, Switzerland.
- 2017 **Organismal and Population Biology.** Teaching assistant for an active-learning undergraduate biology course. MSU, Michigan USA
- 2016 **Cell and Molecular Biology.** Teaching assistant for an undergraduate introductory biology laboratory course. Taught two sections independently, supervised research projects. MSU
- 2011 - 12 **General Science.** Independently taught grades 5 to 8. The Rosary High School, Miramar, Goa, India.
- 2010 - 11 **Mathematics.** Independently taught grades 6 to 10. I was also the class teacher of Grade 6. St Ann's High School, Tivim, Goa, India.
- 2010 **Environmental Education.** Guest lecturer for teachers-in-training at Nirmala Institute of Education, Panjim, Goa.
- 2009 - 10 **General Science and Mathematics.** Independently taught grades 5 to 8. I was the class teacher of Grade 5. Don Bosco High School, Panjim, Goa, India.
- 2008 **General Science and Mathematics.** Independently taught grades 5 to 9. St. Britto's High School, Mapusa, Goa, India.
- 2006 **General Science and Mathematics.** Independently taught grades 7 to 10. I was the class teacher of Grade 9. St. Mary's Convent High School, Mapusa, Goa, India.
- 1997 - 98 **Basic literacy skills.** Taught basic reading and writing skills to illiterate adults as part of the 'Each One – Teach One' National program in Goa, India.

SELECTED MENTORING EXPERIENCE

- 2020 - **Mentor two graduate fellows** in science outreach and community engagement as part of the Science Education and Outreach Fellowship at W. K. Kellogg Biological Station, Michigan State University, MI, USA
- 2017 - **Mentor five graduate researchers (MSU and UZH).** I mentor them on research protocols and techniques in undergraduate biology education research and non-formal education research including designing, conducting, and analysing qualitative data (interviews, questionnaires), data management and communicating research.
- 2015 - **Mentored and supervised five Post-Baccalaureate Researchers and nineteen undergraduate researchers** in the Long Lab. Several of these researchers presented their projects at the MSU University Undergraduate Research and Arts Forum. Michigan State University, MI, USA
- 2016, 17 **Mentored and supervised 3 undergraduate teaching assistants.** I mentored them on basic instruction, classroom management and student interaction skills. Michigan State University, MI, USA

- 2012 - 13 **Mentored 20 graduate students with the aim of improving their classroom teaching skills**, as part of the KBS Graduate STEM Fellows in K-12 Education Program (GK-12). I helped them plan their lessons, conducted classroom observations and subsequently gave them feedback. Kellogg Biological Station, Michigan State University, MI, USA
- 2012 **Mentored 10 school teachers** as part of the Research Experience for Teachers (RET) program at KBS. Kellogg Biological Station, Michigan State University, MI, USA
- 2009 **Mentored 9 high school students in two research projects**. These were presented at the VIII Global Conference on Environmental Education in Goa, India. They were then selected to represent India and present at the 2nd Annual Conference on Earth System Science Research in Ayotthaya, Thailand. Don Bosco High School, Goa, India
- 2009 - 11 **Mentored 15 Trainee Teachers**. I mentored them in lesson design, classroom skills and management, and assessment design. I also evaluated their classes and gave feedback.

SELECTED SCIENCE COMMUNICATION AND OUTREACH

- 2020 - **Write content for and design monthly outreach newsletter and outreach website** aimed at disseminating information about research being conducted and resources available that are relevant to K-12 educators.
- 2020 - 21 **Developed, organised, and hosted series of online workshops** on Climate Science designed as professional development for K-12 educators.
- 2015 - 21 **Developed and conducted science activities** in Science Fairs in ~20 elementary and middle schools to teach students about evolution
- 2019 **Collaborated with a local artist** to create an oil on canvas diptych based on her interpretation of my research titled *Contextual Influences on Algorithmic Reasoning*
- 2018 - 19 **Conducted science activities** for over 1000 children and adults during the annual Darwin Day and Michigan State University (MSU) Science Festival events.
- 2012 - 13 Long Term Ecological Research Program at the Kellogg Biological Station, Michigan State University
- Developed an outdoor activity trail** along with relevant educational activities based on research done at the station and were aimed at improving elementary students' understanding of agriculture, agricultural practices and ecology.
- Co-designed an activity booklet** to go along with the trail activities.
- Co-authored** a teacher's manual for the activity trail.
- Authored** a manual for the activity trail guides.
- Designed and customised assessment materials** for the various demographic audiences of the activity trail.
- Co-ordinated and led school tours** at the activity trail.
- 2012 - 13 W.K. Kellogg Bird Sanctuary, Michigan State University
- Developed educational materials** for outreach activities.

Redesigned and customised the Agriculture and Ecology activity trail to leverage the different landscape at the Bird Sanctuary, and to cater to multiple audiences, based on previous assessments and feedback received.

Led tours on the activity trail for school students and local community members.

Exhibited bird migration and conservation related material at the county fair.

2012 - 13 Kellogg Biological Station's Pasture Dairy.

Organised and conducted multiple seminars, field trips and outreach sessions based on dairy related research, tailored for diverse audiences.

Customised and led tours for groups including school children and dairy professionals.

Planned and organised events including open house days to showcase the research and facilities at the KBS Pasture Dairy.

2009 **Developed and conducted a session on science communication** in daily lives for Indian and Thai students, teachers and scientists at the VIII Global Conference on Environmental Education. Organized by IES, in association with Department of Science and Technology, Ministry of Environment and Forests and GLOBE, Goa, India.

2009 - 11 **Edited and contributed to the 'science and environment' section** of a community magazine, 'San Tomecho Saad'.

2009 **Planned and organised social awareness campaigns** on 'Alternative to Plastics' and 'The Threat of Tobacco'

SELECTED LEADERSHIP

DISCIPLINARY:

2019 - **Chair**, Electoral Committee for international organisation Evolutionary Knowledge for Everyone (EvoKE)

2019 - 20 **Chair**, Bylaws and Elections Subcommittee for Discipline Based Education Research – Scholars in Training (DBER-SiT)

2017 - 20 **Leadership Team member**, DBER-SiT

2018 - 19 **Co-chair**, Media Committee for DBER-SiT

2017 **Co-founder**, international special interest group for graduate students and post-docs interested in and pursuing Biology Education Research. Discipline Based Education Research – Scholars in Training (DBER-SiT). tinyurl.com/y4dc56wy

2010 **Co-organiser and co-host**, national seminar on 'People's Agenda On Climate Change'. Organized by Indian Environmental Society (IES) and Don Bosco High School, Panjim, India.

UNIVERSITY:

2015 - 20 **Advisor**, Women's Advisory Committee to the VP for Student Affairs and Services, MSU.

2016 - 19 **Advisor**, Women's Advisory Committee to the Provost, MSU.

2015 - 19 **Elected Representative**, Council of Graduate Students, MSU

2016 - 17 **Chair**, Women's Advisory Committee to the VP for Student Affairs and Services, MSU.

SELECTED RELEVANT AWARDS AND ACHIEVEMENTS

ACADEMIC:

- 2020 Membership to the American Association for the Advancement of Science (AAAS) through the AAAS/Science Program for Excellence in Science
- 2009 Goa Liberation Council Scholarship for securing the first rank in Bachelor of Education Examination, Goa, India
- 2009 First Rank in Bachelor of Education Examination, Goa University, Goa, India
- 2005 First Rank in Zoology at the Goa University Examination, Goa, India

NON-ACADEMIC:

- 2021 Finalist – Reach Out Science Slam, Museum of Science, Boston, MA, USA
- 2017 Council of Graduate Students Circle Award, Council of Graduate Students, Michigan State University, MI, USA
- 2005 All Round Student of Science Stream, Carmel College of Arts, Science and Commerce for Women, Goa, India

PROFESSIONAL DEVELOPMENT AND TRAININGS

SCIENCE COMMUNICATION:

- 2021 The En-ROADS Climate Ambassador Program, Climate Interactive (independent, not-for-profit think-tank)
- 2021 Crafting an Engaging Science Story, Reach Out Science Communication Workshops, Museum of Science, Boston, MA
- 2019 Acing your Virtual Presentation, Reach Out Science Communication Workshops, Museum of Science, Boston, MA

LEADERSHIP:

- 2021 Diversity, Equity and Inclusion in the Workplace Certificate program. Muma College of Business, University of South Florida
- 2021 Developing Professional Skill Sets in Mentoring and Advising Relationships, Center for the Integration of Research, Teaching and Learning, Online
- 2020 Cultural Competency for Personal, Organizational, and Community Change, College of Natural Science, Michigan State University, MI.

COMMUNITY ENGAGEMENT:

- 2019 Towards Understanding the Role of Adult Education and VET in Promoting Active Citizenship and Inclusion - Lessons from cross-national research. Universität Hamburg, Hamburg, Germany.
- 2019 The beauty and pleasure of understanding in out-of-school settings: engaging with ethical research challenges. ESERA SIG 3: Science Education in Out-Of-School Contexts. Fondazione Golinelli, Bologna, Italy.
- 2014 Engaging K-12 Teachers in Authentic Ecology and Education Learning, Sacramento, CA

TEACHING AND LEARNING:

- 2021 Trauma-Responsive Teaching, Center for the Integration of Research, Teaching and Learning, Online
- 2020 Cracking Open the Black Box of Assessment, Division of Chemical Education - Chemical Education Research Committee (CHED-CHERC), Online.
- 2018 Inclusive Classrooms, Michigan State University, MI

ACADEMIA:

- 2021 Socioscientific Issues (SSI) and Evolution, EuroScitizen COST Action, Online.
- 2019 Emerging Researchers' Conference. Universität Hamburg, Hamburg, Germany.
- 2015 Responsible Conduct of Research, Scholarship and Creative Activities Workshop Series, The Graduate School, Michigan State University, MI.

ADDITIONAL RESEARCH TRAINING AND INTERNSHIPS

- 2007 **Collected, processed and analysed seawater and ocean sediment samples** on board ORV Sagar Kanya in the Bay of Bengal
- 2003 **Participated in a mangrove community composition survey** on Bali Island in the Sunderbans, West Bengal, India directed by the World Wildlife Fund.
- 2003 **Prepared plant tissue culture and conducted microbiological tests** specifically LAL test. Cosme Pharma Limited, Bicholim, Goa, India.
- 2003 **Conducted microbiological and chemical analysis of bodily fluids** including blood and cerebrospinal fluid. Department of Microbiology, Goa Medical College, Bambolim, Goa, India.
- 2003 **Conducted haematological tests, and histological preparations of human tissue.** Department of Pathology, Goa Medical College, Bambolim, Goa, India.
- 2003 **Performed physical and biological quality control tests** on pharmaceutical products. Quality Control Department, Geno Pharmaceuticals Limited, Mapusa, Goa, India.

SELECTED PRO BONO/ VOLUNTEER WORK

- 2012 - 20 W.K. Kellogg Manor House, Michigan State University
Docent. I led tours and interacted with the public and the media (<http://tinyurl.com/mbombkc>).
Event Manager. I planned, organised and managed the Annual Holiday Walk and Market.
Event co-ordinator. I conducted client-tours and helped co-ordinate several events such as weddings, teas and corporate dinners.
Creative assistant. I designed and created publicity and marketing material for various Manor House events.
Office Assistant. I handled some accounting and clerical work.
- 2012 - 13 **Digital archivist.** I archived documents of historical and operational value for KBS
- 2000 - 12 **Compere/MC.** I was the host at the Institutional Annual Day celebrations, inter-collegiate festivals, and various social functions.
- 2002 - 11 **Invited speaker.** I delivered talks on environmental issues and personality development to audiences of parents, children, adults and youth
- 2009 **Audiobook Narrator.** I narrated several audio-textbooks for the National Association for the Blind, India
- 2003 - 07 **Event Planner.** I was instrumental in planning and organizing various social activities
- 2000 - 06 **Fund-raiser.** I participated in fund-raising and awareness programs for Non-Governmental Organizations such as Lions Club International and Help Age India

OTHER WORK EXPERIENCE

- 2002 - 14 **Event Manager & Wedding Planner.** I planned organised and coordinated several large in-person and virtual public events and weddings in India and in the USA.
- 2002 **Manager.** I managed a dry-cleaning store.

SELECTED PROFESSIONAL AFFILIATIONS

DISCIPLINARY SOCIETY:

- 2021 Life Sciences Switzerland (LS²)
- 2020 - American Association for the Advancement of Science (AAAS)
- 2019 - European Science Education Research Association (ESERA)
- 2019 - Evolutionary Knowledge for Everyone (EvoKE)
- 2016 - Society for the Advancement of Biology Education Research (SABER)