

## City of London - Application for Appointment to City of London Community Advisory Committees

### Application

Committee you are interested in serving on: **Ecological Community Advisory Committee**

If applying for the Accessibility Community Advisory Committee, please select: **No, I am not an applicant with a disability.**

If applying for the Ecological Community Advisory Committee, a professional designation, education or experience in related fields is a requirement based on the technical nature of the committee work. Please indicate your area(s) of expertise: **Biology; Botany; Ecology; Other**

If you selected 'Other', please specify: **Evolution**

### Contact Information

Name: **Matheus Sanita Lima**

City: **London**

Province: **ON**

Postal Code: **N6H 4S3**

### Experience and Qualifications

If you have experience on a London Advisory Committee, please provide dates and details. (max. 250 characters): **I do not have experience on a London Advisory Committee.**

What do you hope to contribute or learn as part of a Community Advisory Committee? (max. 250 characters): **I am a biologist (MSc) with extensive experience in molecular ecology and evolution. I have had the opportunity to live in five countries and experience academia in three continents. My journey has equipped me a broad comparative perspective from which I draw creativity, resilience, and resourcefulness. Should I be granted the opportunity to join the ECAC, I will aim bring to the table my research-based global perspective on any environmental issue we might face. I also hope to build stronger connections with the city of London, and to learn as much as I can from all my peers at the Committee. Traveling around the world has taught me the value of diversity and multiplicity of ideas for the greater common good.**

How will you support the work of a Community Advisory Committee? (max. 250 characters): **I am fortunate to have a PhD supervisor who fully supports my endeavours in and outside of academia. My schedule is flexible as well, so I am certain I will be able to support all the work that is presented to this committee. I aim to work collaboratively with everyone and to bring my expertise in Biology, Ecology & Evolution to the forefront whenever needed.**

Please describe additional experience, training, or community involvement that will help you in your role as a Community Advisory Committee Member. (max. 250 characters): **- 2020 - ongoing: Executive member of the Academic Policy and Regulations Committee of the Graduate Education Council-SGPS, University of Western Ontario.  
- 2016: Chairperson of the Biology Research Graduate Forum (BGRF), at the University of Western Ontario.  
- 2015 - 2017: Executive member of the Society of Biology Graduate Students in the Research and Graduate Education Committees of the Department of Biology, University of Western Ontario.**

Attach resume or other document here, if needed: **Matheus\_Sanita\_CV\_2022.pdf**

Attach more files here, if needed:

### Confirmations

I declare the following: **I am a resident of London. ; I am at least 18 years old.; I am not a City employee or Council member.; I understand that the commitment may be up to 4 hours per month to attend meetings and prepare.; I understand that my application and any attachments will be included on a public agenda that is published on the City website.**

To help inform our outreach activities, please tell us how you heard about this opportunity:  
(optional): **Other**

If you selected 'Other', please specify: **Email from Sandy Levin sent to my department**

Submitted on: **3/15/2022 12:49:51 PM**

# Matheus Sanitá Lima

## *Curriculum vitae, 2022*

### CONTACT

Department of Biology  
Biological & Geological Sciences Bldg.  
University of Western Ontario  
1151 Richmond Street  
London, Ontario, Canada, N6A 5B7.

**RESEARCH FIELD:** Molecular evolution of organelle genomes

**12** peer-reviewed academic papers; **7** awards; **6** talks (**4** conference talks, **1** invited talk and **1** science outreach talk); **2** posters; **6** TAs (ships) (**4** full TAs (ships) and **2** half TAs (ships)); **1** invited lecture; **1** workshop (lead by me); **15** positions in services and volunteer work; over **140h** of professional development.

### EDUCATION

**PhD, Biology** (01/2022 – ongoing)  
Department of Biology, University of Western Ontario  
London, Ontario, Canada  
Supervisor: Dr. David Roy Smith

**MSc, Biology** (09/2015 – 08/2017)  
Department of Biology, University of Western Ontario  
London, Ontario, Canada  
Supervisor: Dr. David Roy Smith  
Dissertation title: *“Unravelling organelle transcriptional architecture using RNA-sequencing data.”*

**BSc, Honours Biology** (2008 – 2013)  
Department of Biology, University of Sao Paulo  
Ribeirao Preto, Sao Paulo, Brazil  
Supervisor: Dr. Maria de Lourdes Polizeli  
Honours thesis title: *“Bioprospection of filamentous fungi for enzyme production with industrial applications.”*

Exchange programs:

- 2012 – 2013: Science without Borders undergraduate exchange program – GPA 4.2 (out of 4.3 – Dean’s list in 2013), University of New Brunswick, CANADA.
- 2011 – 2012: Undergraduate exchange program, University of Minho, PORTUGAL.

## MAJOR AWARDS, GRANTS & FUNDING

2022: **Ontario Graduate Scholarship** (\$15,000 CAD). \*There were only 8 scholarships designated to international students across campus.

2017: **Chunfang Hu Graduate Prize** (\$400 CAD). \*Awarded to the top thesis in the broad area of plant sciences.

2017: **Dr. René R. Roth Memorial award** (\$1,300 CAD). \*Awarded to an international Biology graduate student with high standing in academics and research

2017: **Volvox 2017 travel award from the Donald Danforth Plant Science Center** (\$1,140 USD).

2017: **PSAC 610 Outstanding research contributions scholarship** (\$400 CAD).

2017: **Department of Biology (Western University) travel award** (\$200 CAD).

2015: **Honerkamp-Smith travel award** to the 3<sup>rd</sup> International Volvox Conference, University of Cambridge, ENGLAND (£ 380).

## RESEARCH

### Refereed academic papers

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**Sanitá Lima M**, and Coutinho de Lucas, R. 2022. Co-cultivation, co-culture, mixed cultures, and microbial consortium of fungi: an understudied strategy for biomass conversion. *Frontiers in Microbiology*. 12:837685.

de Lucas RC, de Oliveira TB, **Sanitá Lima M**, et al. 2021. The profile secretion of *Aspergillus clavatus*: different pre-treatments of sugarcane bagasse distinctly induces holocellulases for the lignocellulosic biomass conversion into sugar. *Renewable Energy*. 165(1):748-757. <https://doi.org/10.1016/j.renene.2020.11.072>

de Lucas RC, de Oliveira TB, **Lima MS**, et al. 2020. Effect of enzymatic pretreatment of sugarcane bagasse with recombinant hemicellulases and esterase prior to the application of the cellobiohydrolase CBH I Megazyme ®. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-020-00719-9>

**Sanitá Lima M**, Coutinho de Lucas R, Lima N, Polizeli MLTM, Santos C. 2019. Fungal community ecology using MALDI-TOF MS demands curated mass spectral databases. *Frontiers in Microbiology*. 10:315.

**Sanitá Lima** & Smith DR. 2017. Don't just dump your data and run. *EMBO rep*. e201745118.

**Sanitá Lima M** & Smith DR. 2017. Pervasive transcription of mitochondrial, plastid, and nucleomorph genomes across diverse plastid-bearing species. *Genome Biol Evol.* 9:2650-2657.

**Sanitá Lima M** & Smith DR. 2017. Pervasive, genome-wide transcription in the organelle genomes of diverse plastid-bearing protists. *G3.* 7:3789-3796.

Smith DR & **Sanitá Lima M**. 2016. Unravelling chloroplast transcriptomes with ChloroSeq, an organelle RNA-Seq bioinformatics pipeline. *Briefings in Bioinformatics* bbw088. doi: 10.1093/bib/bbw088

**Sanitá Lima M**, Woods LC, Cartwright MW, Smith DR. 2016. The (in)complete organelle genome: exploring the use and non-use of available technologies for characterizing mitochondrial and plastid genomes. *Molecular Ecology Resources.* 16:1279-86.

**Lima MS**, Damasio ARL, Crnkovic PM, Pinto MR, da Silva AM, da Silva JCR, Segato F, de Lucas RC, Jorge JA and Polizeli MLTM. 2016. Co-cultivation of *Aspergillus nidulans* recombinant strains produces an enzymatic cocktail as alternative to alkaline sugarcane bagasse pretreatment. *Frontiers in Microbiology.* 7:583.

da Silva TM, Pessela BC, da Silva JCR, **Lima MS**, Jorge JA and Polizeli MLTM. 2014. Immobilization and high stability of an extracellular  $\beta$ -glucosidase from *Aspergillus japonicus* by ionic interactions. *Journal of Molecular Catalysis B: Enzymatic.* 104:95-100.

Benassi VM, da Silva TM, Pessela BC, Guisan JM, Mateo C, **Lima MS**, Jorge JA, Polizeli MLTM. 2012. Immobilization and biochemical properties of  $\beta$ -xylosidase activated by glucose/xylose from *Aspergillus niger* USP-67 with transxylozylation activity. *Journal of Molecular Catalysis B: Enzymatic.* 89:93-101.

### **Domestic conference presentations & posters**

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Poster: **Sanitá Lima M** & Smith DR. Western Research Forum 2017. 10 March 2017, *University of Western Ontario, CANADA.*

Poster: **Sanitá Lima M** & Smith DR. Fallona Interdisciplinary Research Showcase 2017. 16 January 2017, *University of Western Ontario, CANADA.*

Talk: **Sanitá Lima M** & Smith DR. Biology Graduate Research Forum 2016. 13-14 October 2016, *University of Western Ontario, CANADA.*

Talk: **Sanitá Lima M**, Woods LC, Cartwright MW and Smith DR. Canadian Society of Zoologists Conference 2016. 9-13 May 2016, *University of Western Ontario, CANADA.*

Talk: **Sanitá Lima M**, Woods LC, Cartwright MW and Smith DR. Ontario Ecology Ethology and Evolution Colloquium 2016. 5-7 May 2016, *University of Toronto*, CANADA.

### **International conference presentations & posters**

Talk: **Sanitá Lima M** and Smith Dr. 3<sup>rd</sup> International *Volvox* Conference 2016. 19-22 Aug 2015, *University of Cambridge*, ENGLAND.

**Other talks** (e.g. Invited talks, Science outreach events, internal science advertising events)

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Invited talk: **Sanitá Lima, M**. PhD application talk. December 2016, University of Dusseldorf, GERMANY. \*I was invited to give this talk as the final part of the PhD selection process in the Institute of Molecular Evolution, University of Dusseldorf, GERMANY.

Talk: **Sanitá Lima, M** & Smith, DR. Science goes international 2015. June 2015, *University of Western Ontario*, CANADA.

### **TEACHING**

#### **Teaching assistantships** (four months sessions, unless otherwise stated)

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Winter 2017: **Laboratory teaching assistant** in Evolutionary Genetics, *University of Western Ontario*, CANADA.

*Guided 80 3<sup>rd</sup> year undergraduate students six hours per week. Marked assignments.*

TA evaluation: *TA evaluation (anonymous student ranking) available at the end of the current term.*

Fall 2016: **Laboratory teaching assistant** in Analysis & Interpretation of Biological Data, *University of Western Ontario*, CANADA.

*Guided 40 2<sup>nd</sup> year undergraduate students three hours per week.*

TA evaluation: *TA evaluation (anonymous student ranking) can be supplied upon request.*

Fall 2016: **Tutorial teaching assistant** in Principles of Human Genetics, *University of Western Ontario*, CANADA.

*Directed 60 3<sup>rd</sup> year undergraduate students one hour per week. Marked exams and assignments.*

TA evaluation: *TA evaluation not performed in this course this year.*

Fall 2015: **Tutorial teaching assistant** in Principles of Human Genetics, *University of Western Ontario*, CANADA.

*Directed 60 3<sup>rd</sup> year undergraduate students two hours per week. Marked exams and assignments.*

TA evaluation: 64% of the students ranked my work as outstanding and 36% as good. *Confirmatory data (anonymous student ranking) can be supplied upon request.*

Winter 2016: **Tutorial teaching assistant** in Genetics, *University of Western Ontario, CANADA.*

*Taught 100 2<sup>nd</sup> year undergraduate students two hours per week. Marked assignments. TA evaluation: 37% of the students ranked my work as outstanding, 48% as good and 15% as adequate. Confirmatory data (anonymous student ranking) can be supplied upon request.*

### **Invited lecture**

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Winter 2017: **Lecture title: “Bioinformatics without leaving home”** for Selected topics in Biology: Genome evolution (50min, 4<sup>th</sup> year undergraduate course/graduate course – 20 students), *University of Western Ontario, CANADA.*

### **Workshops** (designed and/or taught by me)

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2017: **Workshop leader** in the Western Student Research Conference 2017 at the *University of Western Ontario, CANADA.*

Workshop title: Best practices in oral and poster presentation.

*Conducted a 2h and half workshop with 20 participants.*

### **SERVICES & LEADERSHIP**

2016 – 2017: **Executive member of the Society of Biology Graduate Students (SOBGS)** as a SOBGS representative in the Graduate Education Committee, at the *University of Western Ontario, CANADA.*

2017: **Application ranker** for the National Scholarships, at the *University of Western Ontario, CANADA.*

2017: **Abstract reviewer** for the Western Student Research Conference 2017, at the *University of Western Ontario, CANADA.*

2017: **Abstract reviewer** for the Society for Teaching and Learning in Higher Education (STLHE) Conference 2017.

2016: **Panellist** in “What to expect from Grad School?” (1.5h) for Honours Research Thesis course, at the *University of Western Ontario, CANADA.*

2016: **Panellist** in “What is Grad School about?” (2h) for the Graduate Orientation week, at the *University of Western Ontario, CANADA.*

2016: **Chairperson** of the Biology Research Graduate Forum (BGRF) 2016, at the *University of Western Ontario, CANADA.*

2016: **Organizing Committee member** of the Symposium on Sustainable Agriculture in the Great Lakes Basin (SSAGLB) 2016, at the *University of Western Ontario, CANADA*.

2016: **Poster judge** for the Western Student Research Conference, at the *University of Western Ontario, CANADA*.

2016: **Award judge** for the Society of Graduate Students TA award at the *University of Western Ontario, CANADA*.

2015 – 2016: **Executive member of the Society of Biology Graduate Students (SOBGS)** as a SOBGS representative in the Research Committee, at the *University of Western Ontario, CANADA*.

## **VOLUNTEER EXPERIENCE**

2017: **Biology graduate student representative** for the University of Western Ontario March Open House, at the *University of Western Ontario, CANADA*.

2016: **Biology graduate student representative** for the Science Students Council Graduate Fair 2016, at the *University of Western Ontario, CANADA*.

2016: **Session moderator and way finder** for the Society for Teaching and Learning in Higher Education (STLHE) Conference 2016, at the *University of Western Ontario, CANADA*.

2016: **Session moderator** for the Canadian Society of Zoologists (CSZ) Conference 2016, at the *University of Western Ontario, CANADA*.

## **PROFESSIONAL DEVELOPMENT & TRAINING**

2017: **Future Prof Series Workshops** (1 workshop ~ 2h) by the *Teaching Support Centre, University of Western Ontario, CANADA*. [\\*full list of workshops: "From the OWL's nest: Best Practices in course site design"](#).

2017: **Winter Conference on Teaching** (5h) at the *University of Western Ontario, CANADA*. [\\*full list of sessions: "Leadership in higher education: what does it take?"; "Browsers, and smartphones, and clickers, oh my!"; "Great Ideas for Teaching \(GIFT\) Award Winners presentation"](#).

2017: **Navigating the Challenges of Graduate School for Women Series** (3 events ~ 2h each) by the *Teaching Support Centre, University of Western Ontario, CANADA*. [\\*full list of workshops: "The graduate student perspective: panel discussion"](#).

2016: **Winter Conference on Teaching** (5h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **Teaching Workshop for TAs** (1.5h) at the Canadian Society of Zoologists Conference 2016.



2016: **Teaching Statistics Summer Course** (48h / 8 weeks) at the *University of Western Ontario, CANADA*. \*as a result of this summer course, I developed a course outline for undergraduate students entitled: "BIO 4000 – Ecology & Evolution Stats".

2016: **Teaching Mentor Program** (5h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **Teaching Master Classes – Lecture in Astronomy** (1.5h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **Successfully Collaborating on Research Teams** (2h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **Public speaking – Giving Effective Presentations in Grad School** (2h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **Future Prof Series Workshops** (8 workshops ~ 2h each) by the *Teaching Support Centre, University of Western Ontario, CANADA*. \*full list of workshops: "Putting together a teaching dossier"; "From CV to Resume"; "Getting it done: strategies for finding focus and overcoming procrastination in grad school"; "Writing effective cover letters"; "Teaching tough concepts in Science"; "Netiquette: communicating with your students"; "Open Educational resources for teaching and learning: Trends & Opportunities"; "Designing your own course: components of a great syllabus".

2016: **Future Prof Series Workshops** (3 workshops ~ 2h each) by the *Teaching Support Centre, University of Western Ontario, CANADA*. \*full list of workshops: "Threshold concepts: teaching troublesome knowledge in the disciplines"; "Navigating a sea of eLearning tools"; "Wrapping up the term – marking and proctoring strategies".

2016: **Fall Perspectives on Teaching Conference** (5h) at the *University of Western Ontario, CANADA*. \*full list of sessions: "Remembering who we are: indigenising, teaching and the university"; "Using online activities to build students' research capacity"; "Bridging classroom and community: an engaged pedagogy"; "Higher education – the state of play: reflections from Western 3M teaching fellows";

2016: **Creating Gender Inclusive Classrooms and Universities** (1h) by the *Teaching Support Centre, University of Western Ontario, CANADA*.

2016: **ATP - Advanced Teaching Program** (20h) by the *Teaching Support Centre, University of Western Ontario, CANADA*. \*as a result of the ATP, I developed a 100 min workshop for graduate students, post docs and faculty members entitled: "Teaching Evolution through the Conceptual Change Model (CCM)".

2015: **Teaching in the Canadian Classroom** (16h) by the *Teaching Support Centre, University of Western Ontario, CANADA*. \*requirement for the Western Certificate in Academic and Professional Communication for International Graduate Students.

2015: **TATP - Teaching Assistant Training Program** (18h) by the *Teaching Support Centre, University of Western Ontario, CANADA.*

2015: **TA day - Graduate Student Conference on Teaching** (5h) by the *Teaching Support Centre, University of Western Ontario, CANADA.*

2015: **Language of Conference Presentations** (8h) by the *Teaching Support Centre, University of Western Ontario, CANADA.* \*requirement for the [Western Certificate in Academic and Professional Communication for International Graduate Students.](#)

2015: **Language of Academic Job Interviews** (6h) by the *Teaching Support Centre, University of Western Ontario, CANADA.* \*requirement for the [Western Certificate in Academic and Professional Communication for International Graduate Students.](#)

2015: **ITA day - International Teaching Assistant Day** (4h) by the *Teaching Support Centre, University of Western Ontario, CANADA.*

2015: **Getting mentored – Building successful Academic Relationships Across Cultures** (2h) by the *Teaching Support Centre, University of Western Ontario, CANADA.*

2015: **Communication in the Canadian Classroom** (12h) by the *Teaching Support Centre, University of Western Ontario, CANADA.* \*requirement for the [Western Certificate in Academic and Professional Communication for International Graduate Students.](#)

### **Required training**

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2021: General Laboratory safety and hazardous waste management training.

2021: Comprehensive WHMIS training.

2021: Accessibility at Western (AODA) – accessibility in Service.

2021: Safe Campus Community: Preventing harassment, Violence and Domestic Violence.

2021: Worker Health and Safety Awareness.

2021: New WHMIS.