

Thiago M. Pasin

The University of Texas at San Antonio
One UTSA Circle
San Antonio, TX 78249
Mobile: (726) 205-4192
thiago.machadopasin@utsa.edu

Expanding the knowledge of **microbial enzymes** with agricultural interest.

Passionate by using **molecular biology** strategies to understand the **structure-activity relationship of proteins**.

Hard skills

- Bioprospecting of **filamentous fungi** and screening of **industrial enzymes**
- Microorganism **cultivation** and optimization of conditions for protein production
- Bacterial **transformation** for **protein expression**
- Protein **purification** with AKTA FPLC including affinity, ion exchange, HIC, Size exclusion, etc
- **ELISA** method development/optimization/validation for proteins activity assays
- Enzyme **kinetics** by spectrophotometer/UV-vis
- Separation of reaction products by **HPLC**
- Biochemical characterization of proteins by **Circular Dichroism** Spectrophotometer
- **RT-PCR** method development for thermal shift enzymatic
- **X-ray diffraction** data collection using the **Stanford Synchrotron Radiation Light source**
- **Determination of protein structures** using PHENIX, Phaser-MR, and Coot software
- Fluency in languages: **English** and **Portuguese**.

Soft skills

Adaptability, Creativity, Critical thinking, Effective communication, Leadership, Problem-solving, Teamwork, Work Ethical.

Education and Research Experience

The University of Texas at San Antonio, USA

Postdoctoral Research Fellow

September 2021 – present

Department of Chemistry

Projects: *Iron biofortification of graminaceous crops; The Chemistry of Riboflavin Biosynthesis.*

Mentor: Audrey Lamb

University of Sao Paulo, Brazil

Ph.D. in Biochemistry

August 2016 – December 2020

Department of Biochemistry and Immunology

Dissertation: *Production of xylooligosaccharides by an endoxylanase from Aspergillus clavatus with subsequent expression in Escherichia coli and application of an enzymatic cocktail from Aspergillus brasiliensis in the production of lactic acid.*

Mentor: Maria de Lourdes T. M. Polizeli

Centro Universitário Barão de Mauá, Brazil
Specialization in Teaching for Higher Education May 2016 – November 2016
Thesis: *Quotas and PROUNI: influence of affirmative actions in the process of teaching-learning of the XXI century.*
Mentor: Lidyane Aline de Freitas

University of Sao Paulo, Brazil
M.Sc. in Biochemistry March 2013 – July 2015
Thesis: *Prospecting, purification, and functional properties of a glucoamylase from Aspergillus japonicus: application of the enzymatic extract in paper recycling.*
Mentor: Maria de Lourdes T. M. Polizeli

University of Sao Paulo, Brazil
Undergraduate researcher August 2009 – July 2012
Department of Biology
Mentor: Maria de Lourdes T. M. Polizeli

Centro Universitário Barão de Mauá, Brazil February 2008 – December 2011
B.S. Biological Science/Biochemistry
Thesis: *Study of amylases produced by filamentous fungi* (based on a 3-year research at the Department of Biology, University of Sao Paulo, Brazil).
Mentor: Maria de Lourdes T. M. Polizeli

Awards and Fellowships

ACS Division of Biological Chemistry Travel Award January 2024
Award to attend the 28th Enzyme Mechanisms Conference to present the poster/talk: Phytosiderophore biosynthesis enzymes from graminaceous plants: key tools for future food security.
Naples, FL, USA

Nominated for UTSA Postdoctoral Research Fellow of the Year Award September 2023
Office of Postdoctoral Affairs
UTSA Graduate School
San Antonio, TX, USA

Graduate Research Fellowship (Ph.D.) August 2016 – December 2020
University of São Paulo, Brazil
Funding: Coordination for the Improvement of Higher Education Personnel (Brazil)

Best Oral Presentation Award July 2019
Presentation title: Paper industry wastes as carbon sources for *Aspergillus* species cultivation and production of holocellulases for biotechnological application at the XXII National Symposium on Bioprocesses (SINAFERM) and XIII Symposium on Enzymatic Hydrolysis of Biomass.
Federal University of Uberlandia, Brazil

Visiting Research Scholar Fellowship (Ph.D.) November 2018 – May 2019
Indiana University-Purdue University Indianapolis, USA

Funding: Coordination for the Improvement of Higher Education Personnel (Brazil)

Graduate Research Fellowship (M.Sc.)

March 2013 - July 2015

University of São Paulo, Brazil

Funding: São Paulo Research Foundation (Brazil)

Undergraduate Research Fellowship (B.Sc)

August 2010- July 2012

University of São Paulo, Brazil

Funding: National Council for Scientific and Technological Development (Brazil)

Publications Peer Reviewed

1. **Pasin TM**, Betini JHA, de Lucas RC, Polizeli MLTM (2023). Biochemical characterization of an acid-thermostable glucoamylase from *Aspergillus japonicus* with potential application in the paper bio-deinking. *Biotechnology Progress*, e3384. [doi:10.1002/btpr.3384](https://doi.org/10.1002/btpr.3384)
2. Marinho GO, Nogueira EA, **Pasin TM**, Oliveira TB, Roa JPB, Nelson DL, Benassi VM (2023). An Environmentally Safe Production of Xylanases by *Fusarium* sp. EA 1.3.1 Using Agroindustrial Residues: Biochemical Characterization and Potential Applications. *Asian Journal of Biochemistry, Genetics and Molecular Biology* 14(4). doi.org/10.9734/ajbgmb/2023/v14i4319
3. Silva MT, Lopes PHS, **Pasin TM**, Nelson DL, Benassi VM (2023). Production of beta-D-fructofuranosidases by *Aspergillus* sp. M2.4 and biochemical characterization (in Portuguese). *The Journal of Engineering and Exact Sciences* 9(5), 15943–01e. doi.org/10.18540/jcecv9iss5pp15943-01e
4. **Pasin TM**, Moreira EA, Benassi VM, Spencer PVD, Peres NTA, Cereia M, Polizeli MLTM (2022). Effects of Ultraviolet Exposure on the Tropical Fungi *Aspergillus carbonarius* and *Aspergillus japonicus*: Survival, Amylase Production, and Thermostability. *Tropical Conservation Science* 15. doi.org/10.1177/19400829221092638
5. Silva, LTA, De Oliveira TMFS, Marinho BM, **Pasin TM**, Nelson DL, Pires, JRM, Benassi, VM (2022). Isolation of High Amylase-producing Filamentous Fungi from the Caatinga: Standardization of the Culture Conditions and Amylase Activity from *Penicillium* sp. L1. *Asian Journal of Research in Biochemistry* 10, 1-15. doi.org/10.9734/ajrb/2022/v10i130211
6. **Pasin TM**, De Oliveira TB, Scarcella ASA, Polizeli MLTM, Guazzaroni ME (2021). Perspectives on Expanding the Repertoire of Novel Microbial Chitinases for Biological Control. *Journal of Agricultural and Food Chemistry* 69, 3284-3288. doi.org/10.1021/acs.jafc.1c00219
7. Scarcella ASA, **Pasin TM**, De Oliveira TB, De Lucas RC, Ferreira-Nozawa MS, Freitas EN, Vici AC, Buckeridge MS, Michelin M, Polizeli MLTM (2021). Saccharification of different sugarcane bagasse varieties by enzymatic cocktails produced by *Mycothermus thermophilus* and *Trichoderma reesei* RP698 cultures in agro-industrial residues. *Energy* 226, 120360. doi.org/10.1016/j.energy.2021.120360
8. **Pasin TM**, Scarcella ASA, De Lucas RC, De Oliveira TB, Cereia M, Polizeli MLTM (2021). An Eco-Friendly Production of a Novel and Highly Active Endo-1,4-beta-xylanase from *Aspergillus clavatus*. *Asian Journal of Biochemistry, Genetics and Molecular Biology* 9, 20-33. doi.org/10.9734/ajbgmb/2021/v9i330219

9. Scarcella ASA, **Pasin TM**, De Lucas RC, Ferreira-Nozawa MS, De Oliveira TB, Contato AG, Grandis A, Buckeridge MS, Polizeli MLTM (2021). Holocellulase production by filamentous fungi: potential in the hydrolysis of energy cane and other sugarcane varieties. *Biomass Conversion and Biorefinery*, 1-12. doi.org/10.1007/s13399-021-01304-4
10. De Lucas RC, De Oliveira TB, Lima MS, **Pasin TM**, Scarcella ASA, Ribeiro LFC, Carvalho C, Damásio ARL, Buckeridge MS, Prade RA, Segato F, Polizeli MLTM (2020). The profile secretion of *Aspergillus clavatus*: different pre-treatments of sugarcane bagasse distinctly induce holocellulases for the lignocellulosic biomass conversion into sugar. *Renewable Energy* 165, 748-757. doi.org/10.1016/j.renene.2020.11.072
11. De Oliveira TB, De Lucas RC, Scarcella ASA, Contato AG, **Pasin TM**, Martinez CA, Polizeli MLTM (2020). Effects of multiple climate change factors on exoenzyme activities and CO₂ efflux in a tropical grassland. *Soil Biology and Biochemistry* 148, 107877. doi.org/10.1016/j.soilbio.2020.107877
12. De Oliveira TB, De Lucas RC, Scarcella ASA, Contato AG, **Pasin TM**, Martinez CA, Polizeli MLTM (2020). Fungal communities differentially respond to warming and drought in tropical grassland soil. *Molecular Ecology* 29, 1550-1559. doi.org/10.1111/mec.15423
13. **Pasin TM**, Salgado JCS, Scarcella ASA, De Oliveira TB, De Lucas RC, Cereia M, Rosa JC, Ward RJ, Buckeridge MS, Polizeli MLTM (2020). A halotolerant endo-1,4- β -xylanase from *Aspergillus clavatus* with potential application for agroindustrial residues saccharification. *Applied Biochemistry and Biotechnology* 191, 1111-1126. doi.org/10.1007/s12010-020-03232-x
14. Souza, MTS, Marinho, BM, **Pasin TM**, Nelson, DL, Benassi, VM (2020). Prospection of filamentous fungi and the production of amylase by *Aspergillus sp.* M1.7.2. *The Journal of Engineering and Exact Sciences* 6, 0365-0376. doi.org/10.18540/jcecvl6iss3pp0365-0376
15. Amorim, ICS, Marinho GO, Oliveira TMFS, Roa, JPB, Reis AB, Nelson DL, **Pasin TM**, Benassi, VM (2020). Isolation of filamentous fungi from the caatinga region and production of amylolytic enzymes of great industrial interest. *Journal of Biosciences and Medicines* 8, 152-164. doi.org/10.4236/jbm.2020.811014.
16. De Oliveira TB, De Lucas RC, Scarcella ASA, **Pasin TM**, Contato AG, Polizeli MLTM (2020). Cold-Active Lytic Enzymes and Their Applicability in the Biocontrol of Postharvest Fungal Pathogens. *Journal of Agricultural and Food Chemistry* 68, 6461-6463. doi.org/10.1021/acs.jafc.0c03085
17. De Lucas RC, De Oliveira TB, Lima MS, **Pasin TM**, Scarcella ASA, Prade RA, Segato F, Polizeli MLTM (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* 12, 491-499. doi.org/10.1007/s13399-020-00719-9
18. **Pasin TM**, Scarcella ASA, De Oliveira TB, De Lucas RC, Cereia M, Betini, Jorge HA, Polizeli MLTM (2020). Paper Industry Wastes as Carbon Sources for *Aspergillus* Species Cultivation and Production of an Enzymatic Cocktail for Biotechnological Applications. *Industrial Biotechnology* 16, 56-60. doi.org/10.1089/ind.2020.29201.tmp

19. De Oliveira TB, De Lucas RC, Scarcella ASA, **Pasin TM**, Martínez CA, Polizeli MLTM (2019). Perspectives on exploring denitrifying fungi as a model to evaluate nitrous oxide production and reduce emissions from agricultural soils. *Journal of Agricultural and Food Chemistry* 67, 12153-12154. doi.org/10.1021/acs.jafc.9b06249
20. **Pasin TM**, Moreira EA, De Lucas RC, Benassi VM, Ziotti LS, Cereia M, Polizeli MLTM (2019). Novel amylase-producing fungus hydrolyzing wheat and brewing residues, *Aspergillus carbonarius*, discovered in tropical forest remnant. *Folia Microbiologica* 65, 173-184, 2019. doi.org/10.1007/s12223-019-00720-4
21. Heinen PR, Pereira MG, Rechia CGV, Almeida PZ, Monteiro LMO, **Pasin TM**, Messias JM, Cereia M, Kadowaki MK, Jorge JA, Polizeli MLTM (2017). Immobilized endo-xylanase of *Aspergillus tamarii* Kita: an interesting biological tool for production of xylooligosaccharides at high temperatures. *Process Biochemistry* 53, 145-152. doi.org/10.1016/j.procbio.2016.11.021
22. **Pasin TM**, Benassi VM, Heinen PR, Damasio, ARL, Cereia M, Jorge JA, Polizeli MLTM (2017). Purification and Functional Properties of a Novel Glucoamylase Activated by Manganese and Lead Produced by *Aspergillus japonicus*. *International Journal of Biological Macromolecules* 102, 779-788. doi.org/10.1016/j.ijbiomac.2017.04.016
23. **Pasin TM**, Benassi VM, Moreira EA, Jorge JA, Polizeli MLTM (2014). Prospecting Filamentous Fungi for Amylase Production: Standardization of *Aspergillus japonicus* Culture Conditions. *Biotechnology Journal International* 4, 482-498. doi.org/10.9734/BBJ/2014/7659
24. Benassi VM, **Pasin TM**, Facchini FDA, Jorge JA, Polizeli MLTM (2013). A novel glucoamylase activated by manganese and calcium produced in submerged fermentation by *Aspergillus phoenicis*. *Journal of Basic Microbiology* 54, 333-339. doi.org/10.1002/jobm.201200515

Book chapters

1. Infante JC, De Lucas RC, De Oliveira TB, **Pasin TM**, Benassi VM, Nelson DL (2023). Sugarcane waste: current scenario in microbial valorization for biomolecules. In: Molina Gustavo; Sharma, Minaxi; Benhida, Rachid; Gupta, Vijai Kumar; Kuhad, Ramesh Chander. (Org.). *Microbial Bioprocessing of Agri-food Wastes: Bioactive Molecules*. 1ed. Boca Raton – FL: *CRC Press* 1, 31p. [10.1201/9781003128977-7](https://doi.org/10.1201/9781003128977-7)
2. Passos MSP, Rocha ACP, **Pasin TM**, Benassi VM (2021). Application of enzymes in food industries (in Portuguese). In: Freitas, DRJ. (Org.). *Microbiology: Advances through the centuries and constant technological updates (in Portuguese)*. 1ed. Ponta Grossa - PR: *Atena* 1, 11-26. doi.org/10.22533/at.ed.3382123112
3. **Pasin TM**, Almeida PZ, Scarcella ASA, Infante JC, Polizeli MLTM (2020). Bioconversion of agro-industrial residues to second-generation bioethanol. In: Nanda, Sonil; N. Vo, Dai-Viet; Sarangi, Prakash Kumar. (Org.). *Biorefinery of Alternative Resources: Targeting Green Fuels and Platform Chemicals*. 1ed. New York - USA: *Springer Nature* 1, 23-47. doi.org/10.1007/978-981-15-1804-1_2

Patents

1. **Pasin TM**, Polizeli MLTM, Scarcella ASA, Oliveira TB, Lucas RC (2021). AbPF saccharifying enzyme cocktail for agro-industrial waste. Request number: BR102021017813-2. Patent deposited on 09/08/2021.
2. Scarcella ASA, Polizeli MLTM, Buckeridge MS, Oliveira TB, **Pasin TM**, Lucas RC (2021). MtTrPM enzyme cocktail for saccharification of lignocellulosic biomass. Request number: BR102021013005-9. Patent deposited on 06/30/2021.

Invited Lectures

“Amylases: catalytic functions and industrial applications”

- Food Science and Technology, Federal University of Jequitinhonha and Mucuri Valleys, August 15, 2023.
- Food Science and Technology, Federal University of Jequitinhonha and Mucuri Valleys, October 25, 2022.

“Amylases: comercial applications and enzymology”

- Biochemistry, Juiz de Fora Federal University Juiz de Fora, October 26, 2021.
- Food Science and Technology, Federal University of Jequitinhonha and Mucuri Valleys, October 13, 2020.

“Enzyme production scaling: from bench to bioreactor”

- Biological Sciences, University of São Paulo, October 22, 2019.

“Enzymatic hydrolysates of agroindustrial residues as alternative and impacting sources for the lactic acid production”

- Chemistry, Indiana University-Purdue University Indianapolis, February 27, 2018

“Prospecting filamentous fungi aiming amylase production and application in paper recycling”

- Chemistry, Indiana University-Purdue University Indianapolis, October 10, 2014.

“Fungal enzymes as biological catalysts: Production and applications”

- Biochemistry, University of São Paulo, July 21-August 1, 2014.

“Morphological mutation and enzyme production by filamentous fungi”

- Micology course for middle and high school teachers, University of São Paulo, December 1, 2012.

“Methods of protein and enzyme activity quantifications”

- Biochemistry, University of São Paulo, July 11-22, 2011.

Poster Presentations and Invited Talks

“Biochemical and structural characterization of RibD: the deaminase/reductase for the riboflavin biosynthesis” **poster presentation** at:

- 11th Annual San Antonio Postdoctoral Research Forum, The University of Texas Health Science Center at San Antonio, September 19, 2023.
- 9th Texas Enzyme Mechanisms Conference, The University of Texas at Austin, June 3, 2023.
- Adventures in Science: The Michael P. Doyle Honorary Symposium, Downtown Campus, University of Texas at San Antonio, June 2, 2023.

“RibD, the aminohydrolase/reductase of riboflavin biosynthesis, is a key target for antimicrobial drug design” **poster presentation** at the 2023 Annual San Antonio Drug Discovery Symposium, Greehey Children’s Cancer Research Institute Auditorium, University of Texas Health Science Center at San Antonio, April 10-11, 2023.

“Nicotianamine synthase from barley: what makes an enzyme processive?” **poster presentation** at the I Chemistry Department Retreat, The University of Texas at San Antonio, August 15, 2022.

“Halotolerant and halophilic xylanases as new tools for water waste reduction and industrial waste recycling” **invited talk** at the I Chemistry International Webinar, March 21-22, 2022.

“Brewers’ spent grain as substrates for production of cellulolytic and hemicellulolytic enzymes by different *Aspergillus* species” **poster presentation** at the Microbiotec19, Congress of Microbiology and Biotechnology 2019 from the Portuguese Microbiology Society (SPM) and the Portuguese Biotechnology Society (SPBT), Faculty of Sciences and Technology of the University of Coimbra, Coimbra - Portugal, December 5-7, 2019.

“Paper industry wastes as carbon sources for *Aspergillus* species cultivation and production of holocellulases for biotechnological application” **invited talk** at the XXII National Symposium on Bioprocesses (SINAFERM) and XIII Symposium on Enzymatic Hydrolysis of Biomass, Federal University of Uberlandia, Brazil, July 28-August 3, 2019.

“Residues from beans processing as substrates for the production of lignocellulolytic enzymes by different species of *Aspergillus*” **invited talk** at the II National Meeting of Agroindustrial Biotechnological Chemistry, University of Sao Paulo, Brazil, September 3-6, 2017.

“Screening of Holocellulases Produced by *Aspergilli* on Residues from Paper and Pulp Industry” **poster presentation** at the 46 Annual Meeting of the Brazilian Society of Biochemistry and Molecular Biology (SBBq), São Paulo, Brazil, July 27-30, 2017.

“*Aspergillus* Cultures on Rice Straw for the Production of Holocellulases with Potential of Biotechnological Application” **invited talk** at the II Workshop on Systems Microbiology, University of Sao Paulo, Brazil, May 31– June 1, 2017.

Teaching and Mentoring Experience

Teacher of Science, Colégio Marista, Ribeirão Preto, Brazil, 2021-2021

Teaching Assistant, University of Sao Paulo, Brazil

Bioprospecting for Biotechnological Processes, Biological sciences, Summer 2019 – Winter 2019.

Cell biology, Biological sciences, Spring 2014 – Summer 2014.

Assistant Professor of Biochemistry, Microbiology and Cell Biology, Instituto Federal de Educação, Ciência e Tecnologia de Goiás, Brazil, 2015-2016

Courses Taught at the Instituto Federal de Educação, Ciência e Tecnologia de Goiás, Brazil:

- Cell biology - four-hour weekly, Biological sciences; ~40 students; 100% my responsibility (spring-summer 2016).
- Histology and Animal Physiology - four-hour weekly, Biotechnology; ~20 students; 100% my responsibility (spring-summer 2016).

- Applied Biochemistry - three-hour weekly, Biotechnology; ~20 students; 100% my responsibility (spring-summer 2016).
- Basic Biochemistry - three-hour weekly, Agricultural sciences; ~20 students; 100% my responsibility (winter 2015/2016).
- Industrial Microbiology - three-hour weekly, Chemistry; ~30 students; 100% my responsibility (summer-winter 2015).
- General Microbiology - four-hour weekly, Agricultural sciences, Biological sciences and Biotechnology; ~130 students; 100% my responsibility (summer-winter 2015).
- Environmental Microbiology - three-hour weekly, Environmental engineering; ~40 students; 100% my responsibility (summer-winter 2015).
- Microbiology II - three-hour weekly, Biological sciences; ~40 students; 100% my responsibility (summer-winter 2015).

Teacher of Science, Secretary of Education from São Paulo State, Brazil, 2012-2013

Supervision of undergraduate students

- At University of Texas at San Antonio:
 - Deegan Ruiz, 2023
 - Sergio Munoz, 2023
 - Caleb Lucio, 2023
 - Tara Jalley, 2023
 - Joseph Abraham Nieto Carrion, 2023
 - Christopher Gomez, 2022
- At University of São Paulo:
 - Eliano dos Anjos Moreira, 2012-2013

Service on Undergraduate Student Committees

- At Federal University of the Jequitinhonha and Mucuri Valleys, Brazil:
 - Daniella Mendes Pereira (Science and Technology), thesis defense 7/12/2022
 - Nayane Carvalho Costa (Science and Technology), thesis defense 11/06/2020.
 - Ingrid Cristina Soares Amorim (Science and Technology), thesis defense 7/15/2019.
 - Gabriela Cirilo Machado (Science and Technology), thesis defense 7/11/2019.
- At University of São Paulo, Brazil:
 - Yuri Heck da Silva (Biological Sciences), thesis defense 11/19/2019.

Co-mentoring of Undergraduate Students

- At Federal University of the Jequitinhonha and Mucuri Valleys, Brazil:
 - Elizângela Nunes Pataleão (Science and Technology), Thesis: *Application of enzymes in replacement of chemical compounds used in paper bleaching*. Defense 01/30/2023.
 - Mylena Sales Palma Passos (Science and Technology), Thesis: *Application of Enzymes in food industries*. Defense 9/20/2021.
 - Junia Maria Couto Oliveira, (Science and Technology), Thesis: *Screening of amylase production by filamentous fungi isolated in distinct regions of Minas Gerais State*. Defense 9/14/2021.

Departmental, College, and University Service

- At Centro Universitário Barão de Mauá, Brazil
- President of the undergraduate biological sciences student union (2010-2011)
- Vice-Secretary of the undergraduate biological sciences student union (2009-2010)

Service to Scientific Community

Manuscripts Reviewed for:

Advances in Agricultural Technology & Plant Sciences
Advances in Bioscience and Biotechnology
Advances in Enzyme Research
African Journal of Biotechnology
American Journal of Chemical and Biochemical Engineering
Applied Biochemistry and Biotechnology
Archives of Microbiology
Asian Plant Research Journal
Bioresources and Bioprocessing
Biotechnology Letters
Current Journal of Applied Science and Technology
Frontiers in Fungal Biology
International Journal of Applied Microbiology and Biotechnology Research
International Journal of Plant & Soil Science
Journal of Biosciences and Medicines
Journal of Polymers and the Environment
Journal of Scientific Research and Reports
Journal of Modern Agriculture and Biotechnology
Plant Cell Biotechnology and Molecular Biology
Science of the Total Environment
World Journal of Microbiology and Biotechnology

Member of the organizing committee:

- XVI Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2017).
- XIII Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2014).
- XII Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2013).
- XXI Regional Meeting of Biology Students. Centro Universitário Barão de Mauá, Ribeirão Preto, SP, Brazil (2010).

Poster Scientific Judge:

- 41st Midwest Enzyme Chemistry Conference. Grand Valley State University, Allendale, MI, USA (2021).
- XVI Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2017).

- XXIV International Symposium on Scientific Initiation. 2016. University of São Paulo, Ribeirão Preto, SP Brazil (2016).
- XIII Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2014).
- XII Winter Course of Biochemistry and Molecular Biology. University of São Paulo, Ribeirão Preto, SP, Brazil (2013).
- XIX National Symposium on Bioprocesses (SINAFERM) and X Symposium on Enzymatic Hydrolysis of Biomass (SHEB). Brazilian Chemical Engineering Association, Foz do Iguacu, PR, Brazil (2013).
- XXI International Symposium on Scientific Initiation. University of São Paulo, Ribeirão Preto, SP Brazil (2013).

Volunteer Judge:

- Alamo Regional Science and Engineering Fair, 2023 (San Antonio, TX)
- Alamo Junior Academy of Sciences Fair, 2023 (San Antonio, TX)
- Alamo Junior Academy of Sciences Fair, 2022 (San Antonio, TX)
- Alamo Regional Science and Engineering Fair, 2022 (San Antonio, TX)

Community outreach:

- Press interview to **The American Society for Biochemistry and Molecular Biology**: “The perfect place to do science” - <https://www.asbmb.org/asbmb-today/people/103123/the-perfect-place-to-do-science> - 2023
- Volunteer work at the **White Shark Projects, South Africa**. Responsible for observation and monitoring activities of the sharks in a daily basis – 2010.
- Volunteer Environmental educator at the **NGO Estação Luz, Brazil**. Responsible for the teaching students from public schools on the principles of permaculture in a fun and relaxed way for 4 hours weekly – 2009.

Identifiers and Web Presence

<https://orcid.org/0000-0003-3100-1674>

<https://www.linkedin.com/in/thiago-machado-pasin-8a2aa069/>

<https://scholar.google.com/citations?hl=pt-BR&user=grboa1MAAAAJ>