

Victor E. A. CALDAS

Personal Data

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Profile

I am a scientist with +10 years of experience in international settings, constantly aiming for the higher standards. I am well-versed in managing teams of researchers and technicians, and in designing and performing experiments with biology, physics and chemistry.

Education

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| MAY 2016 | PhD Biophysics, University of Groningen , The Netherlands
Thesis: Activation and regulation of <i>E. coli</i> DNA Polymerase V studied at the single-molecule level
Defense date: May 2016 |
| AUG 2011 | MSc Applied Physics, University of São Paulo , Brazil
Thesis: Adenine phosphoribosyltransferase from <i>Schistosoma mansoni</i> : insights into the catalytic mechanism via molecular dynamics |
| DEC 2009 | BSc Physics and Biomolecular Sciences University of São Paulo , Brazil |

Employment

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| Current
Feb 2016 | Postdoctoral Researcher , Vrije Universiteit Amsterdam
Faculty of Science , Department of Animal Ecology
— Supervisor: Prof. E. Toby Kiers
Guest Researcher , Institute AMOLF
Systems Biology Group
— Supervisor: Prof. Tom S. Shimizu |
| 2014 –2015 | GMO Safety Officer (VM) of the Single Molecule Biophysics Group, University of Groningen |
| 2015 | Visiting Scholar at the University of Wollongong (Australia). Group of Prof. Antoine van Oijen |
| 2013 | Visiting Scholar at the University of Wisconsin-Madison (USA). Group of Prof. Mike M. Cox |
| 2009 | Visiting Scholar at the University of Illinois at Urbana-Champaign (USA). Group of Prof. Taekjip Ha. |
| 2006–2009 | Undergraduate Research Associate at the Crystallography group. Physics Institute of São Carlos, University of São Paulo, Brazil. |

Grants, Scholarships and Prizes

2018	Travel Grant. The Bioimage Analysis Community Conference. Hungary
2017	NEUBIAS Travel Grant. University of Oxford
2017	Poster Prize. Brazilian Biophysical Society Meeting
2017	Best work. São Paulo School on Biophysical Methods to Study Biomolecular interactions.
2017	Scholarship. The São Paulo Research Foundation(FAPESP) (Brazil).
2017	Scholarship to host a PhD student from Brazil. Coordination for the Improvement of Higher Education Personnel (CAPES). 11 Months.
2017	Scholarship. NEUBIAS Taggathon. Gotemburh, Sweeden
2010 - 2011	MSc Research Scholarship – CAPES
2010	Prize M. Issao – Best undergraduate work – Brazilian Society for Odontology Research (SBPqO) – Shared with R. A. Caldas.
2009	Highest Score on the Admission Exam – MSc in Applied Physics – Physics Institute at São Carlos - University of São Paulo
2008	Scholarship – (University of Illinois at Urbana-Champaign/HHMI)
2007-2010	Undergraduate Research Scholarship – FAPESP – São Paulo

Further Training

2018	Datacamp Track to Data Science in Python
2018	NEUBIAS Training School, Hungary, 2018
2017	Crops in Silico, Oxford Symposium, UK
2017	NEUBIAS Taggathon. Gottemburb, Sweeden
2015	Who wants to become an Entrepreneur — University of Groningen, The Netherlands
2014	Dresden Summer School in Systems Biology. Center for Systems Biology, MPI, Germany.
2009	Workshop in Biophysical Chemistry. USP. Brazil
2007	Genomics, Proteomics and Stem-cells. IUSP. Brazil
2007	Winter Course in Bioinformatics. USP. Brazil
2006	Workshop in Physics Research applied to Human physiology. USP. Brazil
2006	School on Computational Physics. USP. Brazil

Languages

Brazilian Portuguese	Native
English	Fluent (TOEFL iBT 110/120)
Dutch	Basic understanding (A2)
Spanish	Basic understanding

Computer languages

Java, Git, Python, Latex, CSS, Javascript, HTML
Public Git Repositories available: <http://github.com/vcaldas>

Publications

Published

1. K. Aleklett, E. T. Kiers, P. Ohlsson, T. S. Shimizu, **V. E. Caldas**, and E. C. Hammer, "Build your own soil: exploring microfluidics to create microbial habitat structures," *ISME J.*, 2017.
doi:[10.1038/ismej.2017.184](https://doi.org/10.1038/ismej.2017.184)
2. H. Ghodke, **V. E. A. Caldas**, C. M. Punter, A. M. van Oijen, A. Robinson, A. van Oijen, A. Robinson, A. M. van Oijen, and A. Robinson, "Single-Molecule Specific Mislocalization of Red Fluorescent Proteins in Live *Escherichia coli*," *Biophys. J.*, vol. 111, pp. 25–27, jul 2016. doi:[10.1016/j.bpj.2016.05.047](https://doi.org/10.1016/j.bpj.2016.05.047)
3. A. Robinson, J. P. McDonald, **V. E. A. Caldas**, M. Patel, E. A. Wood, C. M. Punter, H. Ghodke, M. M. Cox, R. Woodgate, M. F. Goodman, and A. M. van Oijen, "Regulation of mutagenic DNA Polymerase V activation in space and time.," *PLoS Genet.*, vol. 11, p. e1005482, aug 2015.
doi:[10.1007/s11721-014-0100-8](https://doi.org/10.1007/s11721-014-0100-8)
4. **V. E. A. Caldas**, C. M. Punter, H. Ghodke, A. Robinson, and A. M. van Oijen, "iSBatch: a batch-processing platform for data analysis and exploration of live-cell single-molecule microscopy images and other hierarchical datasets," *Mol. BioSyst.*, vol. 11, no. 10, pp. 2699–2708, 2015.
doi:[10.1039/C5MB00321K](https://doi.org/10.1039/C5MB00321K)
5. E. Pozzi, C. R. Megda, **V. E. Caldas**, M. Damianovic, and E. C. Pires, "Microbial population in an aerated thermophilic reactor that treats recycled cardboard plant wastewater," *J. Water Process Eng.*, vol. 4, pp. 74–81, dec 2014.
doi:[10.1016/j.jwpe.2014.08.011](https://doi.org/10.1016/j.jwpe.2014.08.011)
6. M. T. A. da Silva, **V. E. A. Caldas**, F. C. Costa, D. A. M. M. Silvestre, and O. H. Thiemann, "Selenocysteine biosynthesis and insertion machinery in *Naegleria gruberi*," *Mol. Biochem. Parasitol.*, vol. 188, pp. 87–90, apr 2013.
doi:[10.1016/j.molbiopara.2013.04.002](https://doi.org/10.1016/j.molbiopara.2013.04.002)
7. V. Del Nery, M. Damianovic, E. Pozzi, I. de Nardi, **V. Caldas**, and E. Pires, "Long-term performance and operational strategies of a poultry slaughterhouse waste stabilization pond system in a tropical climate," *Resour. Conserv. Recycl.*, vol. 71, pp. 7–14, feb 2013.
doi:[10.1016/j.resconrec.2012.11.006](https://doi.org/10.1016/j.resconrec.2012.11.006)
8. V. H. B. Serrão, F. Alessandro, **V. E. A. Caldas**, R. L. Marçal, H. D. Pereira, O. H. Thiemann, and R. C. Garratt, "Promiscuous interactions of human septins: the GTP binding domain of SEPT7 forms filaments within the crystal.," *FEBS Lett.*, vol. 585, pp. 3868–73, dec 2011. doi:[10.1016/j.febslet.2011.10.043](https://doi.org/10.1016/j.febslet.2011.10.043)

Meetings and conferences

Invited talks

2018	Netherlands Annual Ecology Meeting, The Netherlands
2018	2 nd NEUBIAS Conference, Hungary
2017	Annual Ecological Science symposium. Vrije Universiteit, The Netherlands
2017	Federal University of Pernambuco, Brazil
2017	Imaging symbiotic networks across scales In: 9th International Conference on Mycorrhiza, Czech Republic
2017	Nutrient tracking with quantum dots. In: 9th International Conference on Mycorrhiza, Czech Republic
2016	São Paulo State University (UNESP), Brazil
2014	NVBMB Symposium - Controlling Biology with Light, The Netherlands.

Presentations

2015	Single Molecule measurements of DNA polymerase competition in live <i>E. coli</i> cells. In: EMBL Symposia – Seeing is believing, Heidelberg - Germany. Selected also for flash talk.
2015	Single Molecule measurements of DNA polymerase competition in live <i>E. coli</i> cells. In: ZING Conference on Genomic Integrity, Cairns - Australia. 2015
2012	Single Molecule imaging of the SOS response: tracking the DNA polymerases in live <i>E. coli</i> cells. In: Gordon Research Conference – Single Molecule Approaches to Biology. Vermont - USA. 2012.
2012 – 2017	Dutch Biophysical Society Meeting. Veldhoven - The Netherlands. Yearly presentation from 2012 to 2017.
2013 – 2015	Activation and regulation of <i>E. coli</i> DNA Polymerase V studied at the single-molecule level. Zernike Institute for Advanced Materials Vlieland Conference, Vlieland - The Netherlands. 2013 and 2015.
2011	Studies of nucleotide metabolism from blood fluke <i>Schistosoma mansoni</i> . Acta Crystallographica A. Work I contributed.
2010	Selenocysteine Incorporation Machinery in <i>Naegleria gruberi</i> . In: XXVI Annual Meeting of Brazilian Society for Protozoology, Lindóia - Brazil. 2010.
2008	Study of Microbial Diversity of Brazilian Savanna Conserved Regions and a Eucalyptus Culture. In: XXXVII SBBq Annual Meeting e XI PABMB Meeting.

Supervisions

2018	Solène Mauger MSc Project in Prof. Toby Kiers group at the Vrije Universiteit Amsterdam, the Netherlands
2017 – 2018	Edgar Correa de Amorim Filho PhD intership at the Systems Biology Group of Prof. Tom Shimizu at the Institute AMOLF
2016 – 2017	Cathleen Boersma, M.Sc. July 2016 MSc Project in Prof. Toby Kiers group at the Vrije Universiteit Amsterdam, the Netherlands

Teaching experience

2012 – 2015	Teaching Assistant , University of Groningen, The Netherlands Course: Molecular Biophysics
2010 – 2011	Teaching Assistant , University of São Paulo Course: Modern Physics
2010	Teacher , Universidade de São Paulo General Physics

Membership

2017 – Present	NEUBIAS - Network of European Bioimage Analysis
2014 – Present	Netherlands Society for Biochemistry and Molecular Biology (2014–present)
2016	Biophysical Society (2016)
2017 – Present	International Mycorrhiza Society (2017-Present)
2017 – Present	Brazilian Biophysics Society (2017)

Service and Outreach

2017	Fungal Growth and transport: https://vimeo.com/vcaldas
2017	Annabel Howland and others. "Triangulations, sound installation". Amsterdam"
2017 – Present	The Hitchhikers Guide to Python - pt_BR Project manager of the translation to Brazilian Portuguese.
2016	Contribution to the episode "Het machtige schimmeldijk" from the TV show "Kennis van nu".
2013 – 2017	DIY Bio Groningen Development of open-source PCR machine and 3D printers. Participa- tion in fairs to promote citizen science.
2013 – 2017	De Jonge Onderzoekers Workshops and tutorials for the community. Groningen, The Nether- lands.

References

References will be provided upon request.