

RESUME (CURRICULUM-VITAE)

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GENERAL IDENTIFICATION

NAME: Elton J. R. Vasconcelos, DVM, PhD

PROFESSIONAL ADDRESS: Leeds Omics, School of Molecular and Cell Biology, Faculty of Biological Sciences, University of Leeds, LS2 9JT, United Kingdom.

Email: e.vasconcelos@leeds.ac.uk

ORCID: <http://orcid.org/0000-0001-5130-6622>

ResearcherID: www.researcherid.com/rid/O-5593-2014

ResearchGate: www.researchgate.net/profile/Elton_Vasconcelos

Github: <https://github.com/eltonjrv>

OCCUPATION

Bioinformatics Research Officer at Leeds Omics

EDUCATION

PhD studies: Cell and Molecular Biology at the University of Sao Paulo (Brazil), School of Medicine of Ribeirao Preto, Department of Cell and Molecular Biology and Pathogenic Bioagents, obtained on Aug 2011. Thesis title: "*in silico* Identification and Functional Characterization of Potential Regulatory Sites within Untranslated Regions of *Leishmania* spp. Genomes".

DVM studies: Bachelor's degree in Veterinary Medicine, College of Veterinary Medicine at the Ceara State University (Brazil) (equivalent in Brazil to DVM degree), obtained on Dec 2005.

ACADEMIC WORKING EXPERIENCE

I - Postdoctoral researcher, bioinformatician working on microbiome analyses applied to Veterinary Medicine at the College of Veterinary Medicine, Western University of Health Sciences, Pomona, CA, USA. Also a PBL facilitator for 1st and 2nd year students at the same college. Member of both Diniz' and Oakley's labs.

II – Postdoc Fellowship: PD-FAPESP (Sao Paulo Research Foundation program, personal fellowship for post-doctoral training), full time (Feb 2015 – Jan 2017). Dept. of Biochemistry, Institute of Chemistry, University of Sao Paulo, Verjovski-Almeida Lab. Sao Paulo, SP, Brazil.

Project: Identification and characterization of regulatory long non-coding RNAs on the *Schistosoma mansoni* genome through NGS strategies and systems approach.

Supervisor: Dr. Sergio Verjovski-Almeida

III – Postdoc Fellowship: PDE-CNPq (Brazilian National Council for Scientific and Technological Development program, personal fellowship for post-doctoral training abroad), full time (Jan 2013 – Dec 2014). Center for Infectious Disease Research/Seattle Biomedical Research Institute, Myler Lab – Bioinformatics Core. Seattle, WA, USA.

Project: *in silico* Identification and characterization of novel non-coding elements in the *Leishmania* spp. genomes.

Supervisor: Dr. Peter Myler

IV – Lecturer for Veterinary Medicine course at "Faculdades INTA" – 16h/week (Aug-Dec 2012) - Sobral, CE, Brazil. Taught subjects: Veterinary Biochemistry and Veterinary Pharmacology

V - PhD Fellowship: Sao Paulo Research Foundation (FAPESP) – full time, (Sep 2006 – Aug 2011). University of Sao Paulo, School of Medicine of Ribeirao Preto, Department of Cell and Molecular Biology, Dr. Angela Cruz Lab. Ribeirao Preto, SP, Brazil.

Project: *in silico* identification and functional characterization of potential regulatory sites within the untranslated regions of *Leishmania* spp. genomes.

SELECTED PUBLISHED WORK

- RUY PC, MONTEIRO-TELES NM, MISERANI MAGALHÃES RD, FREITAS-CASTRO F, DIAS L, AQUINO DEFINA TP, **ROSAS DE VASCONCELOS EJ**, MYLER PJ, KAYSEL CRUZ A. Comparative transcriptomics in *Leishmania braziliensis*: disclosing differential gene expression of coding and putative noncoding RNAs across developmental stages. *RNA Biology*, **2019**. PMID: 30689499
- **VASCONCELOS, EJ**; BILLETER, SA; JETT, LA; MEINERSMANN, RJ; BARR, MC; DINIZ, PPVP; OAKLEY, BB. Assessing cat flea microbiomes in northern and southern California by 16S rRNA Next Generation Sequencing. *Vector-Borne and Zoonotic Diseases*, **2018**. PMID: 29893631
- OAKLEY BB, **VASCONCELOS EJ**, DINIZ PPVP, CALLOWAY KN, RICHARDSON E, MEINERSMANN RJ, COX NA, BERRANG ME. The cecal microbiome of commercial broiler chickens varies significantly by season. *Poultry Science*, **2018**. PMID: 30016503
- **VASCONCELOS EJ***, MESEL VC, SILVA LF, PIRES DS, LAVEZZO GM, PEREIRA ASA, AMARAL MS, VERJOVSKI-ALMEIDA S. Atlas of *Schistosoma mansoni* long non-coding RNAs and their expression correlation to protein-coding genes. *Database*, **2018**. PMID: 29992321
- **VASCONCELOS, E. J. R.**; SILVA, L. F.; PIRES, D. S.; LAVEZZO, G.; PEREIRA, A. S.; AMARAL, M. S.; VERJOVSKI-ALMEIDA, S. . The *Schistosoma mansoni* genome encodes thousands of long non-coding RNAs predicted to be functional at different parasite life-cycle stages. *Scientific Reports*, **2017**. PMID: 28874839
- TERRÃO M. C.; **ROSAS DE VASCONCELOS E. J.**; DEFINA T. A.; MYLER P. J.; CRUZ A. K. . Disclosing 3' UTR cis-elements and putative partners involved in gene expression regulation in *Leishmania* spp. *PLoS One*, **2017**. PMID: 28859096
- LAMBERTZ, U. ; OVANDO, M. O. ; **VASCONCELOS, E. J. R.** ; UNRAU, P. J. ; MYLER, P. J. ; REINER, N. E. . Small RNAs Derived From tRNAs and rRNAs Are Highly Enriched in Exosomes From Both Old and New World *Leishmania* Providing Evidence For Conserved Exosomal RNA Packaging. *BMC Genomics*, v. 16, p. 151, **2015**. PMID: 25764986
- **VASCONCELOS, E. J. R.** ; NUNES, V. S. ; SILVA, M. S. ; SEGATTO, M. ; MYLER, P. J. ; CANO, M. I. N. . The Putative *Leishmania* Telomerase RNA (LeishTER) Undergoes Trans-Splicing and Contains a Conserved Template Sequence. *PLoS One*, **2014**. PMID: 25391020
- JENSEN, B. C. ; RAMASAMY, G. ; **VASCONCELOS, E. J. R.** ; INGOLIA, N. T. ; MYLER, P. J. ; PARSONS, M. . Extensive stage-regulation of translation revealed by ribosome profiling of *Trypanosoma brucei*. *BMC Genomics*, v. 15, p. 911, **2014**. PMID: 25331479
- **VASCONCELOS, E. J. R.**; TERRÃO, M. C.; RUIZ, J. C.; VÊNCIO, R. Z. N.; CRUZ, A.K.. In silico identification of conserved intercoding sequences in *Leishmania* genomes: Unraveling putative cis-regulatory elements. *Molecular and Biochemical Parasitology*, **2012** Jun;183(2):140-50. PMID: 22387760.

* Corresponding author.

For a complete list of my publications, please visit the following URL:

<https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/41101860/?sort=date&direction=descending>

BOOK CHAPTER(S)

1. IRIZARRY, K. J. L. & **VASCONCELOS, E. J. R.** Chapter title: Population Genomics of Domestication and Breed Development in Canines in the Context of Cognitive, Social Behavioral, and Disease Traits. Population Genomics: Concepts, Approaches and Applications. Om P. Rajora (ed.). https://doi.org/10.1007/13836_2018_43 - Springer International Publishing AG, part of Springer Nature **2018**.

Ad hoc PEER-REVIEWER: BMC Research Notes; BMC Bioinformatics; Vaccine; Journal of Biomedical Informatics; Infection, Genetics and Evolution, PLoS One.

MENTORING 2015-2018 : Co-Advisor of Edna Gicela Ortiz Morea (PhD candidate in Genetics at the Sao Paulo State University, Botucatu, SP, Brazil). Project title: Molecular and functional characterization of telomeric non-coding RNAs in *Leishmania major*. Advisor: Dr. Maria Isabel Cano.

SPECIFIC TRAINING

- PATRIC/RAST Workshop. Provided by Argonne National Laboratory, IL, USA. November 2017 (24 hours).
- STAMPS Course (Strategies and Techniques for Analyzing Microbial Population Structures). Provided by Marine Biological Laboratory – University of Chicago, Woods Hole, MA, USA. July 30 – August 9, 2017 (75 hours);
- Microbiome Bioinformatics with QIIME2 (Workshop). Provided by Dr. Greg Caporaso's group (Northern Arizona University). Las Vegas, NV, USA. June 2017 (24 hours);
- Mothur Workshop – Analysis of Microbial Population by 16S high-throughput sequencing using Mothur. Provided and lectured by Prof. Dr. Patrick Schloss (University of Michigan – Dept of Microbiology & Immunology). Ann Arbor, MI, USA. April, 2017 (24 hours);
- Summer Course on Systems Biology of Disease provided by the Institute for Systems Biology, Seattle, WA, USA. July 2014 (40 hours);
- 1st Summer Course on Structural Bioinformatics: A theory/practical course on Structural Bioinformatics provided by the University of Minas Gerais, Belo Horizonte, Brazil. February 2011 (80 hours).
- Special Topics on Genomics Analysis: A theory/practical course for an introduction on how to use R language to analyze genomics and transcriptomics data, provided by “Universidade Estadual Paulista”, Jaboticabal, Sao Paulo, Brazil. July 2009 (20 hours).
- EupathDB Workshop 2009: A theory/practical course on pathogens genomes databases provided by EuPathDB Bioinformatics Resource Center for Biodefense and Emerging/Re-emerging Infectious Diseases at the University of Georgia, Athens, GA, USA. June 2009 (20 hours).

LANGUAGES

- English: proficient
- Portuguese: native idiom
- Spanish: good in reading, writing and understanding, fair in speaking

INFORMATION / RECOMMENDATION

- **Angela K. Cruz** (PhD) – Professor and Head of the Molecular Parasitology Lab at the Department of Cell and Molecular Biology and Pathogenic Bioagents, School of Medicine of Ribeirao Preto, University of Sao Paulo (USP), Ribeirao Preto, SP, Brazil – akcruz@fmrp.usp.br
 - **Peter J. Myler** (PhD) – Professor & Director of Core Services – Director of Seattle Structural Genomics Center for Infectious Disease (SSGCID) - Center for infectious Disease Research, Seattle, WA, USA – peter.myler@cidresearch.org
 - **Marilyn Parsons** (PhD) - Professor and Director of Professional Development, Center for infectious Disease Research, Seattle, WA, USA - marilyn.parsons@cidresearch.org
 - **Brian Oakley** (PhD) - Associate Professor, Microbial Ecology and Food Safety, College of Veterinary Medicine, Western University of Health Sciences, Pomona, CA, USA – boakley@westernu.edu
 - **Maria Isabel N. Cano** (PhD) – Head of the Lab of Telomeres at the Department of Genetics, IBB, Sao Paulo State University (UNESP), Botucatu, SP, Brazil - micano@ibb.unesp.br
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