

CURRICULUM VITÆ RODRIGO LIGABUE BRAUN

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■ Education & Training

2015-current Postdoc in Biosciences - Biophysics

Cbiot - UFRGS - Porto Alegre, BR

2014 <u>Postdoc</u> in Biosciences - Biophysics

InCer - PUCRS - Porto Alegre, BR

2010-2014 <u>D.Sc</u> in Cellular & Molecular Biology

PPGBCM - UFRGS - Porto Alegre, BR

"Structural biology of ureases: Phylogeny, activation, derived peptides"

Supervisors: Dr. Célia Regina Carlini, Dr. Hugo Verli

2013 Internship at Bioinorganic Chemistry Lab, Università di Bologna

Supervisor: Dr. Stefano Ciurli

2009-2010 M. Sc. in Cellular & Molecular Biology

PPGBCM - UFRGS - Porto Alegre, BR

"Conformational characterization of Canavalia ensiformis urease"

Supervisors: Dr. Célia Regina Carlini, Dr. Hugo Verli

2005-2008 B. Sc. In Biological Sciences – Emphasis: Molecular, Cellular and

Functional

UFRGS – Porto Alegre, BR "Ureases: A comparative analysis"

Supervisors: Dr. Célia Regina Carlini, Dr. Evelyn Schroeder

■ Languages

Portuguese Native speaker French Intermediate
English Fluent Italian Basic skills
Spanish Intermediate Japanese Basic skills

■ Research Articles

<u>Ligabue-Braun, R</u>; Sachett, L.; Pol-Fachin, L.; Verli, H. The calcium goes meow: Effects of ions and glycosylation on Fel d 1, the major cat allergen. PLoS One, 10, e0132311, 2015.

Ligabue-Braun, R; Carlini, CR. Poisonous birds: A timely review. Toxicon, 99, 102-108, 2015.

- <u>Ligabue-Braun, R</u>; Real-Guerra, R; Carlini, CR; Verli, H. Evidence-based docking of the urease activation complex. Journal of Biomolecular Structure & Dynamics, 31, 854-861, 2013.
- <u>Ligabue-Braun, R</u>; Andreis, FC; Verli, H; Carlini, CR. 3-to-1: unraveling structural transitions in ureases. Naturwissenschaften, 100, 459-467, 2013.
- <u>Ligabue-Braun, R</u>; Verli, H; Carlini, CR. Venomous mammals: A review. Toxicon, 59, 680-695, 2012.

 ►Awarded: 3rd "Hottest Article" of 2012 in the Toxicon journal, also awarded other 5 times in the "Hottest 25 Articles" (SciVerse ScienceDirect, Elsevier).
- Carlini, CR; <u>Ligabue-Braun, R</u>. Ureases as multifunctional toxic proteins: A review. Toxicon, 110, 90-109, 2016.
- Grunwald, MS; <u>Ligabue-Braun, R</u>; Souza, CS; Heimfarth, L; Verli, H; Gelain, DP; Moreira, JCF. Putative model for heat shock protein 70 complexation with receptor of advanced glycation end products through fluorescence proximity assays and normal mode analyses. Cell Stress & Chaperones, v. 22, 99-111, 2017.
- Martinelli, AH; Lopes, FC; Broll, V; Defferrari, MS; <u>Ligabue-Braun</u>, R; Kappaun, K; Tichota, DM; Fruttero, LL; Moyetta, NR; Demartini, DR; Postal, M; Silva, MM; Becker-Ritt, AB; Pasquali, G; Carlini, CR. Soybean ubiquitous urease with purification facilitator: An addition to the moonlighting studies toolbox. Process Biochemistry, 53, 245-258, 2017.
- Micheletto, YMS; Moro, CF; Lopes, FC; <u>Ligabue-Braun, R</u>; Martinelli, AH; Marques, CM; Schroder, AP; Carlini, CR; Silveira, NP. Interaction of jack bean (*Canavalia ensiformis*) urease and a derived peptide with lipid vesicles. Colloids and Surfaces. B, Biointerfaces 145, 576-585, 2016.
- Wiebke-Stohm, B; <u>Ligabue-Braun, R</u>; Rechenmacher, C; De Oliveira-Busatto, LA; Carlini, CRegina; Bodanese-Zanettini, MH. Structural and transcriptional characterization of a novel member of the soybean urease gene family. Plant Physiology and Biochemistry, 101, 96-104, 2016.
- Fernandes, CL; <u>Ligabue-Braun</u>, R.; Verli, H. Structural glycobiology of human α 1 -acid glycoprotein and its implications for pharmacokinetics and inflammation. Glycobiology, 25, 1125-1133, 2015.
- Feder, V; Kmetzsch, L; Staats, CC; Vidal-Figueiredo, N; <u>Ligabue-Braun, R</u>; Carlini, CR; Vainstein, MH. *Cryptococcus gattii* urease as a virulence factor and the relevance of enzymatic activity in cryptococcosis pathogenesis. The FEBS Journal, 282, 1406-1418, 2015.
- Piovesan, AR; Martinelli, AHS; <u>Ligabue-Braun</u>, R; Schwartz, JL; Carlini, CR. *Canavalia ensiformis* urease, Jaburetox and derived peptides form ion channels in planar lipid bilayers. Archives of Biochemistry and Biophysics, 547, 6-17, 2014.
- Fauth, EVF; Cilli, EM; <u>Ligabue-Braun, R</u>; Verli, H. Differential effect of solution conditions on the conformation of the actinoporins Sticholysin II and Equinatoxin II. Anais da Academia Brasileira de Ciências, 86, 1949-1962, 2014.
- Martinelli, AHS; Kappaun, K; <u>Ligabue-Braun, R</u>; Defferrari, MS; Piovesan, AR; Stanisçuaski, F; Demartini, DR; Dal Belo, CA; Almeida, CGM; Follmer, C; Verli, H; Carlini, CR; Pasquali, G. Structure-function studies on jaburetox, a recombinant insecticidal peptide derived from jack bean (*Canavalia ensiformis*) urease. Biochimica et Biophysica Acta. G. General Subjects, 1840, 935-944, 2014.
- Postal, M; Martinelli, AH; Becker-Ritt, AB; <u>Ligabue-Braun, R</u>; Demartini, DR; Ribeiro, SF; Pasquali, G; Gomes, VM; Carlini, CR. Antifungal properties of *Canavalia ensiformis* urease and derived peptides. Peptides, v. 38, 22-32, 2012.
- Marco-Salvadori, J; Defferrari, MS; <u>Ligabue-Braun, R</u>; Lau, EY; Salvadori, JR; Carlini, CR. Characterization of entomopathogenic nematodes and symbiotic bacteria active against *Spodoptera*

frugiperda (Lepidoptera: Noctuidae) and contribution of bacterial urease to the insecticidal effect. Biological Control, 63, 253-263, 2012.

Mulinari, F; Becker-Ritt, AB; Demartini, DR; <u>Ligabue-Braun, R</u>; Stanisçuaski, F; Verli, H; Fragoso, RR; Schroeder, EK; Carlini, CR; Grossi-de-Sá, MF. Characterization of JBURE-IIb isoform of *Canavalia ensiformis* (L.) DC urease. Biochimica et Biophysica Acta. Proteins and Proteomics, 1814, 1758-1768, 2011.

■ Books & Book Chapters

<u>Ligabue Braun, R;</u> Carlini, CR. Moonlighting toxins: Ureases and beyond. In: Plant Toxins Handbook. Springer; 2017.

► Also Editor of "Plant Toxins Handbook", Springer Nature Singapore. Editor-in-Chief: Gopalakrishnakone, P. 2017.

<u>Ligabue Braun, R.</u> Venom use in mammals: Evolutionary aspects. In: Evolution of Venomous Animals and their Venoms. Springer; 2016.