

**PUBLICAÇÕES COM PARTICIPAÇÃO DE ALUNOS PIBIC E PIBITI-
INSTITUTO BUTANTAN/CNPq
2019-2022**

de Freitas BG, Pereira LM, Santa-Cecília FV, Hösch NG, Picolo G, Cury Y, Zambelli VO. Mitogen-Activated Protein Kinase Signaling Mediates Morphine Induced-Delayed Hyperalgesia. *Front Neurosci.* 2019 Sep 20;13:1018. doi: 10.3389/fnins.2019.01018. eCollection 2019. PMID: 31616243

AGUIAR, WESLEI DA SILVA; GALIZIO, NATHÁLIA DA COSTA; **SERINO-SILVA, CAROLINE**; SANT'ANNA, SÁVIO STEFANINI; GREGO, KATHLEEN FERNANDES; TASHIMA, ALEXANDRE KEIJI; NISHIDUKA, ERIKA SAYURI; MORAIS-ZANI, KAREN DE; Tanaka-Azevedo, Anita Mitico. Comparative compositional and functional analyses of *Bothrops moojeni* specimens reveal several individual variations. *PLoS One. Fator de Impacto* (2020 JCR): 3,2400, v.14, p.e0222206 - , 2019.

SANT'ANNA MB, **LOPES FSR**, KIMURA LF, GIARDINI AC, SANT'ANNA OA, PICOLO G. Crotoxin Conjugated to SBA-15 Nanostructured Mesoporous Silica Induces Long-Last Analgesic Effect in the Neuropathic Pain Model in Mice. *Toxins (Basel)*. 2019 Nov 20;11(12):679. doi: 10.3390/toxins11120679.

Paloma L. da Silva, Fabiana Lauretti-Ferreira, **Maiara Caldas de Lima**, Swiany Silveira Lima, Ambart E. Covarrubias, Marcelo De Franco, Eneas Carvalho, Paulo Lee Ho , Renata M. A. da Costa, Elizabeth A. L. Martins, Josefa B. Da Silva. Phagocytosis of Leptospira by leukocytes from mice with different susceptibility to leptospirosis and possible role of chemokines (2019). <https://doi.org/10.1186/s12866-018-1371-9>

Freitas-de-Sousa LA, Nightigall PG, Portes-Junior JA, Holding ML, Nystrom GS, Ellsworth SA, Guimarães NC, **Tioyama E**, Ortiz F, Silva BR, Kunz TS, Junqueira-de-Azevedo ILM, Grazziotin FG, Rokyta DR, Moura-da-Silva AM. Size Matters: An Evaluation of the Molecular Basis of Ontogenetic Modifications in the Composition of *Bothrops jararacussu* Snake Venom. *Toxins (Basel)*. 2020 Dec 11;12(12):791. doi: 10.3390/toxins12120791.

RODRIGUES, C. F. B.; **SERINO-SILVA, C.**; Morais-Zani, K.; **KAVAZOI, V. K.**; CARVALHO, M. P. N.; GREGO, K. F.; CHIARELLI, T.; TASHIMA, A. K.; TOYAMA, M. H.; TANAKA-AZEVEDO, A. M. BoaYPLI: structural and functional characterization of the gamma phospholipase A2 plasma inhibitor from the non-venomous Brazilian snake *Boa constrictor*. *PLoS One. Fator de Impacto* (2020 JCR): 3,2400, v.15, p.e0229657 - , 2020.

SANT'ANNA MB, GIARDINI AC, RIBEIRO MAC, **LOPES FSR**, TEIXEIRA NB, KIMURA LF, BUFALO MC, RIBEIRO OG, BORREGO A, CABRERA WHK, FERREIRA JCB, ZAMBELLI VO, SANT'ANNA OA, PICOLO G. The Crotoxin:SBA-15 Complex Down-Regulates the Incidence and Intensity of Experimental Autoimmune Encephalomyelitis Through

Peripheral and Central Actions. Front Immunol. 2020 Oct 28;11:591563. doi: 10.3389/fimmu.2020.591563.

Bianca S. Takayasu, Igor R. Martins, Analí M.B. Garnique, Sayuri Miyamoto, Gláucia M. Machado-Santelli, Miriam Uemi, Janice Onuki. Biological effects of an oxyphytosterol generated by β -Sitosterol ozonization. Archives of Biochemistry and Biophysics, Volume 696, 2020, 108654, ISSN 0003-9861, <https://doi.org/10.1016/j.abb.2020.108654>.

Fabiana Lauretti-Ferreira, Paloma L. D. Silva, Naiara M. Alcântara, **Bruna F. Silva**, Isabele Grabher, Gisele O. Souza, Erika Nakajima, Milena A. Akamatsu, Silvio A. Vasconcellos, Patricia A. E. Abreu, Eneas Carvalho, Elizabeth A. L. Martins, Paulo L. Ho, Josefa B. da Silva. New strategies for Leptospira vaccine development based on LPS removal <https://doi.org/10.1371/journal.pone.0230460>

TASIMA, L. J.; HATAKEYAMA, D. M.; SERINO-SILVA, C.; RODRIGUES, C. F. B.; LIMA, E. O. V.; SANT'ANNA, S. S. ; MORAIS-ZANI, K.; SANZ, L.; CALVETE, J. J.; TANAKA-AZEVEDO, A. M. Comparative proteomic profiling and functional characterization of venom pooled from captive *Crotalus durissus terrificus* specimens and the Brazilian Crotalic Reference Venom. TOXICON. Fator de Impacto (2020 JCR): 3,0330, v.185, p.26 - 35, 2020.

Vaniky Duarte Marques, Marcia Regina Franzolin, Sabri Saeed Sanabani, Hugo Vigerelli, Roxane Maria Fontes Piazza, Daniel Carvalho Pimenta, Tiago Venâncio, Irys Viana Neves, **Herbert Guimarães de Sousa Silva**, Daniella dos Santos Courrol, Lucia Mendonça-Previato, José Osvaldo Previato, Soraia Attie Calil Jorge, Marta de Oliveira Domingos. A new class of antimicrobial molecules derived from kefir, effective against *Pseudomonas aeruginosa* and methicillin resistant *Staphylococcus aureus* (MRSA) strains. 2020. **Scientific Reports**. 10: 17434. Doi: 10.1038/s41598-020-73651-7

TASIMA, LÍDIA J.; SERINO-SILVA, CAROLINE; HATAKEYAMA, DANIELA M.; NISHIDUKA, ERIKA S.; TASHIMA, ALEXANDRE K.; SANT'ANNA, SÁVIO S.; GREGO, KATHLEEN F.; MORAIS-ZANI, KAREN DE; Tanaka-Azevedo, Anita M. Crotamine in *Crotalus durissus*: distribution according to subspecies and geographic origin, in captivity or nature. JOURNAL OF VENOMOUS ANIMALS AND TOXINS INCLUDING TROPICAL DISEASES. Fator de Impacto (2020 JCR): 2,8310, v.26, p.:e20190053 - , 2020.

SANZ, L.; QUESADA-BERNAT, S.; PEREZ, A.; MORAIS-ZANI, K.; SANT'ANNA, S. S. ; **HATAKEYAMA, D. M.; TASIMA, L. J.; SOUZA, M.; KAYANO, A.; ZAVALETÀ, A.; SALAS, M.; SOARES, A.; CALDERON, L.; TANAKA-AZEVEDO, A. M.; LOMONTE, B.; CALVETE, J. J.; CALDEIRA, C.** Danger in the canopy. Comparative proteomics and bioactivities of the venoms of the South American palm pitviper *Bothrops bilineatus* subspecies *bilineatus* and *smaragdinus*, and antivenomics of *B. b. bilineatus* (Rondônia) venom

against the Brazilian pentabothropic antivenom. JOURNAL OF PROTEOME RESEARCH. Fator de Impacto (2020 JCR): 4,4660, v.19, p.3518 - 3532, 2020.

MORAIS-ZANI, K.; SILVA-JUNIOR, L. N.; ABREU, L. S.; RODRIGUES, C. F. B.; GALIZIO, N. C.; AGUIAR, W. S.; SERINO-SILVA, C.; SANTOS, V. S.; COSTA, I. A.; OLIVEIRA, L. V. F.; SANT'ANNA, S. S. ; GREGO, K. F.; TANAKA-AZEVEDO, A. M.; RODRIGUES, L. N. S. Geographic variation of individual venom profile of *Crotalus durissus* snakes. JOURNAL OF VENOMOUS ANIMALS AND TOXINS INCLUDING TROPICAL DISEASES. Fator de Impacto (2020 JCR): 2,8310, v.26, p.e20200016 -, 2020.

HATAKEYAMA, D. M.; TASIMA, L. J.; BRAVO-TOBAR, C. A.; SERINO-SILVA, C.; TASHIMA, A. K.; RODRIGUES, C. F. B.; AGUIAR, W. S.; GALIZIO, N. C.; LIMA, E. O. V.; KAVAZOI, V. K.; GUTIERREZ-MARIN, J. D.; FARIAS, I. B.; SANT'ANNA, S. S. ; GREGO, K. F.; MORAIS-ZANI, K.; TANAKA-AZEVEDO, A. M. Venom complexity in individual venom of nine *Bothrops atrox* (common lancehead) siblings. JOURNAL OF VENOMOUS ANIMALS AND TOXINS INCLUDING TROPICAL DISEASES. Fator de Impacto (2020 JCR): 2,8310, v.26, p.e20200018, 2020.

Simone Guedes Calderano, Milton Yutaka Nishiyama Junior, Marjorie Marini, Nathan de Oliveira Nunes, Marcelo da Silva Reis, José Salvatore Leister Patané, José Franco da Silveira, Julia Pinheiro Chagas da Cunha and Maria Carolina Elias. Identification of novel interspersed DNA repetitive elements in the *Trypanosoma cruzi* genome associated with the 3-UTRs of surface multigenic families. Genes, v. 11, p. 1235, 2020.

LIMA, E. O. V.; TASIMA, L. J.; HATAKEYAMA, D. M.; SERINO-SILVA, C.; RODRIGUES, C. F. B.; GALIZIO, N. C.; CHIARELLI, T.; NISHIDUKA, E. S.; ROCHA, M. M.; SANT'ANNA, SÁVIO S.; GREGO, K. F.; TASHIMA, A. K.; TANAKA-AZEVEDO, A. M.; MORAIS-ZANI, K. *Crotalus durissus terrificus*; snake venom plasticity; intraspecific venom variability; captivity maintenance; L-amino acid oxidase. TOXICON. Fator de Impacto (2020 JCR): 3,0330, v.193, p.73 - 83, 2021.

PICOLO G; LOPES FSR; KIMURA LF; SILVA LMR; SANT'ANNA MB. Das florestas tropicais sul-americanas para o seu dia a dia: uso clínico de toxinas animais e seus derivados. In: Leonardo Augusto Kohara Melchior; Dionatas Ulises de Oliveira Meneguetti; Luís Marcelo Aranha Camargo; Jader de Oliveira. (Org.). Atualidades em Medicina Tropical na América do Sul. 1ed. Rio Branco, Acre: Stricto Sensu, 2021, v., p. 10-27.

PICOLO G; LOPES FSR; KIMURA LF; SILVA LMR; SANT'ANNA MB. Das florestas tropicais sul-americanas para o seu dia a dia: uso clínico de toxinas animais e seus derivados. In: Leonardo Augusto Kohara Melchior; Dionatas Ulises de Oliveira Meneguetti; Luís Marcelo Aranha Camargo; Jader de Oliveira. (Org.). Atualidades em Medicina Tropical na América do Sul. 1ed. Rio Branco, Acre: Stricto Sensu, 2021, v., p. 10-27.

Luz D, Gómez FD, Ferreira RL, Melo BS, Guth BEC, Quintilio W, Moro AM, Presta A,

Sacerdoti F, Ibarra C, Chen G, Sidhu SS, Amaral MM, Piazza RMF. The deleterious effects of Shiga Toxin Type 2 are neutralized in vitro by FabF8:Stx2 recombinant monoclonal antibody. Toxins (Basel). 2021 Nov; 22(11):825. doi: 10.3390/toxins13110825.

HATAKEYAMA, DANIELA MIKI; JORGE TASIMA, LÍDIA; DA COSTA GALIZIO, NATHÁLIA; SERINO-SILVA, CAROLINE; FABRI BITTENCOURT RODRIGUES, CAROLINE; RODRIGUES STUGINSKI, DANIEL; STEFANINI SANT'ANNA, SÁVIO; FERNANDES GREGO, KATHLEEN; TASHIMA, ALEXANDRE KEIJI; NISHIDUKA, ERIKA SAYURI; DE MORAIS-ZANI, KAREN; Tanaka-Azevedo, Anita Mitico From birth to adulthood: An analysis of the Brazilian lancehead (*Bothrops moojeni*) venom at different life stages. PLoS One. Fator de Impacto (2020 JCR): 3,2400, v.16, p.e0253050 - , 2021.

RODRIGUES, C. F. B.; ZDENEK, C. N.; **SERINO-SILVA, C.**; GREGO, K. F.; MORAIS-ZANI, K.; BENARD-VALLE, M.; NERI-CASTRO, E.; ALAGON, A.; TANAKA-AZEVEDO, A. M.; FRY, BRYAN G. BoaPLI from *Boa constrictor* blood is a broad-spectrum inhibitor of venom PLA₂ pathophysiological actions. JOURNAL OF CHEMICAL ECOLOGY. Fator de Impacto (2020 JCR): 2,6260, v.21, p.s10886 - , 2021.

Andrade SA, de Souza DA, Torres AL, de Lima CFG, **Ebram MC**, Celano RMG, Schattner M and Chudzinski-Tavassi AM (2022) Pathophysiology of COVID-19: Critical Role of Hemostasis. Front. Cell. Infect. Microbiol. 12:896972. doi: 10.3389/fcimb.2022.896972.

Silva, G.M.; Berto, D.H.; Fessel, M.R.; Waitman, K.B.; **Ebram, M.C.**; Zainescu, I.C.; Portaro, F.C.; Heras, M.; Andrade, S. (2021). Design, synthesis, and evaluation of Bothrops venom serine proteases peptidic inhibitors - J. Venom Anim Toxins Incl Trop Dis., 27: e20200066. doi: 10.1590/1678-9199-JVATID-2020-0066.

Henrique IM, Sacerdoti F, **Ferreira RL**, Henrique C, Amaral MM, Piazza RMF, Luz D. Therapeutic Antibodies Against Shiga Toxins: Trends and Perspectives. Front Cell Infect Microbiol. 2022 Feb 10;12:825856. doi: 10.3389/fcimb.2022.825856.

Ho JD, Takara LEM, Monaris D, Gonçalves AP, Souza-Filho AF, de Souza GO, Heinemann MB, Ho PL, Abreu PAE. GroEL protein of the *Leptospira* spp. interacts with host proteins and induces cytokines secretion on macrophages. BMC Microbiol. 2021 Mar 31;21(1):99. doi: 10.1186/s12866-021-02162-w. PMID: 33789603; PMCID: PMC8011160.

Zambelli VO, **Alcantara QA**, Gross ER. Alcohol and analgesia: a fine wine getting better with age. Br J Anaesth. 2021 Aug;127(2):177-181. doi: 10.1016/j.bja.2021.05.003. Epub 2021 Jun 3. PMID: 34090680

Martins BB, Hösch NG, **Alcantara QA**, Budas GR, Chen CH, Mochly-Rosen D, Ferreira JCB, Zambelli VO. Activation of PKCε-ALDH2 Axis Prevents 4-HNE-Induced Pain in Mice. Biomolecules. 2021 Nov; 30;11(12):1798. doi: 10.3390/biom11121798. PMID: 34944441.

de Freitas BG, Hösch NG, Pereira LM, Barbosa TC, Picolo G, Cury Y, Zambelli VO. PKCζ-Mitogen-Activated Protein Kinase Signaling Mediates Crotalaphine-Induced Antinociception. *Toxins (Basel)*. 2021 Dec 20;13(12):912. doi: 10.3390/toxins13120912. PMID: 34941749

Marta de Oliveira Domingos, Silvio Marciano da Silva Junior, Wagner Milanello, Shirley Sizue Nakamura Nakano, Marcia Regina Franzolin, Luis Fernando dos Santos, Kamila Oliveira Nunes, Vaniky Duarte Marques, Waldir P. Elias, **Herbert Guimarães de Sousa Silva**, Bruna De Lucca Caetano and Roxane Maria Fontes Piazza (2022). *Pathogens*. 11, 231. Doi:10.3390/pathogens11020231

Andrade SA, de Souza DA, Torres AL, de Lima CFG, Ebram MC, Celano RMG, Schattner M and Chudzinski-Tavassi AM (2022) Pathophysiology of COVID-19: Critical Role of Hemostasis. *Front. Cell. Infect. Microbiol.* 12:896972. doi: 10.3389/fcimb.2022.896972

Andrade SA, de Souza DA, Torres AL, Oliveira PR, Moreira PDO, da Silva GM, Selistre-de-Araujo HS, Chudzinski-Tavassi AM. Snake Envenomation: A Component- Based Review on Hemostatic Alterations (2022). *Adv Clin Toxicol*, 7(1). doi: 10.23880/act-16000236.

Kimura, L.F; Sant'Anna, M.B.; Andrade, S. A.; **Ebram, M.C.**; Lima, C.F.G.; Celano, R.M.G.; F.M. Viégas, R.F.M (2021) COVID-19 induces proatherogenic alterations in moderate to severe non-comorbid patients: A single-center observational study. *Blood Cells*, 92:102604. doi: 10.1016/j.bcmd.2021.102604.

KAVAZOI, VICTOR KOITI; SERINO-SILVA, CAROLINE; BITTENCOURT RODRIGUES, CAROLINE FABRI; HATAKEYAMA, DANIELA MIKI; CARVALHO DE SOUZA, DANIEL; GREGO, KATHLEEN FERNANDES; DE MORAIS-ZANI, KAREN; Tanaka-Azevedo, Anita Mitico A comparative study of endogenous phospholipase A₂ inhibitors in the serum of Brazilian pit vipers. *TOXICON. Fator de Impacto* (2020 JCR): 3,0330, v.213, p.87 - 91, 2022.

TASIMA, LIDIA JORGE; HATAKEYAMA, DANIELA MIKI; AGUIAR, WESLEI DA SILVA; LIMA, EDUARDO OLIVEIRA VENÂNCIO DE; MIYAMOTO, JACKSON GABRIEL; TASHIMA, ALEXANDRE KEIJI; SANT'ANNA, SÁVIO STEFANINI; GREGO, KATHLEEN FERNANDES; MORAIS-ZANI, KAREN DE; Tanaka-Azevedo, Anita Mitico. Analyzing the influence of age and sex in *Bothrops pauloensis* snake venom. *TOXICON. Fator de Impacto* (2020 JCR): 3,0330, v.214, p.78 - 90, 2022.