

FULL LIST OF PUBLICATIONS, PATENTS AND CRYSTALLOGRAPHIC STRUCTURES

A Buschiazzo - January 2021

Bibliometric data (Google Scholar):

h-index: 34

i10: 55

Number of citations : 3842

14 papers with ≥ 100 citations (4 as 1st author; 2 as corresponding author; the most cited as 1st author with 255 citations)

Publications

1. Lara J, Diacovich L, Trajtenberg F, Larrieux N, Malchiodi EL, Fernández MM, Gago G, Gramajo H*, **Buschiazzo A*** (2020) *Mycobacterium tuberculosis* FasR senses long fatty acyl-CoA through a tunnel and a hydrophobic transmission spine. *Nat Commun.* **11**:3703 [*co-corresponding authors]
2. Gibson KH, Trajtenberg F, Wunder EA, Brady MR, San Martin F, Mechaly A, Shang Z, Liu J, Picardeau M, Ko A*, **Buschiazzo A***, Sindelar CV*. (2020) An asymmetric sheath controls flagellar supercoiling and motility in the leptospira spirochete. *eLife.* **11**:9 [*co-corresponding authors]
3. Macías-Rioseco M, Silveira C, Fraga M, Casaux L, Cabrera A, Francia ME, Robello C, Maya L, Zarantonelli L, Suanes A, Colina R, **Buschiazzo A**, Giannitti F, Riet-Correa F. (2020) Causes of abortion in dairy cows in Uruguay. *Pesqui Vet Bras.* **40**:325-332.
4. Trajtenberg F*, **Buschiazzo A*** (2020) Protein Dynamics in Phosphoryl-Transfer Signaling Mediated by Two-Component Systems. *Methods Mol Biol.* **2077**:1-18 [*co-corresponding authors]
5. **Buschiazzo A***, Trajtenberg F*. (2019) Two-Component Sensing and Regulation: How Do Histidine Kinases Talk with Response Regulators at the Molecular Level? *Annu Rev Microbiol.* **73** doi:10.1146/annurev-micro-091018-054627. [*co-corresponding authors]
6. Alvarez CE, Bovdilova A, Höppner A, Wolff C-C, Saigo M, Trajtenberg F, Zhang T, **Buschiazzo A**, Nagel-Steger L, Drincovich MF, Lercher MJ, Maurino VG. (2019) Molecular adaptations of NADP-malic enzyme for its function in C4 photosynthesis in grasses. *Nat Plants.* **5**:755-765
7. Nieves C, Ferrés I, Díaz-Viraqué F, **Buschiazzo A**, Zarantonelli L, Iraola G. (2019) Draft Genome Sequences of 40 Pathogenic *Leptospira* Strains Isolated from Cattle in Uruguay. *Microbiol Resour Announc.* **8**:e00893-19.
8. Ortiz C, Botti H, **Buschiazzo A***, Comini MA*. (2019) Glucose-6-Phosphate Dehydrogenase from the Human Pathogen *Trypanosoma cruzi* Evolved Unique Structural Features to Support Efficient Product Formation. *J Mol Biol.* **431**:2143-2162. [*co-corresponding authors]
9. Zarantonelli L, Suanes A, Meny P, Buroni F, Nieves C, Salaberry X, Briano C, Ashfield N, Da Silva Silveira C, Dutra F, Easton C, Fraga M, Giannitti F, Hamond C, Macías-Rioseco M, Menéndez C, Mortola A, Picardeau M, Quintero J, Ríos C, Rodríguez V, Romero A, Varela G, Rivero R*, Schelotto F*, Riet-Correa F*, **Buschiazzo A***; Grupo de Trabajo Interinstitucional de Leptospirosis Consortium. (2018) Isolation of pathogenic *Leptospira* strains from naturally infected cattle in Uruguay reveals high serovar diversity

- and uncovers a relevant risk for human leptospirosis. *PLoS Negl Trop Dis.* **12**:e0006694. [*co-corresponding authors]
10. Mechaly AE, Haouz A, Sasso N, **Buschiazza A**, Betton JM, Alzari PM. (2018) Conformational plasticity of the response regulator CpxR, a key player in Gammaproteobacteria virulence and drug-resistance. *J Struct Biol.* **204**:165-171.
 11. Simpkin AJ, Simkovic F, Thomas JMH, Savko M, Lebedev A, Uski V, Ballard C, Wojdyl M, Wu R, Sanishvili R, Xu Y, Lisa MN, **Buschiazza A**, Shepard W, Rigden DJ, Keegan RM. (2018) SIMBAD: a sequence-independent molecular-replacement pipeline. *Acta Crystallogr D Struct Biol.* **74**:595-605.
 12. Wunder EA Jr, Slamti L, Suwondo DN, Gibson KH, Shang Z, Sindelar CV, Trajtenberg F, **Buschiazza A**, Ko AI, Picardeau M. (2018) FcpB Is a Surface Filament Protein of the Endoflagellum Required for the Motility of the Spirochete *Leptospira*. *Front Cell Infect Microbiol.* **8**:130.
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 15. Imelio JA, Larrieux N, Mechaly AE, Trajtenberg F, **Buschiazza A**. Snapshots of the Kinase:Regulator Complex DesK:DesR in Different Functional States, by Using Rational Mutagenesis and X-Ray Crystallography. (2017) *Bio Protoc.* **7**:e2510.
 16. Mechaly AE, Soto Diaz S, Sasso N, **Buschiazza A**, Betton JM, Alzari PM. Structural coupling between autokinase and phosphotransferase reactions in a bacterial histidine kinase. (2017) *Structure.* **25**:939-944.
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25. Obal G, Trajtenberg F, Carrión F, Tomé L, Larrieux N, Zhang X, Pritsch O*, **Buschiazza A***. Conformational plasticity of a native retroviral capsid revealed by x-ray crystallography. (2015) *Science.* **349**:95-98. [*co-corresponding authors]
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- constant domains on antigen-affinity modulation. (2013) *Acta Crystallogr. Sect. D Biol. Crystallogr.* **69**:388-397.
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Patents

1. "Crystallographic structure of TcPRACA and uses therefor"

Minoprio, P., Alzari, P.M., **Buschiazza, A.**, Degrave, W., Gregoire, C. and Chamond, N.

Institut Pasteur (Paris, France)

European Patent Office, BRPI0410975, 2006-07-04.

United States Patent Application, A1, Document N° 20050250195, Nov 10 2005.

Deposited experimental 3D structures in the Protein Data Bank (PDB)

One hundred (100) structures solved, with access codes:

1MR5, 1MS0, 1MS1, 1MS3, 1MS4, 1MS5, 1MS8, 1MS9, 1MZ5, 1MZ6, 1N1S, 1N1T, 1N1V, 1N1Y, 1RZU, 1RZV, 1S0I, 1S0J, 1W61, 1W62, 2A75, 2AGS, 2AH2, 2CKD, 2F3X, 2F41, 2FHR, 2FWV, 2GEJ, 2GEK, 2UYO, 2UYQ, 2V7S, 2WAM, 2XNC, 2XNJ, 2YOC, 3B69, 3EHF, 3EHG, 3EHH, 3EHJ, 3GIE, 3GIF, 3GIG, 3I0V, 3I11, 3I13, 3I14, 3I15, 3M8O, 3OPZ, 3PG1, 3PJQ, 3QNX, 3QNY, 3QNZ, 3QO0, 3QO1, 3UIB, 4A0X, 4A0Y, 4A0Z, 4A12, 4DVH, 4EMX, 4LE0, 4LE1, 4LE2, 4LDZ, 4LS5, 4LS6, 4LS7, 4LS8, 4PH0, 4PH1, 4PH2, 4PH3, 4Q7E, 5CEE, 5IUJ, 5IUK, 5IUL, 5IUM, 5IUN, 5K0W, 6BY0, 6C7N, 6D23, 6D24, 6NQW, 6NQX, 6NQY, 6NQZ, 6OC8, 6O6P, 6O6O, 6O6N, 6PWB, 6XQK (except for the last one, which is on hold until publication, the rest are publicly available)