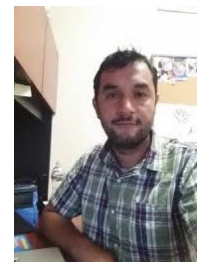


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Research outputs

- 1. Molecular characterization and expression analysis of the chicken-type and goose-type lysozymes from totoaba (*Totoaba macdonaldi*)**
Moreno-Córdova, E. N., Islas-Osuna, M. A., Contreras-Vergara, C. A., López-Zavala, A. A., Ruiz-Bustos, E., Reséndiz-Sandoval, M. G., Castillo-Yañez, F. J., Criscitiello, M. F. & Arvizu-Flores, A. A., 28 Jul 2020, In : *Developmental and Comparative Immunology*. p. 103807
- 2. Quercetin repressed the stress response factor (*sigB*) and virulence genes (*prfA*, *actA*, *inlA*, and *inlC*), lower the adhesion, and biofilm development of *L. monocytogenes***
Vazquez-Armenta, F. J., Hernandez-Oñate, M. A., Martinez-Tellez, M. A., Lopez-Zavala, A. A., Gonzalez-Aguilar, G. A., Gutierrez-Pacheco, M. M. & Ayala-Zavala, J. F., 1 May 2020, In : *Food Microbiology*.
- 3. Synergistic mode of action of catechin, vanillic and protocatechuic acids to inhibit the adhesion of uropathogenic *Escherichia coli* on silicone surfaces**
Bernal-Mercado, A. T., Gutierrez-Pacheco, M. M., Encinas-Basurto, D., Mata-Haro, V., Lopez-Zavala, A. A., Islas-Osuna, M. A., Gonzalez-Aguilar, G. A. & Ayala-Zavala, J. F., 1 Feb 2020, In : *Journal of Applied Microbiology*. p. 387-400 14 p.
- 4. Doing more with less: A comparison of 16S hypervariable regions in search of defining the shrimp microbiota**
García-López, R., Cornejo-Granados, F., Lopez-Zavala, A. A., Sánchez-López, F., Cota-Huizar, A., Sotelo-Mundo, R. R., Guerrero, A., Mendoza-Vargas, A., Gómez-Gil, B. & Ochoa-Leyva, A., 1 Jan 2020, In : *Microorganisms*.
- 5. Mitochondrial response of the lesser grain borer *Rhyzopertha dominica* (F.) to modified atmospheres**
Levy-De la Torre, V. A., Cinco-Moroyoqui, F. J., López-Zavala, A. A., Wong-Corral, F. J. & Martínez-Cruz, O., Sep 2019, In : *Journal of Stored Products Research*. 83, p. 338-346 9 p.
- 6. Refolding and activation from bacterial inclusion bodies of trypsin i from sardine (*sardinops sagax caerulea*)**
Carretas-Valdez, M. I., Cinco-Moroyoqui, F. J., Ezquerro-Brauer, M. J., Marquez-Rios, E., Quintero-Reyes, I. E., Lopez-Zavala, A. A. & Arvizu-Flores, A. A., 1 Jan 2019, In : *Protein and Peptide Letters*. p. 170-175 6 p.
- 7. Comparison of single and combined use of catechin, protocatechuic, and vanillic acids as antioxidant and antibacterial agents against uropathogenic *Escherichia coli* at planktonic and biofilm levels**
Bernal-Mercado, A. T., Vazquez-Armenta, F. J., Tapia-Rodriguez, M. R., Islas-Osuna, M. A., Mata-Haro, V., Gonzalez-Aguilar, G. A., Lopez-Zavala, A. A. & Ayala-Zavala, J. F., 30 Oct 2018, In : *Molecules*.
- 8. Quercetin reduces adhesion and inhibits biofilm development by *Listeria monocytogenes* by reducing the amount of extracellular proteins**
Vazquez-Armenta, F. J., Bernal-Mercado, A. T., Tapia-Rodriguez, M. R., Gonzalez-Aguilar, G. A., Lopez-Zavala, A. A., Martinez-Tellez, M. A., Hernandez-Oñate, M. A. & Ayala-Zavala, J. F., 1 Aug 2018, In : *Food Control*. p. 266-273 8 p.
- 9. De novo assembly and transcriptome characterization of the freshwater prawn *Palaemonetes argentinus*: Implications for a detoxification response**
García, C. F., Pedrini, N., Sánchez-Paz, A., Reyna-Blanco, C. S., Lavarias, S., Muhlia-Almazán, A., Fernández-Giménez, A., Laino, A., de-la-Re-Vega, E., Lukaszewicz, G., López-Zavala, A. A., Brieba, L. G., Criscitiello, M. F., Carrasco-Miranda, J. S., García-Orozco, K. D., Ochoa-Leyva, A., Rudiño-Piñera, E., Sanchez-Flores, A. & Sotelo-Mundo, R. R., 1 Feb 2018, In : *Marine Genomics*. p. 74-81 8 p.
- 10. Exogenous enzymes in aquaculture: Alginate and alginate-bentonite microcapsules for the intestinal delivery of shrimp proteases to Nile tilapia**
Rodriguez, Y. E., Laitano, M. V., Pereira, N. A., López-Zavala, A. A., Haran, N. S. & Fernández-Gimenez, A. V., 4 Jan 2018, In : *Aquaculture*. p. 35-43 9 p.
- 11. Microbiome of Pacific Whiteleg shrimp reveals differential bacterial community composition between Wild, Aquacultured and AHPND/EMS outbreak conditions**
Cornejo-Granados, F., Lopez-Zavala, A. A., Gallardo-Becerra, L., Mendoza-Vargas, A., Sánchez, F., Vichido, R., Brieba, L. G., Viana, M. T., Sotelo-Mundo, R. R. & Ochoa-Leyva, A., 1 Dec 2017, In : *Scientific Reports*.
- 12. Insights into ligand binding to a glutathione S-transferase from mango: Structure, thermodynamics and kinetics**
Valenzuela-Chavira, I., Contreras-Vergara, C. A., Arvizu-Flores, A. A., Serrano-Posada, H., Lopez-Zavala, A. A., García-Orozco, K. D., Hernandez-Paredes, J., Rudiño-Piñera, E., Stojanoff, V., Sotelo-Mundo, R. R. & Islas-Osuna, M. A., 1 Apr 2017, In : *Biochimie*. p. 35-45 11 p.

13. **Biochemical and structural characterization of a novel arginine kinase from the spider *Polybetes pythagoricus***
Laino, A., Lopez-Zavala, A. A., Garcia-Orozco, K. D., Carrasco-Miranda, J. S., Santana, M., Stojanoff, V., Sotelo-Mundo, R. R. & Garcia, C. F., 1 Jan 2017, In : PeerJ.
14. **Experimental and theoretical approaches to investigate the immunogenicity of *Taenia solium* derived KE7 antigen**
Bobes, R. J., Navarrete-Perea, J., Ochoa-Leyva, A., Anaya, V. H., Hernández, M., Cervantes-Torres, J., Estrada, K., Sánchez-Lopez, F., Soberón, X., Rosas, G., Nunes, C. M., García-Varela, M., Sotelo-Mundo, R. R., López-Zavala, A. A., Gevorgian, G., Acero, G., Lacleste, J. P., Fragoso, G. & Sciotto, E., 1 Jan 2017, In : Infection and Immunity.
15. **Structural insights from a novel invertebrate triosephosphate isomerase from *Litopenaeus vannamei***
Lopez-Zavala, A. A., Carrasco-Miranda, J. S., Ramirez-Aguirre, C. D., López-Hidalgo, M., Benitez-Cardoza, C. G., Ochoa-Leyva, A., Cardona-Felix, C. S., Diaz-Quezada, C., Rudiño-Piñera, E., Sotelo-Mundo, R. R. & Briebe, L. G., 1 Dec 2016, In : Biochimica et Biophysica Acta - Proteins and Proteomics. p. 1696-1706 11 p.
16. **Molecular structure, hydrogen-bonding patterns and topological analysis (QTAIM and NCI) of 5-methoxy-2-nitroaniline and 5-methoxy-2-nitroaniline with 2-amino-5-nitropyridine (1:1) co-crystal**
Hernández-Paredes, J., Carrillo-Torres, R. C., López-Zavala, A. A., Sotelo-Mundo, R. R., Hernández-Negrete, O., Ramírez, J. Z. & Alvarez-Ramos, M. E., 5 Sep 2016, In : Journal of Molecular Structure. p. 505-516 12 p.
17. **Arginine kinase shows nucleoside diphosphate kinase-like activity toward deoxythymidine diphosphate**
Lopez-Zavala, A. A., Sotelo-Mundo, R. R., Hernandez-Flores, J. M., Lugo-Sanchez, M. E., Sugich-Miranda, R. & Garcia-Orozco, K. D., 1 Jun 2016, In : Journal of Bioenergetics and Biomembranes. p. 301-308 8 p.
18. **Novel transcriptome assembly and improved annotation of the whiteleg shrimp (*Litopenaeus vannamei*), a dominant crustacean in global seafood mariculture**
Ghaffari, N., Sanchez-Flores, A., Doan, R., Garcia-Orozco, K. D., Chen, P. L., Ochoa-Leyva, A., Lopez-Zavala, A. A., Carrasco, J. S., Hong, C., Briebe, L. G., Rudiño-Piñera, E., Blood, P. D., Sawyer, J. E., Johnson, C. D., Dindot, S. V., Sotelo-Mundo, R. R. & Criscitiello, M. F., 25 Nov 2014, In : Scientific Reports.
19. **Structure of nucleoside diphosphate kinase from pacific shrimp (*Litopenaeus vannamei*) in binary complexes with purine and pyrimidine nucleoside diphosphates**
López-Zavala, A. A., Quintero-Reyes, I. E., Carrasco-Miranda, J. S., Stojanoff, V., Weichsel, A., Rudiño-Piñera, E. & Sotelo-Mundo, R. R., 1 Sep 2014, In : Acta Crystallographica Section:F Structural Biology Communications. p. 1150-1154 5 p.
20. **High-quality draft genomes of two *Vibrio parahaemolyticus* strains aid in understanding acute hepatopancreatic necrosis disease of cultured shrimps in Mexico**
Gomez-Jimenez, S., Noriega-Orozco, L., Sotelo-Mundo, R. R., Cantu-Robles, V. A., Cobian-Guemes, A. G., Cota-Verdugo, R. G., Gamez-Alejo, L. A., Pozo-Yauner, L. D., Guevara-Hernandez, E., Garcia-Orozco, K. D., Lopez-Zavala, A. A. & Ochoa-Leyva, A., 1 Jan 2014, In : Genome Announcements.
21. **Crystal structure of shrimp arginine kinase in binary complex with arginine - A molecular view of the phosphagen precursor binding to the enzyme**
López-Zavala, A. A., García-Orozco, K. D., Carrasco-Miranda, J. S., Sugich-Miranda, R., Velázquez-Contreras, E. F., Criscitiello, M. F., Briebe, L. G., Rudiño-Piñera, E. & Sotelo-Mundo, R. R., 1 Dec 2013, In : Journal of Bioenergetics and Biomembranes. p. 511-518 8 p.
22. **Crystallization and X-ray diffraction studies of crustacean proliferating cell nuclear antigen**
Carrasco-Miranda, J. S., Cardona-Felix, C. S., Lopez-Zavala, A. A., De-La-Re-Vega, E., De La Mora, E., Rudiño-Piñera, E., Sotelo-Mundo, R. R. & Briebe, L. G., 1 Nov 2012, In : Acta Crystallographica Section F: Structural Biology and Crystallization Communications. p. 1367-1370 4 p.
23. **Crystallization and X-ray diffraction studies of arginine kinase from the white Pacific shrimp *Litopenaeus vannamei***
Lopez-Zavala, A. A., Sotelo-Mundo, R. R., Garcia-Orozco, K. D., Isac-Martinez, F., Briebe, L. G. & Rudiño-Piñera, E., 1 Jul 2012, In : Acta Crystallographica Section F: Structural Biology and Crystallization Communications. p. 783-785 3 p.
24. **Gene expression and protein levels of thioredoxin in the gills from the whiteleg shrimp (*Litopenaeus vannamei*) infected with two different viruses: The WSSV or IHNV**
Garcia-Orozco, K. D., Sanchez-Paz, A., Aispuro-Hernandez, E., Gomez-Jimenez, S., Lopez-Zavala, A., Araujo-Bernal, S. & Muhlia-Almazan, A., 1 Jun 2012, In : Fish and Shellfish Immunology. p. 1141-1147 7 p.
25. **Expression and silencing of Selenoprotein M (SelM) from the white shrimp *Litopenaeus vannamei*: Effect on peroxidase activity and hydrogen peroxide concentration in gills and hepatopancreas**
García-Triana, A., Gómez-Jiménez, S., Peregrino-Urriarte, A. B., López-Zavala, A., González-Aguilar, G., Sotelo-Mundo, R. R., Valenzuela-Soto, E. M. & Yepiz-Plascencia, G., 1 Feb 2010, In : Comparative Biochemistry and Physiology - A Molecular and Integrative Physiology. p. 200-204 5 p.
26. **Molecular characterization of hypoxia inducible factor-1 (HIF-1) from the white shrimp *Litopenaeus vannamei* and tissue-specific expression under hypoxia**
Soñanez-Organis, J. G., Peregrino-Urriarte, A. B., Gómez-Jiménez, S., López-Zavala, A., Forman, H. J. & Yepiz-Plascencia, G., 2009, In : Comparative Biochemistry and Physiology - C Toxicology and Pharmacology.

27. **Recombinant bacterial expression of the lysozyme from the tobacco-hornworm *Manduca sexta* with activity at low temperatures**
García-Orozco, K. D., López-Zavala, A. A., Puentes-Camacho, D., Calderón-De-La-Barca, A. M. & Sotelo-Mundo, R. R., 1 Aug 2005, In : *Biotechnology Letters*. p. 1075-1080 6 p.
28. **Biophysical characterization of an insect lysozyme from *Manduca sexta***
López-Zavala, A. A., De-La-Re-Vega, E., Calderón-Arredondo, S. A., García-Orozco, K. D., Velázquez, E. F., Islas-Osuna, M. A., Valdez, M. A. & Sotelo-Mundo, R. R., 1 Feb 2004, In : *Protein and Peptide Letters*. p. 85-92 8 p.