

# Stanford

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## Jose Aguilar Rodriguez

Postdoctoral Research Fellow, Chemical and Systems Biology

### Bio

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#### HONORS AND AWARDS

- Long-Term Fellowship, European Molecular Biology Organization (2019)
- Early Postdoc Mobility, Swiss National Science Foundation (2018)
- Outstanding PhD Dissertation Award, University of Zurich (2017)
- SIB Best Swiss Bioinformatics Graduate Paper Award, SIB Swiss Institute of Bioinformatics (2017)
- Forschungskredit, University of Zurich (2014)
- National Award for Excellence in Academic Performance in Science - First Prize, Spanish Ministry of Education (2014)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Zurich (2017)
- Licenciado, Universidad De Valencia (2011)

### Research & Scholarship

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#### LAB AFFILIATIONS

- Dmitri Petrov, Petrov Lab (1/8/2018)
- Daniel Jarosz, Jarosz Lab (1/8/2018)

### Publications

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#### PUBLICATIONS

- **Molecular chaperones accelerate the evolution of their protein clients in yeast.** *Genome biology and evolution*  
Alvarez-Ponce, D. n., Aguilar-Rodríguez, J. n., Fares, M. A.  
2019
- **The architecture of an empirical genotype-phenotype map.** *Evolution; international journal of organic evolution*  
Aguilar-Rodríguez, J. n., Peel, L. n., Stella, M. n., Wagner, A. n., Payne, J. L.  
2018
- **Metabolic Determinants of Enzyme Evolution in a Genome-Scale Bacterial Metabolic Network.** *Genome biology and evolution*  
Aguilar-Rodríguez, J., Wagner, A.  
2018; 10 (11): 3076–88
- **A thousand empirical adaptive landscapes and their navigability.** *Nature ecology & evolution*  
Aguilar-Rodríguez, J. n., Payne, J. L., Wagner, A. n.

2017; 1 (2): 45

- **The Molecular Chaperone DnaK Is a Source of Mutational Robustness** *GENOME BIOLOGY AND EVOLUTION*  
Aguilar-Rodriguez, J., Sabater-Munoz, B., Montagud-Martinez, R., Berlanga, V., Alvarez-Ponce, D., Wagner, A., Fares, M. A.  
2016; 8 (9): 2979-2991
- **Chaperonin overproduction and metabolic erosion caused by mutation accumulation in Escherichia coli.** *FEMS microbiology letters*  
Aguilar-Rodríguez, J. n., Fares, M. A., Wagner, A. n.  
2019; 366 (10)
- **High mutation rates limit evolutionary adaptation in Escherichia coli.** *PLoS genetics*  
Sprouffske, K. n., Aguilar-Rodríguez, J. n., Sniegowski, P. n., Wagner, A. n.  
2018; 14 (4): e1007324
- **Drosophila Nnf1 paralogs are partially redundant for somatic and germ line kinetochore function.** *Chromosoma*  
Blattner, A. C., Aguilar-Rodríguez, J., Kränzlin, M., Wagner, A., Lehner, C. F.  
2017; 126 (1): 145-163
- **Genonets server-a web server for the construction, analysis and visualization of genotype networks** *NUCLEIC ACIDS RESEARCH*  
Khalid, F., Aguilar-Rodriguez, J., Wagner, A., Payne, J. L.  
2016; 44 (W1): W70-W76
- **How Archiving by Freezing Affects the Genome-Scale Diversity of Escherichia coli Populations** *GENOME BIOLOGY AND EVOLUTION*  
Sprouffske, K., Aguilar-Rodriguez, J., Wagner, A.  
2016; 8 (5): 1290-1298
- **The SIB Swiss Institute of Bioinformatics' resources: focus on curated databases** *NUCLEIC ACIDS RESEARCH*  
Bultet, L. A., Aguilar-Rodriguez, J., Ahrens, C. H., Ahrne, E. L., Ai, N., Aimo, L., Akalin, A., Aleksiev, T., Alloci, D., Altenhoff, A., Alves, I., Ambrosini, G., Pedone, et al  
2016; 44 (D1): D27-D37
- **Fitness Trade-Offs Determine the Role of the Molecular Chaperonin GroEL in Buffering Mutations** *MOLECULAR BIOLOGY AND EVOLUTION*  
Sabater-Munoz, B., Prats-Escriche, M., Montagud-Martinez, R., Lopez-Cerdan, A., Toft, C., Aguilar-Rodriguez, J., Wagner, A., Fares, M. A.  
2015; 32 (10): 2681-2693
- **Modelling the heart as a communication system.** *Journal of the Royal Society, Interface*  
Ashikaga, H., Aguilar-Rodríguez, J., Gorsky, S., Luszczyk, E., Marquitti, F. M., Thompson, B., Wu, D., Garland, J.  
2015; 12 (105)
- **The Gypsy Database (GyDB) of mobile genetic elements: release 2.0** *NUCLEIC ACIDS RESEARCH*  
Llorens, C., Futami, R., Covelli, L., Dominguez-Escriba, L., Viu, J. M., Tamarit, D., Aguilar-Rodriguez, J., Vicente-Ripolles, M., Fuster, G., Bernet, G. P., Maumus, F., Munoz-Pomer, A., Sempere, et al  
2011; 39: D70-D74
- **Genome Sequence of the Pea Aphid Acyrthosiphon pisum** *PLOS BIOLOGY*  
Richards, S., Gibbs, R. A., Gerardo, N. M., Moran, N., Nakabachi, A., Stern, D., Tagu, D., Wilson, A. C., Muzny, D., Kovar, C., Cree, A., Chacko, J., Chandrabose, et al  
2010; 8 (2)