# Jason E. Stajich

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### **Education**

| 2006-2009 | Postdoctoral training, University of California, Berkeley, CA. Mentor: Dr. John W Taylor |
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| 2001-2006 | Ph.D., Genetics and Genomics, Duke University, Durham, NC. Advisor: Dr. Fred S Dietrich  |
| 1995-1999 | B.S., Computer Science, Duke University, Durham, NC                                      |

## **Academic appointments:**

| 2017- | Professor (Step VII), Dept of Microbiology & Plant Pathology. University of California River- |
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2014–2017 Associate Professor (with tenure), Dept of Microbiology & Plant Pathology. University of California Riverside.

2009–2014 Assistant Professor, Dept of Plant Pathology & Microbiology. University of California Riverside.

2006–2009 Postdoctoral Research Fellow. Miller Institute for Basic Research.

Dept of Plant and Microbial Biology, University of California Berkeley.

## **Honors and Awards:**

| 2020      | Fellow, American Association for the Advancement of Science                      |
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| 2020      | Fellow, Mycological Society of America   |
| 2020      | Fellow, American Academy of Microbiology, American Society for Microbiology      |
| 2019-2025 | CIFAR Fellow in program 'Fungal Kingdom: Threats & Opportunities'                |
| 2019      | Rosie Perez Memorial Seminar, North Carolina State University                    |
| 2017      | Whetzel-Westcott-Dimock Special Lecturer, Cornell University                     |
| 2015      | Kavli Fellow, Kavli Frontiers of Science   |
| 2014      | C. J. Alexopoulos Prize, Mycological Society of America                          |
| 2006-2009 | Miller Institute for Basic Research in Science, Postdoctoral Research Fellowship |
| 2003-2006 | National Science Foundation, Graduate Research Fellowship                        |
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#### **Publications:**

#### **Peer Reviewed Publications**

- 1. Baxter, R. V., Othmane, K. B., Rochelle, J. M., **Stajich**, J. E., Hulette, C., Dew-Knight, S., Hentati, F., Hamida, M. B., Bel, S., Stenger, J. E., Gilbert, J. R., Pericak-Vance, M. A., and Vance, J. M. 2002. Ganglioside-induced differentiation-associated protein-1 is mutant in Charcot-Marie-Tooth disease type 4A/8q21. *Nat Genet* 30(1):21–22. doi:10.1038/ng796.
- 2. **Stajich**, J. E., Block, D., Boulez, K., Brenner, S. E., Chervitz, S. A., Dagdigian, C., Fuellen, G., Gilbert, J. G. R., Korf, I., Lapp, H., Lehväslaiho, H., Matsalla, C., Mungall, C. J., Osborne, B. I., Pocock, M. R., Schattner, P., Senger, M., Stein, L. D., Stupka, E., Wilkinson, M. D., and Birney, E. 2002. The Bioperl toolkit: Perl modules for the life sciences. *Genome Res* 12(10):1611–1618. doi:10.1101/gr.361602.
- 3. Stein, L. D., Mungall, C., Shu, S., Caudy, M., Mangone, M., Day, A., Nickerson, E., **Stajich**, J. E., Harris, T. W., Arva, A., and Lewis, S. 2002. The generic genome browser: a building block for a model organism system database. *Genome Res* 12(10):1599–1610. doi:10.1101/gr.403602.

- 4. Hahn, M. W., **Stajich**, J. E., and Wray, G. A. 2003. The effects of selection against spurious transcription factor binding sites. *Mol Biol Evol* 20(6):901–906. doi:10.1093/molbev/msg096.
- 5. Stein, L. D., Bao, Z., Blasiar, D., Blumenthal, T., Brent, M. R., Chen, N., Chinwalla, A., Clarke, L., Clee, C., Coghlan, A., Coulson, A., D'Eustachio, P., Fitch, D. H. A., Fulton, L. A., Fulton, R. E., Griffiths-Jones, S., Harris, T. W., Hillier, L. W., Kamath, R., Kuwabara, P. E., Mardis, E. R., Marra, M. A., Miner, T. L., Minx, P., Mullikin, J. C., Plumb, R. W., Rogers, J., Schein, J. E., Sohrmann, M., Spieth, J., Stajich, J. E., Wei, C., Willey, D., Wilson, R. K., Durbin, R., and Waterston, R. H. 2003. The genome sequence of *Caenorhabditis briggsae*: a platform for comparative genomics. *PLoS Biol* 1(2):E45. doi:10.1371/journal.pbio.0000045.
- 6. Kraus, P. R., Boily, M.-J., Giles, S. S., **Stajich**, J. E., Allen, A., Cox, G. M., Dietrich, F. S., Perfect, J. R., and Heitman, J. 2004. Identification of *Cryptococcus neoformans* temperature-regulated genes with a genomic-DNA microarray. *Eukaryot Cell* 3(5):1249–1260. doi:10.1128/EC.3.5.1249-1260.
- Fraser, J. A., Giles, S. S., Wenink, E. C., Geunes-Boyer, S. G., Wright, J. R., Diezmann, S., Allen, A., Stajich, J. E., Dietrich, F. S., Perfect, J. R., and Heitman, J. 2005. Same-sex mating and the origin of the Vancouver Island *Cryptococcus gattii* outbreak. *Nature* 437(7063):1360–1364. doi: 10.1038/nature04220.
- 8. Hahn, M. W., Bie, T. D., **Stajich**, J. E., Nguyen, C., and Cristianini, N. 2005. Estimating the tempo and mode of gene family evolution from comparative genomic data. *Genome Res* 15(8):1153–1160. doi:10.1101/gr.3567505.
- 9. Leman, S. C., Chen, Y., **Stajich**, J. E., Noor, M. A. F., and Uyenoyama, M. K. 2005. Likelihoods from summary statistics: recent divergence between species. *Genetics* 171(3):1419–1436. doi: 10.1534/genetics.104.040402.
- 10. Mitreva, M., McCarter, J. P., Arasu, P., Hawdon, J., Martin, J., Dante, M., Wylie, T., Xu, J., **Sta-jich**, J. E., Kapulkin, W., Clifton, S. W., Waterston, R. H., and Wilson, R. K. 2005. Investigating hookworm genomes by comparative analysis of two *Ancylostoma* species. *BMC Genomics* 6(1):58. doi:10.1186/1471-2164-6-58.
- 11. **Stajich**, J. E. and Hahn, M. W. 2005. Disentangling the effects of demography and selection in human history. *Mol Biol Evol* 22(1):63–73. doi:10.1093/molbev/msh252.
- 12. Hesselberth, J. R., Miller, J. P., Golob, A., **Stajich**, J. E., Michaud, G. A., and Fields, S. 2006. Comparative analysis of *Saccharomyces cerevisiae* WW domains and their interacting proteins. *Genome Biol* 7(4):R30. doi:10.1186/gb-2006-7-4-r30.
- 13. Cramer, R. A., **Stajich**, J. E., Yamanaka, Y., Dietrich, F. S., Steinbach, W. J., and Perfect, J. R. 2006. Phylogenomic analysis of non-ribosomal peptide synthetases in the genus *Aspergillus*. *Gene* 383:24–32. doi:10.1016/j.gene.2006.07.008.
- 14. Giles, S. S., **Stajich**, J. E., Nichols, C., Gerrald, Q. D., Alspaugh, J. A., Dietrich, F., and Perfect, J. R. 2006. The *Cryptococcus neoformans* catalase gene family and its role in antioxidant defense. *Eukaryot Cell* 5(9):1447–1459. doi:10.1128/EC.00098-06.
- 15. **Stajich**, J. E. and Dietrich, F. S. 2006. Evidence of mRNA-mediated intron loss in the human-pathogenic fungus *Cryptococcus neoformans*. *Euk Cell* 5(5):789–793. doi:10.1128/EC.5.5.789-793. 2006.
- 16. Kämper, J., Kahmann, R., Bölker, M., Ma, L.-J., Brefort, T., Saville, B. J., Banuett, F., Kronstad, J. W., Gold, S. E., Müller, O., Perlin, M. H., Wösten, H. A. B., de Vries, R., Ruiz-Herrera, J., na, C. G. R.-P., Snetselaar, K., McCann, M., Pérez-Martín, J., Feldbrügge, M., Basse, C. W., Steinberg, G., Ibeas, J. I., Holloman, W., Guzman, P., Farman, M., Stajich, J. E., Sentandreu, R., González-Prieto, J. M., Kennell, J. C., Molina, L., Schirawski, J., Mendoza-Mendoza, A., Greilinger, D., Münch, K., Rössel, N., Scherer, M., Vranes, M., Ladendorf, O., Vincon, V., Fuchs, U., Sandrock, B.,

- Meng, S., Ho, E. C. H., Cahill, M. J., Boyce, K. J., Klose, J., Klosterman, S. J., Deelstra, H. J., Ortiz-Castellanos, L., Li, W., Sanchez-Alonso, P., Schreier, P. H., Häuser-Hahn, I., Vaupel, M., Koopmann, E., Friedrich, G., Voss, H., Schlüter, T., Margolis, J., Platt, D., Swimmer, C., Gnirke, A., Chen, F., Vysotskaia, V., Mannhaupt, G., Güldener, U., Münsterkötter, M., Haase, D., Oesterheld, M., Mewes, H.-W., Mauceli, E. W., DeCaprio, D., Wade, C. M., Butler, J., Young, S., Jaffe, D. B., Calvo, S., Nusbaum, C., Galagan, J., and Birren, B. W. 2006. Insights from the genome of the biotrophic fungal plant pathogen *Ustilago maydis*. *Nature* 444(7115):97–101. doi:10.1038/nature05248.
- 17. James, T. Y., Kauff, F., Schoch, C. L., Matheny, P. B., Hofstetter, V., Cox, C. J., Celio, G., Gueidan, C., Fraker, E., Miadlikowska, J., Lumbsch, H. T., Rauhut, A., Reeb, V., Arnold, A. E., Amtoft, A., Stajich, J. E., Hosaka, K., Sung, G.-H., Johnson, D., O'Rourke, B., Crockett, M., Binder, M., Curtis, J. M., Slot, J. C., Wang, Z., Wilson, A. W., Schüßler, A., Longcore, J. E., O'Donnell, K., Mozley-Standridge, S., Porter, D., Letcher, P. M., Powell, M. J., Taylor, J. W., White, M. M., Griffith, G. W., Davies, D. R., Humber, R. A., Morton, J. B., Sugiyama, J., Rossman, A. Y., Rogers, J. D., Pfister, D. H., Hewitt, D., Hansen, K., Hambleton, S., Shoemaker, R. A., Kohlmeyer, J., Volkmann-Kohlmeyer, B., Spotts, R. A., Serdani, M., Crous, P. W., Hughes, K. W., Matsuura, K., Langer, E., Langer, G., Untereiner, W. A., Lücking, R., Büdel, B., Geiser, D. M., Aptroot, A., Diederich, P., Schmitt, I., Schultz, M., Yahr, R., Hibbett, D. S., Lutzoni, F., McLaughlin, D. J., Spatafora, J. W., and Vilgalys, R. 2006. Reconstructing the early evolution of Fungi using a six-gene phylogeny. *Nature* 443(7113):818–822. doi:10.1038/nature05110.
- 18. Demuth, J. P., Bie, T. D., **Stajich**, J. E., Cristianini, N., and Hahn, M. W. 2006. The evolution of mammalian gene families. *PLoS One* 1:e85. doi:10.1371/journal.pone.0000085.
- 19. Fitzpatrick, D. A., Logue, M. E., **Stajich**, J. E., and Butler, G. 2006. A fungal phylogeny based on 42 complete genomes derived from supertree and combined gene analysis. *BMC Evol Biol* 6:99. doi:10.1186/1471-2148-6-99.
- 20. Erwin, T. A., Jewell, E. G., Love, C. G., Lim, G. A. C., Li, X., Chapman, R., Batley, J., **Stajich**, J. E., Mongin, E., Stupka, E., Ross, B., Spangenberg, G., and Edwards, D. 2007. BASC: an integrated bioinformatics system for *Brassica* research. *Nucleic Acids Res* 35(Database issue):D870–D873. doi:10.1093/nar/gkl998.
- 21. Harrison, L. B., Yu, Z., **Stajich**, J. E., Dietrich, F. S., and Harrison, P. M. 2007. Evolution of budding yeast prion-determinant sequences across diverse fungi. *J Mol Biol* 368(1):273–282. doi: 10.1016/j.jmb.2007.01.070.
- 22. Fraser, J. A., **Stajich**, J. E., Tarcha, E. J., Cole, G. T., Inglis, D. O., Sil, A., and Heitman, J. 2007. Evolution of the mating type locus: insights gained from the dimorphic primary fungal pathogens *Histoplasma capsulatum*, *Coccidioides immitis*, and *Coccidioides posadasii*. *Eukaryot Cell* 6(4):622–629. doi:10.1128/EC.00018-07.
- 23. **Stajich**, J. E., Dietrich, F. S., and Roy, S. W. 2007. Comparative genomic analysis of fungal genomes reveals intron-rich ancestors. *Genome Biol* 8(10):R223. doi:10.1186/gb-2007-8-10-r223.
- 24. Hu, G., Liu, I., Sham, A., **Stajich**, J. E., Dietrich, F. S., and Kronstad, J. W. 2008. Comparative hybridization reveals extensive genome variation in the aids-associated pathogen *Cryptococcus neoformans*. *Genome Biol* 9(2):R41. doi:10.1186/gb-2008-9-2-r41.
- 25. Lilly, W. W., **Stajich**, J. E., Pukkila, P. J., Wilke, S. K., Inoguchi, N., and Gathman, A. C. 2008. An expanded family of fungalysin extracellular metallopeptidases of *Coprinopsis cinerea*. *Mycol Res* 112(Pt 3):389–398. doi:10.1016/j.mycres.2007.11.013.
- 26. Martin, F., Aerts, A., Ahrén, D., Brun, A., Danchin, E. G. J., Duchaussoy, F., Gibon, J., Kohler, A., Lindquist, E., Pereda, V., Salamov, A., Shapiro, H. J., Wuyts, J., Blaudez, D., Buée, M., Brokstein, P., Canbäck, B., Cohen, D., Courty, P. E., Coutinho, P. M., Delaruelle, C., Detter, J. C., Deveau, A., DiFazio, S., Duplessis, S., Fraissinet-Tachet, L., Lucic, E., Frey-Klett, P., Fourrey, C., Feussner, I., Gay, G., Grimwood, J., Hoegger, P. J., Jain, P., Kilaru, S., Labbé, J., Lin, Y. C., Legué, V., Tacon, F. L., Marmeisse, R., Melayah, D., Montanini, B., Muratet, M., Nehls, U., Niculita-Hirzel, H., Secq,

- M. P. O.-L., Peter, M., Quesneville, H., Rajashekar, B., Reich, M., Rouhier, N., Schmutz, J., Yin, T., Chalot, M., Henrissat, B., Kües, U., Lucas, S., de Peer, Y. V., Podila, G. K., Polle, A., Pukkila, P. J., Richardson, P. M., Rouzé, P., Sanders, I. R., **Stajich**, J. E., Tunlid, A., Tuskan, G., and Grigoriev, I. V. 2008. The genome of *Laccaria bicolor* provides insights into mycorrhizal symbiosis. *Nature* 452(7183):88–92. doi:10.1038/nature06556.
- 27. Regier, J. C., Shultz, J. W., Ganley, A. R. D., Hussey, A., Shi, D., Ball, B., Zwick, A., **Stajich**, J. E., Cummings, M. P., Martin, J. W., and Cunningham, C. W. 2008. Resolving arthropod phylogeny: exploring phylogenetic signal within 41 kb of protein-coding nuclear gene sequence. *Syst Biol* 57(6):920–938. doi:10.1080/10635150802570791.
- 28. Rosenblum, E. B., **Stajich**, J. E., Maddox, N., and Eisen, M. B. 2008. Global gene expression profiles for life stages of the deadly amphibian pathogen *Batrachochytrium dendrobatidis*. *Proc Natl Acad Sci U S A* 105(44):17034–17039. doi:10.1073/pnas.0804173105.
- 29. Fisher, M. C., Bosch, J., Yin, Z., Stead, D. A., Walker, J., Selway, L., Brown, A. J. P., Walker, L. A., Gow, N. A. R., **Stajich**, J. E., and Garner, T. W. J. 2009. Proteomic and phenotypic profiling of the amphibian pathogen *Batrachochytrium dendrobatidis* shows that genotype is linked to virulence. *Mol Ecol* 18(3):415–429. doi:10.1111/j.1365-294X.2008.04041.x.
- 30. Sharpton, T. J., **Stajich**, J. E., Rounsley, S. D., Gardner, M. J., Wortman, J. R., Jordar, V. S., Maiti, R., Kodira, C. D., Neafsey, D. E., Zeng, Q., Hung, C.-Y., McMahan, C., Muszewska, A., Grynberg, M., Mandel, M. A., Kellner, E. M., Barker, B. M., Galgiani, J. N., Orbach, M. J., Kirkland, T. N., Cole, G. T., Henn, M. R., Birren, B. W., and Taylor, J. W. 2009. Comparative genomic analyses of the human fungal pathogens *Coccidioides* and their relatives. *Genome Res* 19(10):1722–1731. doi:10.1101/gr.087551.108.
- 31. Nowrousian, M., **Stajich**, J. E., Engh, I., Espagne, E., Kamerewerd, J., Kempken, F., Kunstmann, B., Kuo, H.-C., Osiewacz, H. D., Pöggeler, S., Read, N., Seiler, S., Smith, K., Zickler, D., Kück, U., and Freitag, M. 2010. Next-generation sequencing of the 40 Mb genome of the filamentous fungus *Sordaria macrospora*. *PLoS Genetics* 6(4):e1000891. doi:10.1371/journal.pgen.1000891.
- 32. Neafsey, D. E., Barker, B. M., Sharpton, T. J., **Stajich**, J. E., Park, D. J., Whiston, E., Hung, C.-Y., McMahan, C., White, J., Sykes, S., Heiman, D., Young, S., Zeng, Q., Abouelleil, A., Aftuck, L., Bessette, D., Brown, A., Fitzgerald, M., Lui, A., Macdonald, J. P., Priest, M., Orbach, M. J., Galgiani, J. N., Kirkland, T. N., Cole, G. T., Birren, B. W., Henn, M. R., Taylor, J. W., and Rounsley, S. D. 2010. Population genomic sequencing of *Coccidioides* fungi reveals recent hybridization and transposon control. *Genome Res* 20(7):938–946. doi:10.1101/gr.103911.109.
- 33. **Stajich**, J. E., Wilke, S. K., Ahrèn, D., Au, C. H., Birren, B. W., Borodovsky, M., Burns, C., Canbäck, B., Casselton, L. A., Cheng, C. K., Deng, J., Dietrich, F. S., Fargo, D. C., Farman, M. L., Gathman, A. C., Goldberg, J., Guigó, R., Hoegger, P. J., Hooker, J. B., Huggins, A., James, T. Y., Kamada, T., Kilaru, S., Kodira, C., Kües, U., Kupfer, D., Kwan, H. S., Lomsadze, A., Li, W., Lilly, W. W., Ma, L.-J., Mackey, A. J., Manning, G., Martin, F., Muraguchi, H., Natvig, D. O., Palmerini, H., Ramesh, M. A., Rehmeyer, C. J., Roe, B. A., Shenoy, N., Stanke, M., Ter-Hovhannisyan, V., Tunlid, A., Velagapudi, R., Vision, T. J., Zeng, Q., Zolan, M. E., and Pukkila, P. J. 2010. Insights into evolution of multicellular fungi from the assembled chromosomes of the mushroom *Coprinopsis cinerea* (*Coprinus cinereus*). *Proc Natl Acad Sci U S A* 107(26):11889–11894. doi:10.1073/pnas. 1003391107.
- 34. Ohm, R. A., de Jong, J. F., Lugones, L. G., Aerts, A., Kothe, E., **Stajich**, J. E., de Vries, R. P., Record, E., Levasseur, A., Baker, S. E., Bartholomew, K. A., Coutinho, P. M., Fowler, T. J., Gathman, A. C., Lombard, V., Henrissat, B., Knabe, N., Kües, U., Lilly, W. W., Lindquist, E., Lucas, S., Magnuson, J. K., Piumi, F., Raudaskoski, M., Salamov, A., Schmutz, J., Schwarze, F. W., vanKuyk, P. A., Horton, J. S., Grigoriev, I. V., and Wösten, H. A. 2010. Genomic sequence of the wood-rotting *Schizophyllum commune* strain H4-8: a model mushroom system. *Nature Biotech* 28:957–963. doi:10.1038/nbt.1643.

- 35. Strandberg, R., Nygren, K., Menkis, A., James, T. Y., Wik, L., **Stajich**, J. E., and Johannesson, H. 2010. Conflict between reproductive gene trees and species phylogeny among outcrossing members of the filamentous ascomycete genus *Neurospora*. *Fungal Genetics & Biology* 11(7):869–878. doi:10.1016/j.fgb.2010.06.008.
- 36. Lévesque, C. A., Brouwer, H., Cano, L., Hamilton, J. P., Holt, C., Huitema, E., Raffaele, S., Robideau, G. P., Thines, M., Win, J., Zerillo, M. M., Beakes, G. W., Boore, J. L., Busam, D., Dumas, B., Ferriera, S., Fuerstenberg, S. I., Gachon, C. M., Gaulin, E., Govers, F., Grenville-Briggs, L., Horner, N., Hostetler, J., Jiang, R. H., Johnson, J., Krajaejun, T., Lin, H., Meijer, H. J., Moore, B., Morris, P., Phuntmart, V., Puiu, D., Shetty, J., Stajich, J. E., Tripathy, S., Wawra, S., van West, P., Whitty, B. R., Coutinho, P. M., Henrissat, B., Martin, F., Thomas, P. D., Tyler, B. M., De Vries, R. P., Kamoun, S., Yandell, M., Tisserat, N., and Buell, C. R. 2010. Genome sequence of the necrotrophic plant pathogen, *Pythium ultimum*, reveals original pathogenicity mechanisms and effector repertoire. *Genome Biol* 11(7):R173. doi:10.1186/gb-2010-11-7-r73.
- 37. Smith, K. M., Sancar, G., Dekhang, R., Sullivan, C. M., Li, S., Tag, A. G., Sancar, C., Bredeweg, E. L., Priest, H. D., McCormick, R. F., Thomas, T. L., Carrington, J. C., **Stajich**, J. E., Bell-Pedersen, D., Brunner, M., and Freitag, M. 2010. Transcription factors in light and circadian clock signaling networks revealed by genomewide mapping of direct targets for Neurospora White Collar Complex. *Eukaryot Cell* 9(10):1549–1556. doi:10.1128/EC.00154-10.
- 38. Burns, C., **Stajich**, J. E., Rechtsteiner, A., Hanlon, S. E., Wilke, S. K., Palmerini, H. J., Savytskyy, O. P., Gathman, A. C., Lilly, W. W., Lieb, J. D., Zolan, M. E., and Pukkila, P. J. 2010. Analysis of the basidiomycete *Coprinopsis cinerea* reveals conservation of the core meiotic expression program over half a billion years of evolution. *PLoS Genetics* 6(9):e1001135. doi:10.1371/journal.pgen. 1001135.
- 39. D'Souza, C. A., Kronstad, J. W., Taylor, G., Warren, R., Yuen, M., Hu, G., Jung, W. H., Sham, A., Kidd, S. E., Tangen, K., Lee, N., Zeilmaker, T., Sawkins, J., McVicker, G., Shah, S., Gnerre, S., Griggs, A., Zeng, Q., Bartlett, K., Li, W., Wang, X., Heitman, J., **Stajich**, J. E., Fraser, J. A., Meyer, W., Carter, D., Schein, J., Krzywinski, M., Kwon-Chung, K. J., Varma, A., Wang, J., Brunham, R., Fyfe, M., Ouellette, B. F. F., Siddiqui, A., Marra, M., Jones, S., Holt, R., Birren, B. W., Galagan, J. E., and Cuomo, C. A. 2011. Genome variation in *Cryptococcus gattii*, an emerging pathogen of immunocompetent hosts. *MBio* 2(1):e00342–10. doi:10.1128/mBio.00342-10.
- 40. Ellison, C. E., **Stajich**, J. E., Jacobson, D. J., Natvig, D. O., Lapidus, A., Foster, B., Aerts, A., Riley, R., Lindquist, E. A., Grigoriev, I. V., and Taylor, J. W. 2011. Massive changes in genome architecture accompany the transition to self-fertility in the filamentous fungus *Neurospora tetrasperma*. *Genetics* 189(1):55–69. doi:10.1534/genetics.111.130690.
- 41. Joneson, S., **Stajich**, J. E., Shiu, S.-H., and Rosenblum, E. B. 2011. Genomic transition to pathogenicity in chytrid fungi. *PLoS Pathogens* 7(11):e1002338. doi:10.1371/journal.ppat. 1002338.
- 42. **Stajich**, J. E., Harris, T., Brunk, B. P., Brestelli, J., Fischer, S., Harb, O. S., Kissinger, J. C., Li, W., Nayak, V., Pinney, D. F., Stoeckert, C. J., Jr, and Roos, D. S. 2012. FungiDB: an integrated functional genomics database for fungi. *Nucleic Acids Res* 40(D1):D675–D681. doi:10.1093/nar/gkr918.
- 43. Gioti, A., Mushegian, A. A., Strandberg, R., **Stajich**, J. E., and Johannesson, H. 2012. Unidirectional evolutionary transitions in fungal mating systems and the role of transposable elements. *Mol Biol Evol* 29(10):3215–3226. doi:10.1093/molbev/mss132.
- 44. Abramyan, J. and **Stajich**, J. E. 2012. Species-specific chitin-binding module 18 expansion in the amphibian pathogen *Batrachochytrium dendrobatidis*. *MBio* 3(3):e00150–e00112. doi:10.1128/mBio.00150-12.
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#### **Microbial Resource Announcements**

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#### **Commentaries and Book Reviews**

- 1. **Stajich**, J. E. 2009. Review of Bioinformatics, Volume I: Data, Sequence Analysis and Evolution; Volume II: Structure, Function and Applications. *The Quarterly Review of Biology* 84(3):284–285. doi:10.1086/644662. Book Review.
- 2. **Stajich**, J. E. 2011. Review of cellular and molecular biology of filamentous fungi. *The Quarterly Review of Biology* 86(1):59–59. doi:10.1086/658451. Book Review.
- 3. **Stajich**, J. E. 2016. Fungal Evolution: *Mucor* and *Phycomyces* see double. *Curr Biol* 26(16):R775–R777. doi:10.1016/j.cub.2016.06.049.
- 4. Valent, B., Farman, M., Tosa, Y., Begerow, D., Fournier, E., Gladieux, P., Islam, M. T., Kamoun, S., Kemler, M., Kohn, L. M., Lebrun, M.-H., **Stajich**, J. E., Talbot, N. J., Terauchi, R., Tharreau, D., and Zhang, N. 2019. *Pyricularia graminis-tritici* is not the correct species name for the wheat blast fungus: response to Ceresini *et al.* (mpp 20:2). *Molecular Plant Pathology* 20:173–179. doi: 10.1111/mpp.12778.
- 5. **Stajich**, J. E. 2024. Familiar fungal friends and foes. *Current Biology* 34(24):R1211–R1213. doi: 10.1016/j.cub.2024.11.005.

#### **Essays**

1. **Stajich**, J. E. 2014. Top 5 real wolves of wall street. http://nautil.us/issue/ 10/mergers--acquisitions/top-5-real-wolves-of-wall-street. "Moldy Monopolies" and "Creepy Crawly Conglomerate" in the "Mergers & Acquisitions" issue.

## Software and other Products

BioPerl - http://bioperl.org - Core developer

Github http://github.com/hyphaltip-individual projects

Github http://github.com/stajichlab - lab projects

Protocols.io Protocols https://www.protocols.io/researchers/jason-stajich - public protocols

Github http://github.com/1KFG - 1000 Fungal genomes project

Github http://github.com/zygolife - ZyGoLife NSF project and associated phylogenomics

Website: http://1000.fungalgenomes.org - 1KFG project

Website: http://herptilemicrobiomes.org - NSF URoL Herptile Microbiomes

Website: http://zygolife.org - NSF Zygolife

Website: http://dynamiterice.org - NSF Rice Transposable Element project

Website: http://fungalgenomes.org/blog - "The Hyphal Tip" A Blog I write about Fungal Ge-

Website & Database (Collaboration): http://fungidb.org

# **Grant Support:**

| Ongoing suppo | ort   |
|---------------|---|
| 2017-2026     | National Institutes of Health. R01-AI127548   |
|               | "Evolved Heterogeneity contributes to chronic fungal lung infections"                     |
|               | Role: Senior Personnel. PI: D Hogan (Dartmouth)   |
| 2017-2028     | National Institutes of Health. R01-AI130128   |
|               | "Evolution of Aspergillus fumigatus virulence"  |
|               | Role: Senior Personnel. PI: RA Cramer, Jr (Dartmouth)                                     |
| 2019-2025     | Canadian Institute For Advanced Research. Fellowship                                      |
|               | "Fungal Kingdom: Threats and Opportunities"   |
|               | Role: CIFAR Fellow. PI/Directors: L Cowen and J Heitman                                   |
| 2020-2023     | Gordon and Betty Moore Foundation   |
|               | "New Tools for Advancing Model Systems in Aquatic Symbiosis"                              |
|               | Role: Co-PI. PI: Lillian Fritz-Laylin (U Mass-Amherst). With Co-PI Tim James (U Michigan) |
| 2020-2025     | USDA-NIFA, Emergency Citrus Disease Research and Extension                                |
|               | "CAP: Combining Cultural And Genetic Approaches For Grove Success To Unravel And          |
|               | Enhance Resistance/Tolerance To Huanglongbing."   |
|               | Role: Co-PI. PI Caroline Roper, UCR   |
| 2022-2024     | Canadian Institute For Advanced Research. Catalyst Award                                  |
|               | "Discovering and describing fungi from deep biosphere environments"                       |
|               | Role: PI. Co-PI: Tim James, U Michigan  |
| 2022-2026     | National Science Foundation. EF-2125066.  |
|               | "Collaborative Research: MIM: Gut-inhabiting fungi influence structure and function of    |
|               | herptile microbiomes through horizontal gene transfer and novel metabolic function"       |
|               | Role: PI. Collaborative linked award with 3 other PIs: J Spatafora & K McPhail (Oregon    |
|               | State), D Walker (Middle Tennessee State) https://herptilemicrobiomes.org/                |
| 2022-2026     | National Science Foundation. IOS-2134912  |

Riverside), J Burnette (UC Riverside)

"Research-PGR: Impact of transposable element bursts on the rice genome and epigenome." Role: Co-I. PI: SR Wessler (UC Riverside). Co-I: R Schmitz (U Georgia), K Ostivek (UC

| 2022-2026   | National Science Foundation. DBI-2215705   |
|---|--|
|   | "Research Infrastructure: MRI: Acquisition of a Big Data HPC Cluster for Interdisciplinary   |
|   | Research and Training."  |
|   | Role: Co-I. PI: Thomas Girke (UC Riverside). Co-I: Wenxiu Ma, Mark Alber, Adam Godzik  |
|   | (UC Riverside)   |
| 2022-2027   | National Science Foundation. IOS-2141858   |
|   | "CAREER: Dissecting the molecular regulation of septin-mediated plant invasion by the  |
|   | blast fungus Magnaporthe oryzae"   |
|   | Role: Senior Personnel. PI: Martin Egan (U Arkansas)   |
| 2024-2025   | California Department of Food and Agriculture  |
|   | "Blocking the Acquisition and Transmission Cycle of Xylella fastidiosa by Glassy-winged  |
|   | Sharpshooter using Genetic Control." Role: Co-PI. PI: Peter Atkinson (UCR)   |
| 2024-2025   | USDA-APHIS   |
|   | "CRISPR-mediated Genome Modification of <i>Homalodisca vitripennis</i> for the genetic control   |
|   | of Pierce's Disease." Role: Co-PI. PI: Rick Redak (UCR)  |
| 2023-2026   | California Department of Food and Agriculture - Specialty Crop Block Grant   |
|   | "Rapid-response detection and management of emerging outbreaks of lettuce Fusarium   |
|   | wilt in Coastal California." Role: Co-PI. PI: Alexander Putnam (UCR)   |
| 2023-2024   | California Department of Food and Agriculture  |
|   | "Eliminating transmission of Xylella fastidiosa by the glassy-winged sharpshooter (Homa-   |
|   | lodisca vitripennis) using CRISPR technology." Role: Co-PI. PI: Peter Atkinson (UCR)   |
| 2024-2030   | National Science Foundation. DBI-2400327   |
|   | "BioFoundry: A BioFoundry for Extreme & Exceptional Fungi, Archaea and Bacteria (Ex-   |
|   | FAB)"  |
|   | Role: Co-PI. PI: Michelle O'Malley (UCSB)  |
| Completed sup   | ·  |
| Completed sup   | γροιτ  |
| 2010-2013   |  |
|   | Burroughs Wellcome Fund. "FungiDB: A Pan Fungal Genome Database".  |
|   | Burroughs Wellcome Fund. "FungiDB: A Pan Fungal Genome Database".  |
|   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database".  Role: Co-I. PI: DS Roos (U Pennsylvania)   |
| 2010-2013   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database".  Role: Co-I. PI: DS Roos (U Pennsylvania)  UC Riverside, Chancellor's Strategic Investment Funds.   |
| 2010-2013   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database".  Role: Co-I. PI: DS Roos (U Pennsylvania)  UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control"  |
| 2010-2013   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database".  Role: Co-I. PI: DS Roos (U Pennsylvania)  UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control"  Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside)  |
| 2010-2013 2011-2012   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database". Role: Co-I. PI: DS Roos (U Pennsylvania) UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control" Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside) UC Riverside, Office of Research Strategic Investment Funds.  |
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| 2010-2013<br>2011-2012<br>2013-2014   | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database". Role: Co-I. PI: DS Roos (U Pennsylvania)  UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control" Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside)  UC Riverside, Office of Research Strategic Investment Funds.  "High-throughput synthetic biology for natural products discovery" Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside)   |
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| 2010-2013<br>2011-2012<br>2013-2014<br>2013-2014<br>2011-2014               | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database".  Role: Co-I. PI: DS Roos (U Pennsylvania)  UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control"  Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside)  UC Riverside, Office of Research Strategic Investment Funds.  "High-throughput synthetic biology for natural products discovery"  Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside)  National Institutes of Health - 1-R03-AI105636-01.  "Annotation of Cryptococcus genomes by comprehensive curation of published literature"  Role: PI. Co-I G Sherlock (Stanford)  Alfred P. Sloan Foundation.  "MoBe DAC: A data coordinating center for the Sloan Indoor Environment Metagenomic Project - Fungal resources".  Role: PI. Linked grants with F Meyer (U Chicago/ANL), R Knight (U Colorado), M Sogin (Marine Biological Lab).  National Science Foundation. DBI-1429826.  "MRI: Acquisition of a Big Data Compute Cluster for Interdisciplinary Research" Role: Co  |
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| 2010-2013<br>2011-2012<br>2013-2014<br>2013-2014<br>2011-2014<br>2014-2015  | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database". Role: Co-I. PI: DS Roos (U Pennsylvania) UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control" Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside) UC Riverside, Office of Research Strategic Investment Funds.  "High-throughput synthetic biology for natural products discovery" Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside) National Institutes of Health - 1-R03-AI105636-01.  "Annotation of Cryptococcus genomes by comprehensive curation of published literature" Role: PI. Co-I G Sherlock (Stanford) Alfred P. Sloan Foundation.  "MoBe DAC: A data coordinating center for the Sloan Indoor Environment Metagenomic Project - Fungal resources". Role: PI. Linked grants with F Meyer (U Chicago/ANL), R Knight (U Colorado), M Sogin (Marine Biological Lab). National Science Foundation. DBI-1429826.  "MRI: Acquisition of a Big Data Compute Cluster for Interdisciplinary Research" Role: Co PI. PI T Girke. Co-Is J Bailey-Serres, M Allen, and S Lonardi (UCR) National Institutes of Health - 1-R01-GM108492-01.  "Dynamics of bacterial-fungal interactions in chronic lung infections" Role: Co-I. PI: D Hogan (Dartmouth) W.M. Keck Foundation. (No Cost Extension thru 2018) |
| 2010-2013  2011-2012  2013-2014  2013-2014  2011-2014  2014-2015  2014-2017 | Burroughs Wellcome Fund.  "FungiDB: A Pan Fungal Genome Database". Role: Co-I. PI: DS Roos (U Pennsylvania) UC Riverside, Chancellor's Strategic Investment Funds.  "Coelomomyces Genomics for Mosquito Vector Control" Role: Co-I. PI: B Federici. Co-I: A Ray (UC Riverside) UC Riverside, Office of Research Strategic Investment Funds.  "High-throughput synthetic biology for natural products discovery" Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside) National Institutes of Health - 1-R03-AI105636-01.  "Annotation of Cryptococcus genomes by comprehensive curation of published literature" Role: PI. Co-I G Sherlock (Stanford) Alfred P. Sloan Foundation.  "MoBe DAC: A data coordinating center for the Sloan Indoor Environment Metagenomic Project - Fungal resources". Role: PI. Linked grants with F Meyer (U Chicago/ANL), R Knight (U Colorado), M Sogin (Marine Biological Lab). National Science Foundation. DBI-1429826.  "MRI: Acquisition of a Big Data Compute Cluster for Interdisciplinary Research" Role: Co PI. PI T Girke. Co-Is J Bailey-Serres, M Allen, and S Lonardi (UCR) National Institutes of Health - 1-R01-GM108492-01.  "Dynamics of bacterial-fungal interactions in chronic lung infections" Role: Co-I. PI: D Hogan (Dartmouth)   |

Role: Co-I. PI: SR Wessler (UC Riverside). Co-I: P Atkinson (UC Riverside). 2017 Burroughs Wellcome Fund. "Meeting grant to support Fungal Cell Wall (FCW2017) Conference in Ensenada, Mexico" Role: PI. 2016-2019 National Science Foundation. DEB-1557110. (No Cost Ext thru 04/2020) "Collaborative Research: Phylogenomics and evolutionary history of the anaerobic fungal group, Neocallimastigomycota" Role: PI. Collaborative linked award PI: N Youssef (Oklahoma State) National Science Foundation, IOS-1027542. (No Cost Ext thru 02/2021) 2011-2017 "CPGS: Genome-wide impact of mPing transposition on rice phenotypic diversity." Role: Co-I. PI: SR Wessler (UC Riverside). http://dynamiterice.org National Science Foundation. GO Life DEB-1441715. (No Cost Ext thru 08/2020) 2015-2018 "Collaborative Research: The Zygomycetes Genealogy of Life (ZyGoLife)- the conundrum of Kingdom Fungi" Role: PI. Collaborative linked award with 3 other PIs and 12 collaborating labs: J Spatafora (Oregon State), TY James (U Michigan), R Robertson (Arizona State) http://zygolife.org 2017-2020 Univ of California-Office of the President, MRPI. "UC Valley Fever Research Initiative" Role: Co-PI. PI: Anita Sil (UCSF) and Co-PIs at UC Berkeley, UC Merced, UC San Diego City of Hope / Univ of California-Riverside 2019-2020 "Antifungal drug resistance in Southern California: Discovery of novel mechanisms by genomics and proteomics." Role: PI with Co-PIs M Kalkum and S Dadwal at City of Hope Hospital Canadian Institute For Advanced Research 2020-2021 "Pilot investigation of avian-origin Aspergillus fumigatus infections in the United States" Role: PI. Co-PI: David Blehert, National Wildlife Health Center, USGS 2020 Burroughs Wellcome Fund. "Meeting grant to support 2022 Fungal Cellular and Molecular Biology Gordon Research Conference" Role: PI. 2020-2021 **USDA-APHIS** "Tracking seasonal changes of endophytic communities in Fusarium dieback - Invasive shot hole borers host trees in California." Role: Co-I. PI Akif Eskalen, UC Davis 2022 National Science Foundation. MCB-2227426 "Meeting grant to support Fungal Cellular and Molecular Biology Gordon Research Conference 2022" Role: PI. 2019-2022 Univ of California-Office of the President "Investigating fundamental gaps in Valley Fever research" Role: Co-PI. PI: Anita Sil (UCSF) and Co-PIs at UC Berkeley, UC Davis, UC Merced, UC San Diego National Institutes of Health. R15-GM132869 2019-2022 "Understanding The Mechanisms Of Spatial Protein Quality Control In A Model Filamentous Fungus" Role: Senior Personnel. PI: Egans, M (U Arkansas) 2020-2022 California Conservation Genomics Project (subproject) "Landscape and Population Genomics of the lichen Acarospora socialis in California" Role: PI.

2021-2023 Canadian Institute For Advanced Research. Catalyst Award

"Exploring the extended phenotypes of BdDV-1, a DNA mycovirus associated with enzootic

strains of amphibian chytridiomycosis"

Role: Co-PI. PI: Tim James, U Michigan; Co-PI: Lillian Fritz-Laylin, U Mass Amherst; Co-PI

Mat Fisher, Imperial College (UK)

2020-2023 California Department of Agriculture / Glassywinged Sharptshooter Board

"CRISPR-mediated genome modification of *Homalodisca vitripennis* for the genetic control

of Pierce's disease"

Role: Co-PI. PI Peter Atkinson, UCR

## **Service:**

## **University and Departmental**

| •           | 1  |
|-------------|--|
| 2023-2024   | Vice Chair, Department of Microbiology and Plant Pathology                         |
| 2023-2024   | Chair, ad hoc Senate committee for evaluation of BS+MS programs                    |
| 2020-2022   | Division Chair, Riverside Division of the University of California Academic Senate |
| 2020-2022   | Member UC Academic Senate Academic Council (as per role as UCR Senate Chair)       |
| 2021-2022   | Member Senate/UCOP Leadership Budget Call (as per role as UCR Senate Chair)        |
| 2020-2021   | Member UC Academic Planning Committee (as per role as UCR Senate Chair)            |
| 2020-2021   | Member UCR Campus Safety Taskforce (as per role as UCR Senate Chair)               |
| 2021        | Member UCR Provost Search Committee (as per role as UCR Senate Chair)              |
| 2018-2020   | Chair, UC Riverside Graduate Council and member of Senate Executive Council        |
| 2017-2018   | Member, UC Riverside Graduate Council  |
| 2015-2020   | Director, Microbiology Graduate Program (except Sabbatical 2016-17)                |
| 2014–2015,  | 2018–2020 Graduate Advisor, Microbiology Graduate Program                          |
| 2015-2016,2 | 2017–2018 Admissions Advisor, Microbiology Graduate Program                        |

## **Editorial Boards**

| 2021-     | Editorial Board, Annual Reviews of Microbiology                  |
|-----------|--|
| 2019-2023 | Associate Editor, Genome Biology & Evolution                     |
| 2019-2024 | Associate Editor, Mycologia                                      |
| 2018-     | Senior Editor, Microbial Resource Announcements                  |
| 2018-     | Associate Editor, GENETICS                                       |
| 2016-     | Editorial Board, Current Opinion in Microbiology                 |
| 2015-2019 | Associate Editor, Microbial Genomics                             |
| 2014-2022 | Associate Editor, Fungal Genetics & Biology                      |
| 2013,2015 | Guest Associate Editor, PLoS Genetics                            |
| 2013      | Guest Associate Editor, Mycologia                                |
| 2011–2016 | Faculty Member in Microbial Genetics & Genomics, Faculty of 1000 |
| 2010-2015 | Editorial Board, Eukaryotic Cell.                                |
| 2009–2016 | Section Editor, PLoS One.  |
| 2007–2016 | Academic Editor, PLoS One.                                       |
|           |  |

#### **Professional Service**

| 2018-2022 | Co-Chair (2020, moved to 2022) of Cellular and Molecular Fungal Biology, Gordon Research  |
|-----------|---|
|           | Conference; Co-Vice Chair (2018).   |
| 2017-2020 | Karling Lecture Committee, Mycologia Society of America (Chair 2019-2020)                 |
| 2018-2021 | Councilor for Cell Biology & Physiology. Mycological Society of America.                  |
| 2014-2018 | Neurospora Policy Committee, Co-Organized 2016 Neurospora conference                      |
| 2013-2019 | Fungal Genetics Policy Committee  |
| 2012-2020 | Scientific advisory board, Plant Microbe Interactions - DOE Science Focus Area, Oak Ridge |
|           | National Laboratory   |

| 2012-2018             | Scientific advisory board, WormBase  |
|-----------------------|--|
| 2012-2015             | Scientific advisory board, EnsEMBL Genomes   |
| 2010-2012             | Councilor for Genetics & Molecular Biology, Mycological Society of America                                 |
| 2009-2010             | Advisory Board for Genomic Encyclopedia of Fungi, Joint Genome Institute, US Department                    |
| _00, _010             | of Energy.   |
| 2009-2010             | Pan-Fungal Database Steering Committee for Burroughs Welcome Fund.   |
| 2007–2009             | Scientific advisory board NSF Computer Science Education Revitalization (PI Owen Astrachan,                |
| 2007 2007             | Duke University)   |
| 2005-2008             | Scientific advisory committee Information Technology and Computing infrastructure, National                |
| 2003-2006             | Center for Evolutionary Synthesis (NESCent).   |
| 2005–2011             | President and Board Member [2005–2014], Open Bioinformatics Foundation http://www.                         |
| 2003-2011             |  |
| 2001 2015             | open-bio.org/  |
| 2001–2015             | Co-Project leader, BioPerl. http://www.bioperl.org/  |
| Graduate              | Students   |
| Graduate              | Students.  |
| 2009-2013             | PhD student, Divya Sain. Genetics, Genomics, & Bioinformatics.   |
|                       | Current: Scientific Program Manager at Velsera.  |
| 2010-2012             | MS student, Yi (Zoe) Zhou. Genetics, Genomics, & Bioinformatics.   |
|                       | Current: Biostatistician at dMed Biopharmaceutical Co.   |
| 2010-2014             | PhD student, Yizhou Wang. Plant Biology.   |
|                       | Current: Research Bioinformatician III in Data Science Navigator Team, Cedars-Sinai.                       |
| 2011-2015             | PhD student, Steven Ahrendt. Genetics, Genomics, & Bioinformatics.   |
|                       | Current: Data Scientist at DOE Joint Genome Institute.   |
| 2016-2019             | PhD Student, Derreck Carter-House. Plant Pathology.  |
|                       | Current: Senior Scientist, Clear Labs  |
| 2015-2021             | MS Student, Sawyer Masonjones. Genetics, Genomics, & Bioinformatics  |
| 2015–2021             | PhD Student, Nuttapon Pombubpa. Plant Pathology.   |
|                       | Current: Assistant Professor, Chulalongkorn, Bangkok, THAILAND   |
| 2016-2022             | PhD Student, Jesús Peña, Microbiology.   |
| _010 _0               | Current: Visiting Assistant Professor, Colorado College  |
| 2017-2022             | PhD Student, Tania Kurbessoian, Microbiology.  |
| 2017 2022             | Current: Postdoctoral Fellow, University of North Carolina at Chapel Hill                                  |
| 2017-2024             | PhD Student, Julia Adams, Plant Biology  |
| 2020–2024             | PhD Student, Talieh Ostovar, Evolutionary Biology, San Diego State - UCR Joint Doctoral Pro-               |
| 2020 2021             | gram   |
| 2021–2024             | PhD Student, Mark Yacoub, Microbiology   |
| 2021 2021             | PhD Student, Cheng-Hung Tsai, Genetics, Genomics, & Bioinformatics   |
| 2022-                 | PhD Student, Jessica Wu-Woods, Microbiology  |
| 2022-                 | PhD Student, Leila Shadmani, Microbiology  |
| 2022-                 | PhD Student, Xueyan (Sharon) Xu, Cellular, Molecular, and Developmental Biology.                           |
| 2023-                 | PhD Student, Kian Kelly, Plant Pathology   |
| 2023-                 | PhD Student, Nath Nethy, Flant Fathology PhD Student, Nathan Matheiu, Genetics, Genomics, & Bioinformatics |
| 2023-                 | PhD Student, Nathan Matherd, Genetics, Genomics, & Biomormatics  PhD Student, Nora Ismail, Microbiology    |
| 2023-<br>2024-        | PhD Student, Nota Ishian, Microbiology PhD Student, Julissa Perez-Maron, Microbiology                      |
| 2024-                 | PhD Student, Junssa Perez-Maron, Microbiology  |
| Postdoctoral Fellows: |  |
| 2010-2011             | John Abramyan, Ph.D.   |
|                       | Current: Associate Professor, Univ of Michigan-Dearborn  |
| 2011-2014             | Sofia Robb, Ph.D.  |
| •                     | Current: Genomics Scientist at Stowers Institute.  |
| 2012-2014             | Brad Cavinder, Ph.D.   |
|                       |  |

|                        | Current: Research Associate at Michigan State University   |
|------------------------|--|
| 2012–2015              | Peng Liu, Ph.D.  |
|                        | Current: Research Associate, Yangzhou University, CHINA  |
| 2013–2019              | Jinfeng Chen, Ph.D.  |
|                        | Current: Assistant Professor, Institute of Zoology of Chinese Academy of Science; 1st position:  |
| 2012 2015              | Staff Scientist, City of Hope, CA.   |
| 2013–2015              | Ousmane Cissé, Ph.D Swiss National Science Foundation Fellow. Current: Staff Scientist at Critical Care Department, NIH Clinical Center. |
| 2014–2015              | Rodrigo Olarte, Ph.D.  |
| 201   2015             | Current: Postdoctoral Fellow at Univ of Minnesota.   |
| 2017-19                | Yan Wang, Ph.D.  |
|                        | Current: Assistant Professor, University of Toronto-Scarbourgh.  |
| 2019-2021              | Lotus Lofgren, Ph.D.   |
|                        | Current: Incoming Assist Professor, University of California-Berkeley  |
|                        | Previous: Tri-I Mycology Postdoctoral Researcher, Duke University.   |
| 2020–2021              | Ying Sun, Ph.D.  |
| 0000                   | Current: Postdoctoral Researcher at Salk Institute   |
| 2020-                  | Cassie Ettinger, Ph.D.<br>Kelsey Aadland, Ph.D.  |
| 2020–2023              | Current: Computational Biologist at Computercraft Corporation, NCBI Protein Domains team   |
| 2023-2024              | Claudia Coleine, Ph.D Marie Curie Fellow.  |
| 2023-                  | Carolina Pina-Paez, Ph.D.  |
|                        |  |
| <b>Visitors:</b>       |  |
| 2010-2013 (            | (4, 2-3 month vists) Anastasia Gioti, PhD, Dept of Evolution Biology, Uppsala University, SWE-   |
|                        | DEN  |
| 2010                   | Suzanne Joneson, PhD, Department of Biology, University of Idaho   |
| 2011                   | Edgar Medina Tovar, MSc Mycology and Phytopathology Lab, Universidad de Los Andes, Bo-   |
|                        | gota, COLOMBIA   |
| 2012                   | Andrii Gryganski, PhD, Visiting Researcher, Duke University  |
| 2013–2014              | Venkatesh Moktali, PhD, FungiDB Project, Visiting Research Fellow, Oregon State University   |
| 2014                   | Raúl Castanera Andrés, Visiting Graduate Student, Universidad Pública de Navarra, Pamplona,  |
| 2015                   | SPAIN Natalie Vande Pol, Visiting Graduate Student (Bonito Lab), Michigan State University   |
| 2015–2016              | Zhinquan Song, Visiting Graduate Student (Guangyi Wang Lab), Tianjin University, CHINA   |
| 2015 2016              | John Yinka Odebode, Visiting Graduate Student on a West African Research Assocation Fellow-  |
| _010                   | ship, University of Lagos, NIGERIA.  |
| 2015                   | Marco Marconi, Visiting Graduate Student, Universidad Politécnica de Madrid, Madrid, SPAIN   |
| 2015-2016              | Claudia Coleine, Visiting Graduate Student, Universitá degli Studi della Tuscia, Viterbo, ITALY  |
| 2017                   | Jane Lind Nybo, Visiting Graduate Student, Technical University of Denmark, Copenhagen,  |
|                        | DENMARK  |
| 2019                   | Guillermo Vidal-Diez de Ulzurrun, Visiting Postdoc scientist, IMB, Academia Sinica, Taipei,  |
|                        | Taiwan   |
| 2019–2020              | Felipe Salgado, Federal University of Rio de Janeiro, BRAZIL.  |
| 2020–2021              | Omar Valencia, Volunteer.  |
| 2021–2022<br>2022–2023 | Jaehyuk Choi, Incheon National University, SOUTH KOREA. Xinzhan Liu, Institute of Microbiology, Chinese Academy of Sciences, CHINA.      |
| 2022-2023              | Amizhan Era, montate of microbiology, chinicse Academy of Sciences, Criman.  |
| a. cc                  |  |

# Staff:

2011–2012 Daniel Borcherding, Programmer (FungiDB). Current: Senior Software Build Engineer, Apple, Inc.

| 2011-2013   | Raghuraman Ramamurthy, Programmer (FungiDB).  |
|-------------|---|
|             | Current: Lead Bioinformatician - Natera.  |
| 2012-2014   | Edward Liaw, Programmer (FungiDB).  |
|             | Current: Bioinformatics Engineer - Twist Bioscience.                                      |
| 2012–2014   | Greg Gu, Programm (FungiDB).  |
|             | Current: Chief Engineer - PH Engineering Corp.  |
| 2013–2014   | Venkatesh Moktali, Bioinformatics Scientist (FungiDB).                                    |
|             | Current: Biotech and Healthcare Product Management - Twist Bioscience.                    |
| 2017–2018   | Jericho Ortanez, Junior Specialist. Current: Graduate Student, UC Riverside.              |
| 2021        | Omar Valencia, Junior Specialist.   |
| 2022–2023   | Sadikshya Sharma, Assistant Specialist.   |
| Teaching:   |   |
| reaching.   |   |
| 2010,2012   | BIO5C - Introductory Ecology & Evolution  |
| 2011        | BIO20 - The Dynamic Genome - Research module for Neurospora research                      |
| 2011,2013   | GEN240B - Tools for Bioinformatics and Genome Analysis                                    |
| 2015        | MCBL124 - Microbial Pathogenesis  |
| 2011–2016   | MCBL211 - Microbial Ecology   |
| 2012-2015   | MCBL202 - Microbial Pathogenesis & Physiology   |
| 2012–Presen | at GEN220 - Computational Analysis of High Throughput Biological Data http://biodataprog. |

# **Undergraduate Researchers:**

github.io/

2022–Present MCBL221 - Microbial Genetics

2016–2020 BIO119 - Introduction to Genomics and Bioinformatics

| _         |   |
|-----------|---|
| 2010-     | Sponsor for summer research students in MARCU, STEM, and CAMP programs at UCR.          |
| 2010–2012 | Jessica De Anda, UCR. STEM grant participant (2010); MARC USTAR student 2010-12. Cur-   |
|           | rent: Career Development Coordinator at UC Berkeley School of Buisiness                 |
| 2010–2011 | Annie Nguyen, UCR.  |
| 2011–2012 | Carlos Rojas Torres, UCR. CAMP (2011); lab researcher. Current: Gilead Pharmaceuticals. |
| 2011      | Ramy Wissa, UCR. Pre-MARC USTAR Summer student.   |
| 2011–2012 | Lorena Rivera, UCR. Pre-MARC USTAR student (2011); lab researcher, CNAS Dean's Fellow   |
|           | Summer Undergraduate Research (Summer 2012)   |
| 2012-2014 | Erum Khan, UCR.   |
| 2012-2014 | Sapphire Ear, UCR. Current: MD student at UCSF  |
| 2012-2014 | Megna Tiwari, UCR. Current: PhD student at Univ of Georgia                              |
| 2013-2014 | Dylan McVay, UCR.   |
| 2013-2016 | Na Jeong, UCR, Summer RISE Scholar (2013) and lab researcher                            |
| 2014      | Spencer Swansen, Summer NSF REU student (Seattle Pacific University)                    |
| 2015-2017 | Justin Shen, UCR.   |
| 2015-2016 | Serena Choi, UCR.   |
| 2015-2017 | Dillon McDonald, UCR Summer HSI-STEM (2015) and lab researcher. Current: DO Student,    |
|           | Western University of Health Sciences in Oregon   |
| 2015      | Christina Uriarte, UCR. Pre-MARC USTAR student.   |
| 2015-2017 | Jericho Ortanez, UCR. Current: PhD student UCR Microbiology                             |
| 2015-2016 | Leandra Ibrahim, UCR.   |
| 2015-2017 | Deane Kim, UCR.   |
| 2016-2017 | Georgiy Smirnov, UCR.   |
| 2016-2018 | Meng (Josh) Chung, UCR. Current: Dentistry Student                                      |
| 2017-2019 | Estefania Caldera, UCR.   |
| 2018      | Lily Bautista, UCR.   |
|           | y   |

2018-2020 Renata Haro, UCR. 2018-2020 Skylar McDonald, UCR. Current: MS student in UCR Engineering. 2019 Saisuki Putumbaka, The College of New Jersey, Summer REU student. Current: PhD student at Univ of Georgia 2019-2020 Nicole Leung, UCR. 2020-2021 Dionne Martin, UCR - won IIGB Undergraduate Research Award. Next: PhD student at Univ of Georgia Amy Do, UCR. Current: MS student in UCR Engineering. 2021-2023 Jared Coyle, CSUSB. - Summer REU student. 2023 2023-Varshini Balaji, UCR.

# Thesis/Dissertation committees:

2023-

Mia Miyatake, UCR.

| 2011 | Sourav Roy, PhD, Genetics, Genomics & Bioinformatics                      |
|------|---|
|      | Yi Zhou, MS, Genetics, Genomics & Bioinformatics ★                        |
| 2012 | Andrew Defries, PhD, Plant Sciences                                       |
| 2013 | Gilbert Uribe, MS, Plant Pathology  |
|      | Divya Sain, PhD, Genetics, Genomics & Bioinformatics ★                    |
| 2014 | Yizhou Wang, PhD, Plant Sciences ⋆  |
|      | Zhigang Wu, PhD, Genetics, Genomics & Bioinformatics                      |
| 2015 | Presha Shah, PhD, Biochemistry  |
|      | Ming Wang, PhD, Plant Pathology   |
|      | Steven Ahrendt, PhD, Genetics, Genomics & Bioinformatics $\star$          |
|      | Ilva Cabrera, PhD, Genetics, Genomics & Bioinformatics                    |
|      | Jinfeng Lu, PhD, Genetics, Genomics & Bioinformatics                      |
|      | James Ricci, MS, Entomology   |
| 2016 | Ryan Arvidson, PhD, Biochemistry  |
|      | Francis Na, MS, Microbiology  |
|      | Jishu Ha, PhD, Genetics, Genomics & Bioinformatics                        |
|      | Arit Gosh, PhD, Genetics, Genomics & Bioinformatics                       |
|      | Kelsey Gano, PhD, Microbiology  |
|      | Kun Liu, PhD, Plant Biology   |
| 2017 | Raissa Green, PhD, Genetics, Genomics & Bioinformatics                    |
|      | Amelia Lindsey, PhD, Entomology   |
|      | Patrick Schriener, PhD, Genetics, Genomics & Bioinformatics               |
|      | Eric Smith, PhD, Genetics, Genomics & Bioinformatics                      |
|      | Katherine Picard, PhD, Univ Prog in Genetics & Genomics (Duke University) |
|      | Eric Gordon, PhD, Entomology  |
| 2018 | Cynthia Dick, PhD, EEOB   |
|      | Dan Vanderpool, PhD, Biology (University of Montana)                      |
|      | Steven Bolaris, PhD, Genetics, Genomics & Bioinformatics $\triangle$      |
| 2019 | Joseph Carrillo, PhD, Plant Pathology $\triangle$                         |
|      | Dinusha Maheepala Mudalige, PhD, Plant Biology                            |
|      | Aaron Robinson, PhD, Biology (University of New Mexico)                   |
|      | Courtney Collins, PhD, Plant Biology                                      |
|      | Edgar Medina, PhD, Univ Prog in Genetics & Genomics (Duke University)     |
|      | Lluvia Vargas, PhD, Microbiología (CICESE, MEXICO)                        |
|      | Derreck Carter-House, PhD, Plant Pathology ★                              |
| 2020 | Andrea Vu, PhD, Plant Pathology   |
|      | Nichole Ginnan, PhD, Plant Pathology                                      |
|      | Alex Rajewski, PhD, Plant Biology   |

2021 Nuttapon Pombubpa, PhD, Plant Pathology \*

Caleb Hubbard, PhD, Medical and Veterinary Entomology Sawyer Masonjones, MS, Genetics, Genomics & Bioinformatics \*

Markus Hiltunen, PhD, Evolutionary Biology, Uppsala University (external opponent)

2022 Yi Huang, PhD, Plant Biology

Jesús Peña, PhD, Microbiology \* Hannah Shulman, PhD, Microbiology

Christopher Fiscus, PhD, Genetics, Genomics & Bioinformatics

Celia Xi, PhD, Plant Biology

Sarah Thorwall, Chemical and Environmental Engineering

Tania Kurbessoian, Microbiology ★

Moira Kelly, Ghent University (external PhD Exam committee)

2023 Robyn Anderson, University of Western Australia (external PhD Exam committee)

Samantha (Smith) Standring, Entomology

Zachary Konkel, The Ohio State University (external PhD Exam committee)

Glen Morrison, Plant Biology

Peggy Brady, EEOB

Danielle Stevenson, Environmental Sciences Fabiola Pulido-Chavez, Plant Pathology

Aidan Shands, Plant Pathology

ongoing Julia Adams, Plant Biology  $\star$ 

Talieh Ostovar, Program in Evolutionary Biology SDSU-UCR \*

Dylan Enright, Microbiology

Yagna Oza, Genetics, Genomics, Bioinformatics

Jericho Ortañez, Microbiology

Linton Freund, Genetics, Genomics, & Bioinformatics Isaac Diaz, Genetics, Genomics, & Bioinformatics

Tamsen Dunn, Program in Evolutionary Biology SDSU-UCR

Angela Buehlman, Plant Biology

Colin Todd, Plant Biology Ben Hoyt, Plant Pathology

Mark Yacoub, Microbiology \*

Jessica Maccaro, Entomology

Aida Tafrishi, Chemical and Environmental Engineering

Jessica Wu-Woods, Microbiology ★ Leila Shadmani, Microbiology ★

Xueyan (Sharon) Xu, Cellular, Molecular and Developmental Biology \*

Nathan Mathieu, Genetics, Genomics, Bioinformatics ★ (co-advised with Sue Wessler)

Sadikshya Sharma, Genetics, Genomics, Bioinformatics \*

Kian Kelly, Plant Pathology \*

Nora Ismail, Microbiology ★

Julissa Perez-Maron, Microbiology \*

# Invited Seminars and conference presentations (2015-Present)

- 2024 · Louisiana State University, Graduate Student Invited Speaker, Dept of Plant Pathology
  - · 29th Fungal Genetics Conference. Pacific Grove, CA.
- 2023 · University of Arizona, Guest Lecturer in Mycology Class (Virtual)
  - · FUN-EX IUBMB Focused Meeting on Extremophilic Fungi, Llubjana, SLOVENIA
  - · University of Georgia, Dept of Microbiology

 $<sup>\</sup>star$  Stajich is Dissertation advisor or  $\triangle$  co-advisor / substitute

- 2022 · CIFAR Fungal Kingdom: Threats & Opportunities, Presenter for Feb and March Meetings (Virtual)
  - · Keynote speaker, Bark Beetle Mycobiome Research community meeting (Virtual)
  - · Scripps Institution of Oceanography, UC San Diegoi (Virtual)
  - · Mycological Society of Japan Annual Meeting (Virtual)
  - · National Academies Symposium on Valley Fever, Irvine, CA (Virtual presentation)
- 2021 · CIFAR Fungal Kingdom: Threats & Opportunities, Presenter for Feb and March Meetings
  - $\cdot$  University of Georgia, Guest lecture for undergraduate seminar course "Genome Biology Across the Tree of Life" (Virtual)
  - · Rochester Institute of Technology, Georgia Gosnell Seminar Series (Virtual)
  - · University of Deleware, Microbiology Graduate Program (Virtual)
  - · Canadian Fungal Network Conference, Plenary Speaker (Virtual)
  - · Botany / Mycological Society of America 2021 meeting (Virtual)
  - · Metaorganisms: Collaborative Research Center Seminar series, Germany (Virtual)
- 2020 · Microbiology and Infectious Disease Grad Student retreat speaker, Univ Texas Health Sciences, Houston, TX (postponed)
- 2019 · Phylogenomics Workshop, Cesky Krumlov, Czech Republic
  - · Middle Tennessee State University, Murfreesboro, TN
  - · Rosie Perez Memorial Seminar, North Carolina State University, Raleigh, NC
  - · University of North Carolina, Chapel Hill, NC
  - · California State University, Northridge, CA
- 2018 · UC Riverside Data Science Series. Riverside, CA
  - · University of Nebraska-Lincoln, Lincoln, NE
  - · Creighton University, Omaha, NE
  - · Marine Fungi Workshop. Marine Biological Lab, Woods Hole, MA.
  - · 11th International Mycological Congress. San Juan, Puerto Rico
  - · CIFAR workshop "Microbial Pathogens in the Fungal Kingdom". Toronto, Ontario, CANADA
- 2017 · Oregon State University. Corvallis, OR
  - · 29th Fungal Genetics Conference. Plenary Speaker. Pacific Grove, CA.
  - · Oomycete Molecular Genetics Network. Plenary Speaker. Pacific Grove, CA
  - · Population Genomics of Oomycete and Fungal Pathogens. Ascona, Switzerland
  - · American Society for Microbiology Microbe Meeting. New Orleans, LA
  - · FASEB Microbial Pathogenesis. Aspen, CO.
  - · Mycological Society of America 2017 Meeting. Athens, GA
  - · American Academy of Microbiology Colloquium on Fungal Pathogenesis. Washington, DC
  - · Fungal Cell Wall Conference. Ensenada, Mexico
  - · Whetzel-Westcott-Dimock Special Lecturer, Cornell University, Ithaca, NY

April 15, 2025