Jason E. Stajich

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Education

2006-2009	Postdoctoral training, University of California, Berkeley, CA. Mentor: Dr. John W Taylor
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, Dept of Microbiology & Plant Pathology. University of California Riverside.
2014–2017	Associate Professor (with tenure), Dept of Microbiology & Plant Pathology. University of Cali-
	fornia 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
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

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. 2004.
- 7. 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.
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- 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.
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- 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.
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- 5. He, B., Cai, Q., Weiberg, A., Li, W., Cheng, A.-P., Ouyang, S., Borkovich, K., **Stajich**, J., Abreu-Goodger, C., and Jin, H. 2023. *Botrytis cinerea* small RNAs are associated with tomato AGO1 and silence tomato defense-related target genes supporting cross-kingdom RNAi. *bioRxiv* doi: 10.1101/2022.12.30.522274.
- 6. **Stajich**, J. E., Lovett, B., Lee, E., Macias, A. M., Hajek, A. E., de Bivort, B. L., Kasson, M. T., Licht, H. H. D. F., and Elya, C. 2023. Signatures of transposon-mediated genome inflation, host specialization, and photoentrainment in *Entomophthora muscae* and allied entomophthoralean fungi. *bioRxiv* doi:10.1101/2023.09.13.557621.
- 7. Lovett, B., Barrett, H., Macias, A. M., **Stajich**, J. E., Kasson, L. R., and Kasson, M. T. 2024. Morphological and phylogenetic resolution of *Conoideocrella luteorostrata* (Hypocreales: Clavicipitaceae), a potential biocontrol fungus for *Fiorinia externa* in United States Christmas tree production areas. *Mycologia* pages 1–24. doi:10.1080/00275514.2023.2296337.

Reviews (Refereed)

- 1. **Stajich**, J. E. and Lapp, H. 2006. Open source tools and toolkits for bioinformatics: significance, and where are we? *Brief Bioinform* 7(3):287–296. doi:10.1093/bib/bbl026.
- 2. **Stajich**, J. E., Berbee, M. L., Blackwell, M., Hibbet, D. S., James, T. Y., Spatafora, J. W., and Taylor, J. W. 2009. The Fungi. *Current Biol* 19(18):R840–R845. doi:10.1016/j.cub.2009.07.004.
- 3. Rosenblum, E. B., Voyles, J., Porten, T. J., and **Stajich**, J. E. 2010. The deadly chytrid fungus: a story of an emerging pathogen. *PLoS Pathogens* 6(1):e1000550. doi:10.1371/journal.ppat. 1000550.

- 4. Rosenblum, E. B., Fisher, M. C., James, T. Y., **Stajich**, J. E., Longcore, J. E., Gentry, L. R., and Porten, T. J. 2010. A molecular perspective on the biology of the emerging pathogen *Batrachochytrium dendrobatidis*. *Diseases of Aquatic Organisms* 92(2-3):131–147. doi:10.3354/dao02179.
- 5. Hibbett, D. S., **Stajich**, J. E., and Spatafora, J. W. 2013. Toward genome-enabled mycology. *Mycologia* 105(6):1339–1349. doi:10.3852/13-196.
- Amend, A., Burgaud, G., Cunliffe, M., Edgcomb, V. P., Ettinger, C. L., Gutiérrez, M. H., Heitman, J., Hom, E. F. Y., Ianiri, G., Jones, A. C., Kagami, M., Picard, K. T., Quandt, C. A., Raghukumar, S., Riquelme, M., Stajich, J., Vargas-Muñiz, J., Walker, A. K., Yarden, O., and Gladfelter, A. S. 2019. Fungi in the marine environment: Open questions and unsolved problems. *mBio* 10(2):e01189–18. doi:10.1128/mBio.01189-18.
- 7. Warren, S. D., Clair, L. L. S., Stark, L. R., Lewis, L. A., Pombubpa, N., Kurbessoian, T., **Stajich**, J. E., and Aanderud, Z. T. 2019. Reproduction and dispersal of biological soil crust organisms. *Frontiers In Ecology & Evolution* 7:344. doi:10.3389/fevo.2019.00344.
- 8. Fisher, M. C., Gurr, S. J., Cuomo, C. A., Blehert, D. S., Jin, H., Stukenbrock, E. H., **Stajich**, J. E., Kahmann, R., Boone, C., Denning, D. W., Gow, N. A. R., Klein, B. S., Kronstad, J. W., Sheppard, D. C., Taylor, J. W., Wright, G. D., Heitman, J., Casadevall, A., and Cowen, L. E. 2020. Threats posed by the fungal kingdom to humans, wildlife, and agriculture. *mBio* 11(3):e00449–20. doi: 10.1128/mBio.00449-20.
- 9. Lovett, B., Macias, A., **Stajich**, J. E., Cooley, J., Eilenberg, J., de Fine Licht, H. H., and Kasson, M. T. 2020. Behavioral betrayal: how select fungal parasites enlist living insects to do their bidding. *PLoS Pathogens* 16(6):e1008598. doi:10.1371/journal.ppat.1008598.
- 10. James, T. Y., **Stajich**, J. E., Hittinger, C. T., and Rokas, A. 2020. Towards a fully resolved Fungal Tree of Life. *Annual Reviews of Microbiology* 74:291–313. doi:10.1146/annurev-micro-022020-051835.
- 11. Coleine, C., **Stajich**, J. E., de Los Ríos, A., and Selbmann, L. 2020. Beyond the extremes: Rocks as ultimate refuge for fungi in drylands. *Mycologia* 113(1):108–133. doi:10.1080/00275514.2020. 1816761.
- 12. Selbmann, L., Benkö, Z., Coleine, C., de Hoog, S., Donati, C., Druzhinina, I., Emri, T., Ettinger, C. L., Gladfelter, A. S., Gorbushina, A. A., Grigoriev, I. V., Grube, M., Gunde-Cimerman, N., Karányi, Z. A., Kocsis, B., Kubressoian, T., Miklós, I., Miskei, M., Muggia, L., Northen, T., Novak-Babic, M., Pennacchio, C., Pfliegler, W. P., Pócsi, I., Prigione, V., Riquelme, M., Segata, N., Schumacher, J., Shelest, E., Sterflinger, K., Tesei, D., U'Ren, J. M., Varese, G. C., Vázquez-Campos, X., Vicente, V. A., Souza, E. M., Zalar, P., Walker, A. K., and **Stajich**, J. E. 2020. Shed light in the DaRk LineagES of the fungal tree of life-STRES. *Life* 10(12):362. doi:10.3390/life10120362.
- 13. Lofgren, L. A. and **Stajich**, J. E. 2021. Fungal biodiversity and conservation mycology in light of new technology, big data, and changing attitudes. *Current Biology* 31:R1312–R1325. doi: 10.1016/j.cub.2021.06.083.
- 14. Coleine, C., **Stajich**, J. E., and Selbmann, L. 2022. Fungi are key players in extreme ecosystems. *Trends in Ecology & Evolution* doi:10.1016/j.tree.2022.02.002.
- 15. Gostinčar, C., **Stajich**, J. E., and Gunde-Cimerman, N. 2023. Extremophilic and extremotolerant fungi. *Current Biology* 33:R752–R756. doi:10.1016/j.cub.2023.06.011.

Books and Book Chapters

1. Coghlan, A., **Stajich**, J. E., and Harris, T. W. 2006. Comparative genomics in *C. elegans*, *C. briggsae*, and other *Caenorhabditis* species. *Methods Mol Biol* 351:13–29. doi:10.1385/1-59745-151-7:13.

- 2. **Stajich**, J. E. and Dietrich, F. S. 2006. Genomic perspectives on the fungal kingdom. In J. Heitman, S. G. Filler, J. E. Edwards Jr, and A. P. Mitchell, editors, *Molecular principles of fungal pathogenesis*, pages 657–666. ASM press.
- 3. **Stajich**, J. E. 2007. An introduction to BioPerl. *Methods Mol Biol* 406:535–548.
- 4. Edwards, D., Stajich, J. E., and Hansen, D., editors. 2009. Bioinformatics. Springer, NY.
- 5. McKay, S. J., Vergara, I. A., and **Stajich**, J. E. 2010. Using the Generic Synteny Browser (GBrowse_syn). *Curr Protoc Bioinformatics* Chapter 9:Unit9.12. doi:10.1002/0471250953. bi0912s31.
- 6. Fisher, M. C., **Stajich**, J. E., and Farrer, R. A. 2012. Emergence of the chytrid fungus *Batrachochytrium dendrobatidis* and global amphibian declines. In D. Sibley, B. Howlett, and J. Heitman, editors, *Evolution of Virulence in Eukaryotic Microbes*. Wiley Blackwell.
- 7. **Stajich**, J. E. 2013. Comparative genomics. In J. Losos, D. Baum, D. J. Futuyma, H. Hoekstra, R. Lenski, A. Moore, D. Schluter, and M. Whitlock, editors, *The Princeton Guide to Evolution*. Princeton University Press.
- 8. **Stajich**, J. E. 2015. Phylogenomics enabling genome based mycology. In D. J. McLaughlin, M. Blackwell, and J. W. Spatafora, editors, *The Mycota VII*, Systematics and Evolution. Springer.
- 9. Spatafora, J. W., Aime, M. C., Grigoriev, I. V., Martin, F., **Stajich**, J. E., and Blackwell, M. 2017. The fungal tree of life: From molecular systematics to genome-scale phylogenies. In J. Heitman, B. J. Howlett, P. W. Crous, E. H. Stukenbrock, T. Y. James, and N. A. R. Gow, editors, *The Fungal Kingdom*, chapter 1, pages 1–34. John Wiley & Sons, Ltd. doi:10.1128/9781555819583.ch1.
- 10. **Stajich**, J. E. 2017. Fungal genomes and insights into the evolution of the kingdom. In J. Heitman, B. J. Howlett, P. W. Crous, E. H. Stukenbrock, T. Y. James, and N. A. R. Gow, editors, *The Fungal Kingdom*, chapter 29, pages 619–633. John Wiley & Sons, Ltd. doi:10.1128/microbiolspec. FUNK-0055-2016.

Consortia publications

- 1. Bidartondo, M. I. 2008. Preserving accuracy in GenBank. *Science* 319(5870):1616–1616. doi: 10.1126/science.319.5870.1616a.
- 2. West, A. G., Digby, A., Lear, G., Digby, A., Armstrong, D., Armstrong-James, D., Bromley, M., Buckley, E., Chatterton, J., Cox, M. P., Cramer, R. A., Crane, J., Dearden, P. K., Eason, D., Fisher, M. C., Gago, S., Gartrell, B., Gemmell, N. J., Glare, T. R., Guhlin, J., Howard, J., Lacap-Bugler, D., Le Lec, M., Lin, X. X., Lofgren, L., Mackay, J., Meis, J., Morelli, K. A., Perrott, J., Petterson, M., Quinones-Mateu, M., Rhodes, J., Roberts, J., Stajich, J., Taylor, M. W., Tebbutt, S. J., Truter-Meyer, A., Uddstrom, L., Urban, L., van Rhijn, N., Vercoe, D., Vesely, E., Weir, B. S., West, A. G., Winter, D. J., Yeung, J., Taylor, M. W., Kākāpō Recovery Team, and Kākāpō Aspergillosis Research Consortium. 2022. Influence of management practice on the microbiota of a critically endangered species: a longitudinal study of kākāpō chick faeces and associated nest litter. *Animal Microbiome* 4(1):55. doi:10.1186/s42523-022-00204-w.

Meeting and Technical Reports

- 1. Lapp, H., Bala, S., Balhoff, J., Bouck, A., Goto, N., Holder, M., Holland, R., Holloway, A., Katayama, T., Lewis, P. O., Mackey, A. J., Osborne, B. I., Piel, W. H., Kosakovsky Pond, S. L., Poon, A., Qiu, W., **Stajich**, J. E., Stoltzfus, A., Thierer, T., Vielella, A. J., Vos, R. A., Zmasek, C., Zwickl, D., and Vision, T. J. 2007. The 2006 NESCent Phyloinformatics Hackathon: A field report. *Evolutionary Bioinformatics Online* 3:357–366.
- 2. Bates, S. T., Ahrendt, S., Bik, H., Bruns, T. D., Caparaso, J., Cole, J., Dwan, M., Fierer, N., Gu, D., Houston, S., Knight, R., Leff, J., Lewis, C., McDonald, D., Nilsson, H., Porras-Alfaro, A., Robert, V., Schoch, C., Scott, J., Taylor, D. L., Wegener-Parfrey, L., and **Stajich**, J. E. 2013. Meeting Report: Fungal ITS Workshop (October 2012). *SIGS* 8:118–23.

- 3. Glass, E. M., Dribinsky, Y., Yilmaz, P., Levin, H., Van Pelt, R., Wendel, D., Wilke, A., Eisen, J. A., Huse, S., Shipanova, A., Sogin, M., **Stajich**, J., Knight, R., Meyer, F., and Schriml, L. M. 2014. MIxS-BE: a MIxS extension defining a minimum information standard for sequence data from the built environment. *ISME J* 8(1):1–3. doi:10.1038/ismej.2013.176.
- 4. Kennedy, P. and **Stajich**, J. E. 2015. Twenty-first century mycology: a diverse, collaborative, and highly relevant science. *New Phytol* 205(1):23–26. doi:10.1111/nph.13165.
- 5. Momany, M., Di Pietro, A., Alexander, W. G., Barker, B. M., Harb, O. S., Kamoun, S., Martin, F., Pires, J. C., **Stajich**, J. E., Thomma, B. P. H. J., and Unruh, S. 2015. Meeting Report: Fungal Genomics Meets Social Media: Highlights of the 28th Fungal Genetics Conference at Asilomar. *G3: Genes Genomes Genetics* 5(12):2523–2525. doi:10.1534/g3.115.024158.
- 6. Gaya, E., Kooija, P., Dentinger, B. T. M., Grigoriev, I. V., Nagy, L., **Stajich**, J. E., Coker, T., and Leitcha, I. J. 2018. Fungal tree of life. In K. J. Willis, editor, *State of the World's Fungi. Report*, pages 12–17. Royal Botanic Gardens, Kew.
- 7. Baltrus, D. A., Cuomo, C. A., Dennehy, J. J., Dunning Hotopp, J. C., Maresca, J. A., Newton, I. L. G., Rasko, D. A., Rokas, A., Roux, S., and **Stajich**, J. E. 2019. Future-proofing your *Microbiology Resource Announcements* genome assembly for reproducibility and clarity. *Microbiology Resource Announcements* 8(36):e00954–19. doi:10.1128/MRA.00954-19.
- 8. Pombubpa, N., Kurbessoian, T., **Stajich**, J. E., and Pietrasiak, N. 2020. Exploring the microbial diversity in biological soil crusts at Joshua Tree National Park. https://www.nps.gov/articles/exploring-the-microbial-diversity-in-biological-soil-crusts-at-joshua-tree-national-park.htm.
- 9. Dunning Hotopp, J. C., Baltrus, D. A., Bruno, V. M., Dennehy, J. J., Gill, S. R., Maresca, J. A., Matthijnssens, J., Newton, I. L. G., Putonti, C., Rasko, D. A., Rokas, A., Roux, S., **Stajich**, J. E., Stedman, K. M., Stewart, F. J., and Thrash, J. C. 2020. Best practices for successfully writing and publishing a genome announcement in *Microbial Resource Announcements*. *Microbiology Resource Announcements* 9(36):e00763–20. doi:10.1128/MRA.00763-20.
- Case, N. T., Berman, J., Blehert, D. S., Cramer, R. A., Cuomo, C., Currie, C. R., Ene, I. V., Fisher, M. C., Fritz-Laylin, L. K., Gerstein, A. C., Glass, N. L., Gow, N. A. R., Gurr, S. J., Hittinger, C. T., Hohl, T. M., Iliev, I. D., James, T. Y., Jin, H., Klein, B. S., Kronstad, J. W., Lorch, J. M., McGovern, V., Mitchell, A. P., Segre, J. A., Shapiro, R. S., Sheppard, D. C., Sil, A., Stajich, J. E., Stukenbrock, E. E., Taylor, J. W., Thompson, D., Wright, G. D., Heitman, J., and Cowen, L. E. 2022. The future of fungi: threats and opportunities. *G3* 12(11):jkac224. doi:10.1093/g3journal/jkac224.
- 11. Case, N. T., Song, M., Fulford, A. H., Graham, H. V., Orphan, V. J., **Stajich**, J. E., Casadevall, A., Mustard, J., Heitman, J., Lollar, B. S., and Cowen, L. E. 2022. Exploring space via astromycology: A report on the CIFAR programs *Earth 4D* and *Fungal Kingdom* inaugural joint meeting. *Astrobiology* doi:10.1089/ast.2021.0186.

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.

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-

nomics

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

Grant Support:

Ongoing suppor	Ongoing support		
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 "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 Riverside), J Burnette (UC Riverside) National Science Foundation. DBI-2215705 2022-2026 "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) National Science Foundation. IOS-2141858 2022-2027 "CAREER: Dissecting the molecular regulation of septin-mediated plant invasion by the blast fungus Magnaporthe oryzae" Role: Senior Personnel. PI: Martin Egan (U Arkansas) **Completed support** 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. 2011-2012 "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. 2013-2014 "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. 2013-2014 "Annotation of Cryptococcus genomes by comprehensive curation of published literature" Role: PI. Co-I G Sherlock (Stanford) 2011-2014 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). 2014-2015 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. 2014-2017 "Dynamics of bacterial-fungal interactions in chronic lung infections" Role: Co-I. PI: D Hogan (Dartmouth) 2011-2016 W.M. Keck Foundation. (No Cost Extension thru 2018) "New Active Transposable Elements for Mosquito Genetics." 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: PL 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

2015-2018 National Science Foundation. GO Life DEB-1441715. (No Cost Ext thru 08/2020) "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 Univ of California-Office of the President, MRPI. 2017-2020 "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. USDA-ANIMAL AND PLANT HEALTH INSPECTION SERVICE 2020-2021 "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 2019-2022 National Institutes of Health. R15-GM132869 "Understanding The Mechanisms Of Spatial Protein Quality Control In A Model Filamentous Fungus" Role: Senior Personnel. PI: Egans, M (U Arkansas) California Conservation Genomics Project (subproject) 2020-2022 "Landscape and Population Genomics of the lichen Acarospora socialis in California" Role: PI. Canadian Institute For Advanced Research. Catalyst Award 2021-2023 "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-Lavlin, U Mass Amherst: Co-PI Mat Fisher, Imperial College (UK) California Department of Agriculture / Glassywinged Sharptshooter Board 2020-2023 "CRISPR-mediated genome modification of *Homalodisca vitripennis* for the genetic control of Pierce's disease"

Service:

University and Departmental

Role: Co-PI. PI Peter Atkinson, UCR

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, 2	2018–2020 Graduate Advisor, Microbiology Graduate Program
2015-2016,2	017–2018 Admissions Advisor, Microbiology Graduate Program

Editorial Boards

2021-	Editorial Board, Annual Reviews of Microbiology
2019-2023	Associate Editor, Genome Biology & Evolution
2019-	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

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
	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,
	Duke University)
2005–2008	Scientific advisory committee Information Technology and Computing infrastructure, National
	Center for Evolutionary Synthesis (NESCent).
2005–2011	President and Board Member [2005–2014], Open Bioinformatics Foundation http://www.
	open-bio.org/
2001-2015	Co-Project leader, BioPerl. http://www.bioperl.org/

Graduate Students:

2009–2013	PhD student, Divya Sain. Genetics, Genomics, & Bioinformatics.		
0010 0010	Current: Bioinformatics Scientist at Ambry Genetics.		
2010–2012	MS student, Yi (Zoe) Zhou. Genetics, Genomics, & Bioinformatics.		
0010 0014	Current: Biostatistician at dMed Biopharmaceutical Co.		
2010–2014	PhD student, Yizhou Wang. Plant Biology.		
	Current: Research Bioinformatician and Associate Director at Applied Genomics, Computation		
0011 0015	& Translational Core, 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: Research 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.		
	Current: Visiting Assistant Professor, Harvey-Mudd College		
2017–2022	PhD Student, Tania Kurbessoian, Microbiology		
2017–	PhD Student, Julia Adams, Plant Biology		
2020–	PhD Student, Talieh Ostovar, Evolutionary Biology, San Diego State - UCR Joint Doctoral Pro-		
2021-	gram PhD Student, Mark Yacoub, Microbiology		
2021-	PhD Student, Mark Tacoub, Microbiology PhD Student, Cheng-Hung Tsai, Genetics, Genomics, & Bioinformatics		
2021-	PhD Student, Jessica Wu-Woods, Microbiology		
2022-	PhD Student, Jessica Wu-Woods, Microbiology 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, Nathan Matheiu, Genetics, Genomics, & Bioinformatics		
2023-	PhD Student, Nora Ismail, Microbiology		
2020	The Statem, Nota Ishian, Microstology		
Postdocto	Postdoctoral Fellows:		
2010-2011	John Abramyan, Ph.D.		
	Current: Assistant 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	e ,		
	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:		
	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.		
0015 10	Current: NSF Postdoctoral Fellow at Univ of Minnesota.		
2017–19	Yan Wang, Ph.D.		
2010 2021	Current: Assistant Professor, University of Toronto-Scarbourgh.		

Lotus Lofgren, Ph.D.

Current: Postdoctoral Researcher, Duke University.

2019-2021

2020–2021 Ying Sun, Ph.D.

Current: Postdoctoral Researcher at Salk Institute

2020– Cassie Ettinger, Ph.D. 2020–2023 Kelsey Aadland, Ph.D.

2023– Claudia Coleine, Ph.D. - Marie Curie Fellow.

Visitors:

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, Bogota, 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,	
	SPAIN	
2015	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	John Yinka Odebode, Visiting Graduate Student on a West African Research Assocation Fellow-	
	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	Jaehyuk Choi, Incheon National University, SOUTH KOREA.	

Xinzhan Liu, Institute of Microbiology, Chinese Academy of Sciences, CHINA.

Staff:

2022-2023

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:

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–Present GEN220 - Computational Analysis of High Throughput Biological Data http://biodataprog.github.io/
2016–2020 BIO119 - Introduction to Genomics and Bioinformatics
2022–Present MCBL221 - Microbial Genetics

Undergraduate Researchers:

2010– 2010–2012	Sponsor for summer research students in MARCU, STEM, and CAMP programs at UCR. Jessica De Anda, UCR. STEM grant participant (2010); MARC USTAR student 2010-12. Current: 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.
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
2021-2023	Amy Do, UCR. Current: MS student in UCR Engineering.
2023	Jared Coyle, CSUSB Summer REU student.
2023-	Varshini Balaji, UCR.
2023-	Mia Miyatake, UCR.

Thesis/Dissertation committees:

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 * Ilva Cabrera, PhD. Genetics, Genomics & Bioinformatics Jinfeng Lu, PhD, Genetics, Genomics & Bioinformatics James Ricci, MS, Entomology Ryan Arvidson, PhD, Biochemistry 2016 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 Cynthia Dick, PhD, EEOB 2018 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 Nuttapon Pombubpa, PhD, Plant Pathology * 2021 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

Mark Yacoub, Microbiology ★

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 \star

Invited Seminars and conference presentations (2015–Present)

- 2022 · CIFAR Fungal Kingdom: Threats & Opportunities, Presenter for Feb and March Meetings (Virtual)
 - · Keynote speaker, Bark Beetle Mycobiome Research community meeting (Virtual)
 - · Department Seminar, Scripps Institution of Oceanography, UCSD (Virtual)
 - · Mycological Society of Japan Annual Meeting (Virtual)
- 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

 $[\]star$ Stajich is Dissertation advisor or \triangle co-advisor / substitute

- · 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

February 11, 2024