## 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.
- 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 Pathog* 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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#### **Microbial Resource Announcements**

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- 5. Coleine, C., Albanese, D., Onofri, S., Zucconi, L., Tringe, S. G., Pennacchio, C., Donati, C., **Sta-jich**, J. E., and Selbmann, L. 2020. Metagenomes in the borderline ecosystems of the Antarctic cryptoendolithic communities. *Microbial Resource Announcements* 9(10):e01599–19. doi: 10.1128/MRA.01599-19.
- 6. Coleine, C., Masonjones, S., Onofri, S., Selbmann, L., and **Stajich**, J. E. 2020. Draft genome sequence of yeast *Rhodotorula* sp. CCFEE 5036, isolated from McMurdo Dry Valleys, Antarctica. *Microbiology Resource Announcements* 9(14):e00020–20. doi:10.1128/MRA.00020-20.
- 7. **Stajich**, J. E., Vu, A. L., Judelson, H. S., Vogel, G. M., Gore, M. A., Carlson, M. O., Devitt, N., Jacobi, J., Mudge, J., Lamour, K. H., and Smart, C. D. 2021. High-quality reference genome sequence for the oomycete vegetable pathogen *Phytophthora capsici* strain LT1534. *Microbial Resource Announcements* pages e00295–21. doi:10.1128/MRA.00295-21.
- 8. Ward, R. D., Stajich, J. E., Johansen, J. R., Huntemann, M., Clum, A., Foster, B., Foster, B., Roux, S., Palaniappan, K., Varghese, N., Mukherjee, S., Reddy, T. B. K., Daum, C., Copeland, A., Chen,

- I.-M. A., Ivanova, N. N., Kyrpides, N. C., Shapiro, N., Eloe-Fadrosh, E. A., and Pietrasiak, N. 2021. Metagenome sequencing to explore phylogenomics of terrestrial cyanobacteria. *Microbiology resource announcements* 10:e0025821. ISSN 2576-098X. doi:10.1128/MRA.00258-21.
- 9. Coleine, C., Selbmann, L., Pombubpa, N., and **Stajich**, J. E. 2021. Amplicon sequencing of rock-inhabiting microbial communities from Joshua Tree National Park, USA. *Microbiology Resource Announcements* 10:e0049421. doi:10.1128/MRA.00494-21.

#### **Submitted Manuscripts and Preprints**

- 1. Unruh, S. A., Pires, C. A., Zettler, L. W., Erba, L., Grigoriev, I. V., Barry, K. W., Daum, C., Lipzen, A. V., and **Stajich**, J. E. 2019. Shallow genome sequencing for phylogenomics of mycorrhizal fungi from endangered orchids. *Biorxiv* doi:10.1101/862763.
- 2. Alvarado, P., de Melo Teixeir, M., Pérez-Rojas, Y., Barker, B., **Stajich**, J. E., Zambrano, E. A., and Gonzatti, M. I. 2020. Genomic characterization and biochemical identification of secreted antigens and peptidases in a Venezuelan clinical isolate of *Histoplasma suramericanum*. *Submitted*.
- 3. Carter-House, D., Chung, J., McDonald, S., Mauck, K., and **Stajich**, J. E. 2020. Volatiles from *Serratia marcescens*, *S. proteamaculans*, and *Bacillus subtilis* inhibit growth of *Rhizopus stolonifer* and other fungi. *bioRxiv* doi:10.1101/2020.09.07.286443.

#### 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.
- 6. 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.

## **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.

#### **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. State of the world's fungi. report. chapter Fungal tree of life., 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.

#### **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. O'Donnell, K., Al-Hatmi, A. M. S., Aoki, T., Brankovics, B., Cano-Lira, J. F., Coleman, J. J., de Hoog, G. S., Pietro, A. D., Frandsen, R. J. N., Geiser, D. M., Gibas, C. F. C., Guarro, J., Kim, H.-S., Kistler, H. C., Laraba, I., Leslie, J. F., López-Berges, M. S., Lysøe, E., Meis, J. F., Monod, M., Proctor, R. H., Rep, M., Ruiz-Roldán, C., Sisic, A., Stajich, J. E., Steenkamp, E. T., Summerell, B. A., van der Lee, T. A. J., van Diepeningen, A. D., E.Verweij, P., Waalwijk, C., Ward, T. J., Wickes, B. L., Wiederhold, N. P., Wingfield, M. J., Zhang, N., and Zhang, S. X. 2020. No to *Neocosmospora*: Phylogenomic and practical reasons for continued inclusion of the *Fusarium solani* species complex in the genus *Fusarium. mSphere* 5(5):e00810–20. doi:10.1128/mSphere.00810-20.

#### **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 support**

2017-2026 National Institutes of Health. R01-AI127548

"Evolved Heterogeneity contributes to chronic fungal lung infections"

Role: Senior Personnel. PI: D Hogan (Dartmouth)

2017-2022 National Institutes of Health. R01-AI130128

"Evolution of Aspergillus fumigatus virulence"

Role: Senior Personnel. PI: RA Cramer, Jr (Dartmouth)

2019-2022 National Institutes of Health. R15-GM132869

"Understanding The Mechanisms Of Spatial Protein Quality Control In A Model Filamen-

tous Fungus"

Role: Senior Personnel. PI: Egans, M (U Arkansas)

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

2019-2025 Canadian Institute For Advanced Research

"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) 2020-2022 California Conservation Genomics Project (subproject) "Landscape and Population Genomics of the lichen Acarospora socialis in California" Role: PI. California Department of Agriculture / Glassywinged Sharptshooter Board 2020-2023 "CRISPR-mediated genome modification of Homalodisca vitripennis for the genetic control of Pierce's disease" Role: Co-PI. PI Peter Atkinson, UCR 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 2020-2025 United States Department of Agriculture, 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 2020 Burroughs Wellcome Fund. "Meeting grant to support 2020 Fungal Cellular and Molecular Biology Gordon Research Conference" Role: PI. (postponed for 2022) National Science Foundation. EF-2125066. 2022-2026 "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. Reccomended for funding "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) **Completed support** 2010-2013 Burroughs Wellcome Fund. "FungiDB: A Pan Fungal Genome Database". Role: Co-I. PI: DS Roos (U Pennsylvania) 2011-2012 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. 2013-2014 "High-throughput synthetic biology for natural products discovery" Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside) 2013-2014 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. 2011-2014 "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)
2014-2017	National Institutes of Health - 1-R01-GM108492-01. "Dynamics of bacterial-fungal interactions in chronic lung infections"
2011-2016	Role: Co-I. PI: D Hogan (Dartmouth) W.M. Keck Foundation. (No Cost Extension thru 2018) "New Active Transposable Elements for Mosquito Genetics."
2017	Role: Co-I. PI: SR Wessler (UC Riverside). Co-I: P Atkinson (UC Riverside). Burroughs Wellcome Fund. "Meeting grant to support Fungal Cell Wall (FCW2017) Conference in Ensenada, Mexico"
2016-2019	Role: PI. National Science Foundation. DEB-1557110. (No Cost Ext thru 04/2020) "Collaborative Research: Phylogenomics and evolutionary history of the anaerobic fungal group, Neocallimastigomycota"
2011-2017	Role: PI. Collaborative linked award PI: N Youssef (Oklahoma State) National Science Foundation. IOS-1027542. (No Cost Ext thru 02/2021) "CPGS: Genome-wide impact of <i>mPing</i> transposition on rice phenotypic diversity." Role: Co-I. PI: SR Wessler (UC Riverside).
2015-2018	http://dynamiterice.org 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
2017-2020	Univ of California-Office of the President, MRPI. "UC Valley Fever Research Initiative"
2019-2020	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 "Antifungal drug resistance in Southern California: Discovery of novel mechanisms by
2020 2021	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 <i>Aspergillus fumigatus</i> infections in the United States" Role: PI. Co-PI: David Blehert, National Wildlife Health Center, USGS

## Service:

## **University and Departmental**

2020-2022	Division Chair, Riverside Division of the University of California Academic Senate
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-	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–	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 2007–2016	Section Editor, PLoS One. Academic Editor, PLoS One.	
2007-2016	Academic Editor, PLOS Offe.	
Professiona	l Service	
2021-	Scientific Advisory Board, Sincarne.	
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-	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	
0000 0010	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,	
2005–2008	Duke University) 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	open-bio.org/	
2001-2015	Co-Project leader, BioPerl. http://www.bioperl.org/	
Membersh	nip in Professional Societies:	
2015-	American Association for the Advancement of Science	
2007-	Mycological Society of America	
2007-	American Society for Microbiology, Fellow (2020)	
2004–	Genetics Society of America	
2004–	Society for Molecular Biology and Evolution	
2002-	Open Bioinformatics Foundation	
2002-	International Society for Computational Biology	
Graduate Students:		
2009–2013	PhD student, Divya Sain. Genetics, Genomics, & Bioinformatics.	
2010-2012	Current: Bioinformatics Scientist at Ambry Genetics.  MS student, Vi (700) Thou, Capatics Genemics & Bioinformatics	
ZU1U-ZU1Z	MS student, Yi (Zoe) Zhou. Genetics, Genomics, & Bioinformatics. Current: Biostatistician at dMed Biopharmaceutical Co.	
2010-2014	PhD student, Yizhou Wang. Plant Biology.	
2010-2014	Current: Research Bioinformatician and Associate Director at Applied Genomics, Computation	
	Sarrent. Research Dionnormatician and resociate Director at Applica denomics, computation	

	& Translational Core, Cedars-Sinai.
2011–2015	PhD student, Steven Ahrendt. Genetics, Genomics, & Bioinformatics.
0016 0010	Current: Data Scientist at DOE Joint Genome Institute.
2016–2019	PhD Student, Derreck Carter-House. Plant Pathology.
2015 2021	Current: Research Scientist, Clear Labs
2015–2021 2015–2021	MS Student, Sawyer Masonjones. Genetics, Genomics, & Bioinformatics PhD Student, Nuttapon Pombubpa. Plant Pathology.
2013-2021	Current: Assistant Professor, Chulalongkorn, Bangkok, THAILAND
2016–	PhD Student, Jesús Peña, Microbiology
2017-	PhD Student, Julia Adams, Plant Biology
2017-	PhD Student, Tania Kurbessoian, Microbiology
2020-	PhD Student, Talieh Ostovar, Evolutionary Biology, San Diego State - UCR Joint Doctoral Pro-
	gram
2021-	PhD Student, Mark Yacoub, Microbiology
2021-	PhD Student, Cheng-Hung Tsai, Genetics, Genomics, & Bioinformatics
2022–	PhD Student, Jessica Wu-Woods, Microbiology
Postdocto	ral Fellows:
2010-2011	John Abramyan, Ph.D.
2010-2011	Current: Assistant Professor, Univ of Michigan-Dearborn
2011–2014	Sofia Robb, Ph.D.
_011 _011	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:
2013-2015	Staff Scientist, City of Hope, CA. Ousmane Cissé, Ph.D Swiss National Science Foundation Fellow.
2013 2013	Current: Staff Scientist at Critical Care Department, NIH Clinical Center.
2014-2015	Rodrigo Olarte, Ph.D.
	Current: NSF Postdoctoral Fellow at Univ of Minnesota.
2017-19	Yan Wang, Ph.D.
	Current: Assistant Professor, University of Toronto-Scarbourgh.
2019–2021	g ·
0000 0001	Current: Postdoctoral Researcher, Duke University.
2020–2021	Ying Sun, Ph.D. Current: Postdoctoral Researcher at Salk Institute
2020-	Cassie Ettinger, Ph.D.
2020-	Kelsey Aadland, Ph.D.
2020	reisey riadiana, rinor
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, Bo-
2012	gota, COLOMBIA
2012 2013–2014	Andrii Gryganski, PhD, Visiting Researcher, Duke University Venkatesh Moktali, PhD, FungiDB Project, Visiting Research Fellow, Oregon State University
2013–2014	Raúl Castanera Andrés, Visiting Graduate Student, Universidad Pública de Navarra, Pamplona,
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2015 2015–2016 2015	SPAIN Natalie Vande Pol, Visiting Graduate Student (Bonito Lab), Michigan State University Zhinquan Song, Visiting Graduate Student (Guangyi Wang Lab), Tianjin University, CHINA John Yinka Odebode, Visiting Graduate Student on a West African Research Assocation Fellowship, University of Lagos, NIGERIA.	
2015 2015–2016 2017	Marco Marconi, Visiting Graduate Student, Universidad Politécnica de Madrid, Madrid, SPAIN Claudia Coleine, Visiting Graduate Student, Universitá degli Studi della Tuscia, Viterbo, ITALY 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 2020–2021 2021–2022	Felipe Salgado, Federal University of Rio de Janeiro, BRAZIL. Omar Valencia, Volunteer. Jaehyuk Choi, Incheon National University, SOUTH KOREA.	
Staff:		
2011–2012	Daniel Borcherding, Programmer (FungiDB).	
2011–2013	Current: Senior Software Build Engineer, Apple, Inc. 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 2021	Jericho Ortanez, Junior Specialist. Current: Graduate Student, UC Riverside.  Omar Valencia, Junior Specialist.	
Teaching:		
2010,2012 2011 2011,2013 2015 2011–2016 2012-2015 2012–Presen	BIO5C - Introductory Ecology & Evolution BIO20 - The Dynamic Genome - Research module for <i>Neurospora</i> research GEN240B - Tools for Bioinformatics and Genome Analysis MCBL124 - Microbial Pathogenesis MCBL211 - Microbial Ecology MCBL202 - Microbial Pathogenesis & Physiology at GEN220 - Computational Analysis of High Throughput Biological Data http://biodataprog.	
2016–2020	github.io/ BIO119 - Introduction to Genomics and Bioinformatics	
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 2011–2012 2011 2011–2012 2012–2014	Annie Nguyen, UCR. Carlos Rojas Torres, UCR. CAMP (2011); lab researcher. Current: Gilead Pharmaceuticals. Ramy Wissa, UCR. Pre-MARC USTAR Summer student. Lorena Rivera, UCR. Pre-MARC USTAR student (2011); lab researcher, CNAS Dean's Fellow Summer Undergraduate Research (Summer 2012) 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.
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

# Thesis/Dissertation committees:

2011	Sourav Roy, PhD, GGB
	Yi Zhou, MS, GGB ⋆
2012	Andrew Defries, PhD, Plant Sciences
2013	Gilbert Uribe, MS, Plant Pathology
	Divya Sain, PhD, GGB ⋆
2014	Yizhou Wang, PhD, Plant Sciences ⋆
	Zhigang Wu, PhD, GGB
2015	Presha Shah, PhD, Biochemistry
	Ming Wang, PhD, Plant Pathology
	Steven Ahrendt, PhD, GGB ⋆
	Ilva Cabrera, PhD, GGB
	Jinfeng Lu, PhD, GGB
	James Ricci, MS, Entomology
2016	Ryan Arvidson, PhD, Biochemistry
	Francis Na, MS, Microbiology
	Jishu Ha, PhD, GGB
	Arit Gosh, PhD, GGB
	Kelsey Gano, PhD, Microbiology
	Kun Liu, PhD, Plant Biology
2017	Raissa Green, PhD, GGB
	Amelia Lindsey, PhD, Entomology
	Patrick Schriener, PhD, GGB
	Eric Smith, PhD, GGB
	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, GGB  $\triangle$ 

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 \*

Nathan Robinett, Evolutionary Biology, Joint Doctoral Prog. SDSU-UCR o

2020 Andrea Vu, PhD, Plant Pathology

Nichole Ginnan, PhD, Plant Pathology Alex Rajewski, PhD, Plant Biology

Next rajewski, PilD, Plant Diology

2021 Nuttapon Pombubpa, PhD, Plant Pathology  $\star$ 

Caleb Hubbard, PhD, Medical and Veterinary Entomology

Sawyer Masonjones, MS, GGB ★

ongoing Jesús Peña, Microbiology \*

Julia Adams, Plant Biology \*
Tania Kurbessoian, Microbiology \*
Beth Peacock, Plant Pathology
Glen Morrison, Plant Biology
Yi Huang, Plant Biology
Christopher Ficus, GGB
Glen Morrison, Plant Biology

Hannah Schulman, Microbiology

Sarah Thorwall, Chemical and Environmental Engineering

Samantha (Smith) Standring, Entomology

Jericho Ortanez, Microbiology

Peggy Brady, EEOB

## Invited Seminars and conference presentations (2015–Present)

- 2021 · CIFAR Fungal Kingdom: Threats & Opportunities, Presenter for Feb and March Meetings
  - · University of Georgia, Guest lecture for undergraduate seminar course "Genome Biology Across the Tree of Life"
  - · Rochester Institute of Technology, Georgia Gosnell Seminar Series
  - · Unversity of Deleware, Microbiology Graduate Program
  - · Canadian Fungal Network Conference, Plenary Speaker
- 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

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

- · 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
- 2016 · Mycological Society of America 2016 Meeting. Berkeley, CA.
  - · CIFAR Integrated Microbial Biodiversity Program. Toronto, ON, CANADA.
  - · 13th European Fungal Genetics Conference. Paris, France. Plenary Speaker
  - · Neurospora Conference. Asilomar Conference Center, Pacific Grove, CA.
  - · Duke University, Durham, NC.
  - · University of California, Davis, CA.
  - · University of Exeter. United Kingdom.
- 2015 · EMBO Conference: Genomic complexity and diversity of eukaryotes. Sant Feliu de Guixols, SPAIN.
  - $\cdot$  XI CONGRESO NATIONAL DE MICOLOGIA, Sociedad Mexicana de Micologia. Merida, Yucatan, MEXICO. Plenary Speaker
  - · University of Arizona, Tucson, AZ.
  - · Eighth International Conference on Mycorrhiza. Flagstaff, AZ.
  - · Mycological Society of America 2015 Meeting. Edmonton, AB, CANADA.
  - · Society for Molecular Biology & Evolution 2015. Vienna, Austria.
  - · University of California, Los Angeles, CA.
  - · University of California, Merced, CA.
  - · 28th Fungal Genetics Conference. Asilomar Conference Center, Pacific Grove, CA.
  - · Oregon State University, Corvallis, OR.
  - · Oklahoma State University, Stillwater, OK.

February 15, 2022