# 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
2014-2017	Associate Professor (with tenure)
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 of American Academy of Microbiology, American Society of Microbiology
2019-2024	CIFAR Fellow (Fungal Kingdom: Threats & Opportunities)
2017	Whetzel-Westcott-Dimock Special Lecturer, Cornell University
2015	Kavli Fellow, Kavli Frontiers of Science
2014	C. J. Alexopoulos Prize, Mycological Society for 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 ne-oformans*. *Genome Biol* 9(2):R41. doi:10.1186/gb-2008-9-2-r41.
- 25. Lilly, W. W., **Stajich**, J. E., Pukkila, P. J., Wilke, S. K., Inoguchi, N., and Gathman, A. C. 2008. An expanded family of fungalysin extracellular metallopeptidases of *Coprinopsis cinerea*. *Mycol Res* 112(Pt 3):389–398. doi:10.1016/j.mycres.2007.11.013.
- 26. Martin, F., Aerts, A., Ahrén, D., Brun, A., Danchin, E. G. J., Duchaussoy, F., Gibon, J., Kohler, A., Lindquist, E., Pereda, V., Salamov, A., Shapiro, H. J., Wuyts, J., Blaudez, D., Buée, M., Brokstein, P., Canbäck, B., Cohen, D., Courty, P. E., Coutinho, P. M., Delaruelle, C., Detter, J. C., Deveau, A., DiFazio, S., Duplessis, S., Fraissinet-Tachet, L., Lucic, E., Frey-Klett, P., Fourrey, C., Feussner, I., Gay, G., Grimwood, J., Hoegger, P. J., Jain, P., Kilaru, S., Labbé, J., Lin, Y. C., Legué, V., Tacon, F. L., Marmeisse, R., Melayah, D., Montanini, B., Muratet, M., Nehls, U., Niculita-Hirzel, H., Secq, M. P. O.-L., Peter, M., Quesneville, H., Rajashekar, B., Reich, M., Rouhier, N., Schmutz, J., Yin, T., Chalot, M., Henrissat, B., Kües, U., Lucas, S., de Peer, Y. V., Podila, G. K., Polle, A., Pukkila, P. J., Richardson, P. M., Rouzé, P., Sanders, I. R., Stajich, J. E., Tunlid, A., Tuskan, G., and Grigoriev, I. V. 2008. The genome of *Laccaria bicolor* provides insights into mycorrhizal symbiosis. *Nature* 452(7183):88–92. doi:10.1038/nature06556.

- 27. Regier, J. C., Shultz, J. W., Ganley, A. R. D., Hussey, A., Shi, D., Ball, B., Zwick, A., **Stajich**, J. E., Cummings, M. P., Martin, J. W., and Cunningham, C. W. 2008. Resolving arthropod phylogeny: exploring phylogenetic signal within 41 kb of protein-coding nuclear gene sequence. *Syst Biol* 57(6):920–938. doi:10.1080/10635150802570791.
- 28. Rosenblum, E. B., **Stajich**, J. E., Maddox, N., and Eisen, M. B. 2008. Global gene expression profiles for life stages of the deadly amphibian pathogen *Batrachochytrium dendrobatidis*. *Proc Natl Acad Sci U S A* 105(44):17034–17039. doi:10.1073/pnas.0804173105.
- 29. Fisher, M. C., Bosch, J., Yin, Z., Stead, D. A., Walker, J., Selway, L., Brown, A. J. P., Walker, L. A., Gow, N. A. R., **Stajich**, J. E., and Garner, T. W. J. 2009. Proteomic and phenotypic profiling of the amphibian pathogen *Batrachochytrium dendrobatidis* shows that genotype is linked to virulence. *Mol Ecol* 18(3):415–429. doi:10.1111/j.1365-294X.2008.04041.x.
- 30. Sharpton, T. J., **Stajich**, J. E., Rounsley, S. D., Gardner, M. J., Wortman, J. R., Jordar, V. S., Maiti, R., Kodira, C. D., Neafsey, D. E., Zeng, Q., Hung, C.-Y., McMahan, C., Muszewska, A., Grynberg, M., Mandel, M. A., Kellner, E. M., Barker, B. M., Galgiani, J. N., Orbach, M. J., Kirkland, T. N., Cole, G. T., Henn, M. R., Birren, B. W., and Taylor, J. W. 2009. Comparative genomic analyses of the human fungal pathogens *Coccidioides* and their relatives. *Genome Res* 19(10):1722–1731. doi:10.1101/gr.087551.108.
- 31. Nowrousian, M., **Stajich**, J. E., Engh, I., Espagne, E., Kamerewerd, J., Kempken, F., Kunstmann, B., Kuo, H.-C., Osiewacz, H. D., Pöggeler, S., Read, N., Seiler, S., Smith, K., Zickler, D., Kück, U., and Freitag, M. 2010. Next-generation sequencing of the 40 Mb genome of the filamentous fungus *Sordaria macrospora*. *PLoS Genetics* 6(4):e1000891. doi:10.1371/journal.pgen.1000891.
- 32. Neafsey, D. E., Barker, B. M., Sharpton, T. J., **Stajich**, J. E., Park, D. J., Whiston, E., Hung, C.-Y., McMahan, C., White, J., Sykes, S., Heiman, D., Young, S., Zeng, Q., Abouelleil, A., Aftuck, L., Bessette, D., Brown, A., Fitzgerald, M., Lui, A., Macdonald, J. P., Priest, M., Orbach, M. J., Galgiani, J. N., Kirkland, T. N., Cole, G. T., Birren, B. W., Henn, M. R., Taylor, J. W., and Rounsley, S. D. 2010. Population genomic sequencing of *Coccidioides* fungi reveals recent hybridization and transposon control. *Genome Res* 20(7):938–946. doi:10.1101/gr.103911.109.
- 33. **Stajich**, J. E., Wilke, S. K., Ahrèn, D., Au, C. H., Birren, B. W., Borodovsky, M., Burns, C., Canbäck, B., Casselton, L. A., Cheng, C. K., Deng, J., Dietrich, F. S., Fargo, D. C., Farman, M. L., Gathman, A. C., Goldberg, J., Guigó, R., Hoegger, P. J., Hooker, J. B., Huggins, A., James, T. Y., Kamada, T., Kilaru, S., Kodira, C., Kües, U., Kupfer, D., Kwan, H. S., Lomsadze, A., Li, W., Lilly, W. W., Ma, L.-J., Mackey, A. J., Manning, G., Martin, F., Muraguchi, H., Natvig, D. O., Palmerini, H., Ramesh, M. A., Rehmeyer, C. J., Roe, B. A., Shenoy, N., Stanke, M., Ter-Hovhannisyan, V., Tunlid, A., Velagapudi, R., Vision, T. J., Zeng, Q., Zolan, M. E., and Pukkila, P. J. 2010. Insights into evolution of multicellular fungi from the assembled chromosomes of the mushroom *Coprinopsis cinerea* (*Coprinus cinereus*). *Proc Natl Acad Sci U S A* 107(26):11889–11894. doi:10.1073/pnas. 1003391107.
- 34. Ohm, R. A., de Jong, J. F., Lugones, L. G., Aerts, A., Kothe, E., **Stajich**, J. E., de Vries, R. P., Record, E., Levasseur, A., Baker, S. E., Bartholomew, K. A., Coutinho, P. M., Fowler, T. J., Gathman, A. C., Lombard, V., Henrissat, B., Knabe, N., Kües, U., Lilly, W. W., Lindquist, E., Lucas, S., Magnuson, J. K., Piumi, F., Raudaskoski, M., Salamov, A., Schmutz, J., Schwarze, F. W., vanKuyk, P. A., Horton, J. S., Grigoriev, I. V., and Wösten, H. A. 2010. Genomic sequence of the wood-rotting *Schizophyllum commune* strain H4-8: a model mushroom system. *Nature Biotech* 28:957–963. doi:10.1038/nbt.1643.
- 35. Strandberg, R., Nygren, K., Menkis, A., James, T. Y., Wik, L., **Stajich**, J. E., and Johannesson, H. 2010. Conflict between reproductive gene trees and species phylogeny among outcrossing members of the filamentous ascomycete genus *Neurospora*. *Fungal Genetics & Biology* 11(7):869–878. doi:10.1016/j.fgb.2010.06.008.

- 36. Lévesque, C. A., Brouwer, H., Cano, L., Hamilton, J. P., Holt, C., Huitema, E., Raffaele, S., Robideau, G. P., Thines, M., Win, J., Zerillo, M. M., Beakes, G. W., Boore, J. L., Busam, D., Dumas, B., Ferriera, S., Fuerstenberg, S. I., Gachon, C. M., Gaulin, E., Govers, F., Grenville-Briggs, L., Horner, N., Hostetler, J., Jiang, R. H., Johnson, J., Krajaejun, T., Lin, H., Meijer, H. J., Moore, B., Morris, P., Phuntmart, V., Puiu, D., Shetty, J., Stajich, J. E., Tripathy, S., Wawra, S., van West, P., Whitty, B. R., Coutinho, P. M., Henrissat, B., Martin, F., Thomas, P. D., Tyler, B. M., De Vries, R. P., Kamoun, S., Yandell, M., Tisserat, N., and Buell, C. R. 2010. Genome sequence of the necrotrophic plant pathogen, *Pythium ultimum*, reveals original pathogenicity mechanisms and effector repertoire. *Genome Biol* 11(7):R173. doi:10.1186/gb-2010-11-7-r73.
- 37. Smith, K. M., Sancar, G., Dekhang, R., Sullivan, C. M., Li, S., Tag, A. G., Sancar, C., Bredeweg, E. L., Priest, H. D., McCormick, R. F., Thomas, T. L., Carrington, J. C., **Stajich**, J. E., Bell-Pedersen, D., Brunner, M., and Freitag, M. 2010. Transcription factors in light and circadian clock signaling networks revealed by genomewide mapping of direct targets for Neurospora White Collar Complex. *Eukaryot Cell* 9(10):1549–1556. doi:10.1128/EC.00154-10.
- 38. Burns, C., **Stajich**, J. E., Rechtsteiner, A., Hanlon, S. E., Wilke, S. K., Palmerini, H. J., Savytskyy, O. P., Gathman, A. C., Lilly, W. W., Lieb, J. D., Zolan, M. E., and Pukkila, P. J. 2010. Analysis of the basidiomycete *Coprinopsis cinerea* reveals conservation of the core meiotic expression program over half a billion years of evolution. *PLoS Genetics* 6(9):e1001135. doi:10.1371/journal.pgen. 1001135.
- 39. D'Souza, C. A., Kronstad, J. W., Taylor, G., Warren, R., Yuen, M., Hu, G., Jung, W. H., Sham, A., Kidd, S. E., Tangen, K., Lee, N., Zeilmaker, T., Sawkins, J., McVicker, G., Shah, S., Gnerre, S., Griggs, A., Zeng, Q., Bartlett, K., Li, W., Wang, X., Heitman, J., **Stajich**, J. E., Fraser, J. A., Meyer, W., Carter, D., Schein, J., Krzywinski, M., Kwon-Chung, K. J., Varma, A., Wang, J., Brunham, R., Fyfe, M., Ouellette, B. F. F., Siddiqui, A., Marra, M., Jones, S., Holt, R., Birren, B. W., Galagan, J. E., and Cuomo, C. A. 2011. Genome variation in *Cryptococcus gattii*, an emerging pathogen of immunocompetent hosts. *MBio* 2(1):e00342–10. doi:10.1128/mBio.00342-10.
- 40. Ellison, C. E., **Stajich**, J. E., Jacobson, D. J., Natvig, D. O., Lapidus, A., Foster, B., Aerts, A., Riley, R., Lindquist, E. A., Grigoriev, I. V., and Taylor, J. W. 2011. Massive changes in genome architecture accompany the transition to self-fertility in the filamentous fungus *Neurospora tetrasperma*. *Genetics* 189(1):55–69. doi:10.1534/genetics.111.130690.
- 41. Joneson, S., **Stajich**, J. E., Shiu, S.-H., and Rosenblum, E. B. 2011. Genomic transition to pathogenicity in chytrid fungi. *PLoS 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.
- 44. Abramyan, J. and **Stajich**, J. E. 2012. Species-specific chitin-binding module 18 expansion in the amphibian pathogen *Batrachochytrium dendrobatidis*. *MBio* 3(3):e00150–e00112. doi:10.1128/mBio.00150-12.
- 45. Nygren, K., Wallberg, A., Samils, N., **Stajich**, J. E., Townsend, J. P., Karlsson, M., and Johannesson, H. 2012. Analyses of expressed sequence tags in *Neurospora* reveal rapid evolution of genes associated with the early stages of sexual reproduction in fungi. *BMC Evol Biol* 12:229. doi:10.1186/1471-2148-12-229.
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- 107. Macias, A. M., Marek, P. E., Morrissey, E. M., Brewer, M. S., Short, D. P. G., Stauder, C. M., Wickert, K. L., Berger, M. C., Metheny, A. M., Stajich, J. E., Boyce, G., Rio, R. V. M., Panaccione, D. G., Wong, V., Jones, T. H., and Kasson, M. T. 2019. Diversity and function of fungi associated with the fungivorous millipede, *Brachycybe lecontii. Fungal Ecology* 41:187–197. doi:10.1016/j. funeco.2019.06.006.

- 108. Coleine, C., **Stajich**, J. E., Pombubpa, N., Zucconi, L., Onofri, S., Canini, F., and Selbmann, L. 2019. Altitude and fungal diversity influence the structure of Antarctic cryptoendolithic Bacteria communities. *Environmental Microbiology Reports* 11(5):718–726. doi:10.1111/1758-2229. 12788.
- 109. Wang, Y., Youssef, N., Couger, M., Hanafy, R., Elshahed, M., and **Stajich**, J. E. 2019. Molecular dating of the emergence of anaerobic rumen fungi and the impact of laterally acquired genes. *mSystems* 4(4):e00247–19. doi:10.1128/mSystems.00247-19.
- 110. Kowalski, C. H., Kerkaert1, J. D., Liu, K.-W., Nadell, C. D., **Stajich**, J. E., and Cramer, R. A. 2019. *Aspergillus fumigatus* Colony Biofilm Morphology Impacts Hypoxia Fitness, Inflammation, and Disease Progression. *Nature Microbiology* 4(12):2430–2441. doi:10.1038/s41564-019-0558-7.
- 111. Carrillo, J. D., Rugman-Jones, P. F., Husein, D., **Stajich**, J. E., Kasson, M. T., Carrillo, D., Stouthamer, R., and Eskalen, A. 2019. Members of the *Euwallacea fornicatus* species complex exhibit promiscuous mutualism with ambrosia fungi in taiwan. *Fungal Genetics and Biology* 133:103269. doi:10.1016/j.fgb.2019.103269.
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- 113. Odebode, A., Adekunle, A., **Stajich**, J., and Adeonipekun, P. 2020. Airborne fungi spores distribution in various locations in Lagos, Nigeria. *Environmental monitoring and assessment* 192:87. doi:10.1007/s10661-019-8038-3.
- 114. Carrillo, J. D., Mayorquin, J. S., **Stajich**, J. E., and Eskalen, A. 2020. Probe-based multiplex Real-Time PCR as a diagnostic tool to distinguish distinct fungal symbionts associated with *Euwallacea kuroshio* and *Euwallacea whitfordiodendrus* in California. *Plant Disease* 104(1):227–238. doi: 10.1094/PDIS-01-19-0201-RE.
- 115. Knudsen, K., Adams, J. N., Kocourková, J., Wang, Y., Ortañez, J., and **Stajich**, J. E. 2020. The monophyletic *Sarcogyne canadensis*—wheeleri clade, a newly recognized group sister to the European *Acarospora glaucocarpa* group. *The Bryologist* 123(1):11–30. doi:10.1639/0007-2745-123. 1.011.
- 116. Coleine, C., **Stajich**, J. E., Zucconi, L., Onofri, S., and Selbmann, L. 2020. Sun exposure drives Antarctic cryptoendolithic community structure and composition. *Polar Biology* In press. doi: 10.1101/676692.
- 117. Coleine, C., Pombubpa, N., Zucconi, L., Onofri, S., **Stajich**, J. E., and Selbmann, L. 2020. Endolithic fungal species markers for harshest conditions in the McMurdo Dry Valleys, Antarctica. *Life* In Press. doi:10.3390/life10020013.
- 118. Coleine, C., **Stajich**, J. E., Pombubpa, N., Zucconi, L., Onofri, S., and Selbmann, L. 2020. Sampling strategies to assess microbial diversity of Antarctic cryptoendolithic communities. *Polar Biology* In Press. doi:10.1101/676775.
- 119. Coleine, C., Masonjones, S., Sterflinger, K., Onofri, S., Selbmann, L., and **Stajich**, J. E. 2020. Peculiar genomic traits in the stress-adapted cryptoendolithic Antarctic fungus *Friedmanniomyces endolithicus*. *Fungal Biology* In press. doi:10.1016/j.funbio.2020.01.005.
- 120. Yang, C.-T., Vidal-Diez de Ulzurrun, G., Goncalves, P., Lin, H.-C., Chang, C.-W., Huang, T.-Y., Chen, S.-A., Lai, C.-K., Tsai, I. J., Schroeder, F. C., **Stajich**, J. E., and Hsueh, Y.-P. 2020. Natural variation in the predatory behavior of nematode-trapping fungi facilitates the establishment of a new robust model strain. *Proc National Acad Sciences In press*.

#### **Genome Announcements**

- 1. Coleine, C., Masonjones, S., Selbmann, L., Zucconi, L., Onofri, S., Pacelli, C., and **Stajich**, J. E. 2017. Draft genome sequences of the Antarctic endolithic fungi *Rachicladosporium antarcticum* CCFEE 5527 and *Rachicladosporium* sp. CCFEE 5018. *Genome Announcements* 5. doi:10.1128/genomeA.00397-17.
- 2. Kasson, M. T., Kasson, L. R., Wickert, K. L., Davis, D. D., and **Stajich**, J. E. 2019. Genome sequence of a lethal vascular wilt fungus, *Verticillium nonalfalfae*, a biological control used against the invasive *Ailanthus altissima*. *Microbiology Resource Announcements* 8. doi:10.1128/MRA.01619-18.
- 3. Coleine, C., Selbmann, L., Masonjones, S., Onofri, S., Zucconi, L., and **Stajich**, J. E. 2019. Draft genome sequence of an Antarctic isolate of the black yeast fungus *Exophiala mesophila*. *Microbiology Resource Announcements* 8(19):e00142–19. doi:10.1128/MRA.00142-19.
- 4. de Melo Teixeira, M., Barker, B. M., and **Stajich**, J. E. 2019. Improved reference genome sequence of *Coccidioides immitis* strain WA 211, isolated in Washington State. *Microbial Resource Announcements* 8(33):e00149–19. doi:10.1128/MRA.00149-19.
- 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* In Press. doi:10.1101/725200.

### **Submitted Manuscripts and Preprints**

- 1. Coeline, C., Masonjones, S., Onofri, S., Selbmann, L., and **Stajich**, J. E. 2020. Draft genome sequence of yeast *Rhodotorula* sp. CCFEE 5306, isolated from McMurdo Dry Valleys, Antarctica. *Submitted*.
- 2. Pombubpa, N., Pietrasiak, N., De Ley, P., and **Stajich**, J. E. 2019. Insights into the desert living skin microbiome: geography, soil depth, and crust type affect biocrust microbial communities and networks in Mojave Desert, USA. *bioRxiv* page 810002. doi:10.1101/810002.
- 3. Macias, A. M., Geiser, D. M., **Stajich**, J. E., Lukasik, P., Veloso, C., Bublitz, D. C., Berger, M. C., Boyce, G. R., Hodge, K., and Kasson, M. T. 2019. Evolutionary relationships among *Massospora spp.* (Entomophthorales), obligate pathogens of cicadas. *bioRxiv* (*In Revision, Mycologia*) page 811836. doi:10.1101/811836.
- 4. 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.

### **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., GutiÃlrrez, 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-MuÃśiz, J., Walker, A. K., Yarden, O., and Gladfelter, A. S. 2019. Fungi in the marine environment: Open questions and unsolved problems. *mBio* 10. ISSN 2150-7511. 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.

### **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. *Microbiology spectrum* 5(5). doi:10.1128/microbiolspec.FUNK-0053-2016.
- 10. **Stajich**, J. E. 2017. Fungal genomes and insights into the evolution of the kingdom. *Microbiology spectrum* 5(4). 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.
- 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. Pombubpa, N., Kurbessoian, T., **Stajich**, J. E., and Pietrasiak, N. 2019. Exploring the microbial diversity in biological soil crusts at Joshua Tree National Park. *Joshua Tree Science Updates In Press*.
- 8. 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. ISSN 2576-098X. doi:10.1128/MRA.00954-19.

#### 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

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://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		
2011-2017	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).	
0015 0010	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	
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"	
2017 2020	Role: PI. Collaborative linked award PI: N Youssef (Oklahoma State)	
2017-2020	Univ of California-Office of the President, MRPI. "UC Valley Fever Research Initiative"	
	Role: Co-PI. PI: Anita Sil (UCSF) and Co-PIs at UC Berkeley, UC Merced, UC San Diego	
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	
2019-2020	City of Hope / Univ of California-Riverside	
	"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	
2017-2021	National Institutes of Health. R01-AI127548-01A1	
	"Evolved Heterogeneity contributes to chronic fungal lung infections"	
	Role: Senior Personnel. PI: D Hogan (Dartmouth)	
2017-2022	National Institutes of Health. R01-AI130128-01A1	
	"Evolution of Aspergillus fumigatus virulence"	
2010 2021	Role: Senior Personnel. PI: RA Cramer, Jr (Dartmouth) National Institutes of Health. R15-GM132869	
2019-2021	"Understanding The Mechanisms Of Spatial Protein Quality Control In A Model Filamen-	
	tous Fungus"	
	Role: Senior Personnel. PI: Egans, M (U Arkansas)	
2019-2024	Canadian Institute For Advanced Research	
	"Fungal Kingdom: Threats and Opportunities"	
	Role: CIFAR Fellow. PI/Directors: L Cowen and J Heitman	
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)	
2013-2014	UC Riverside, Office of Research Strategic Investment Funds.	
	"High-throughput synthetic biology for natural products discovery"	
2012 2014	Role: Co-I. PI: K Borkovich. Co-I: C Larive (UC Riverside)	
2013-2014	National Institutes of Health - 1-R03-AI105636-01.	

2011-2014	"Annotation of <i>Cryptococcus</i> genomes by comprehensive curation of published literature" Role: PI. Co-I G Sherlock (Stanford) Alfred P. Sloan Foundation. "MoBe DAC: A data coordinating center for the Sloan Indoor Environment Metagenomic Project - Fungal resources".
	Role: PI. Linked grants with F Meyer (U Chicago/ANL), R Knight (U Colorado), M Sogin (Marine Biological Lab).
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"
	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: PI.
Service:	

University	and	Departmental
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2017–2020	UC Riverside Graduate Council. Chair & member of Senate Executive Council (2018-2020).
2015-	Director, Microbiology Graduate Program
2018-2019	Graduate Advisor, & Admissions Advisor, Microbiology Graduate Program
2015-2018	Admissions Advisor, Microbiology Graduate Program
2014–2015	Graduate Advisor, Microbiology Graduate Program

# **Editorial Boards**

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	Section Editor, PLoS One.
2007–2016	Academic Editor, PLoS One.

## **Professional Service**

1 1 Ol Coololla	1 bel vice
2018-2020	Co-Chair (2020) 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
2009–2010	of Energy. Pan-Fungal Database Steering Committee for Burroughs Welcome Fund.
2009–2010	Scientific advisory board NSF Computer Science Education Revitalization (PI Owen Astrachan,
2007 2007	Duke University)
2005-2008	Scientific advisory committee Information Technology and Computing infrastructure, National
	Center for Evolutionary Synthesis (NESCent).
2005–2011	President and Board Member [2005–2014], Open Bioinformatics Foundation http://www.
2001–2015	open-bio.org/ Co-Project leader, BioPerl. http://www.bioperl.org/
2001–2013	Co-Project leader, bioreir. http://www.broperr.org/
Membersh	hip in Professional Societies:
2007-	Mycological Society of America
2007-	American Society for Microbiology
2004–	Genetics Society of America
2004–	Society for Molecular Biology and Evolution
2002-	Open Bioinformatics Foundation
2002–	International Society for Computational Biology
Graduate	Students:
2009-13	PhD student, Divya Sain. Genetics, Genomics, & Bioinformatics.
	Current: Bioinformatics Scientist at Ambry Genetics.
2010–12	MS student, Yi (Zoe) Zhou. Genetics, Genomics, & Bioinformatics.
0010 14	Current: Biostatistician at dMed Biopharmaceutical Co.
2010–14	PhD student, Yizhou Wang. Plant Biology. Current: Research Bioinformatician and Associate Director at Applied Genomics, Computation
	& Translational Core, Cedars-Sinai.
2011–15	PhD student, Steven Ahrendt. Genetics, Genomics, & Bioinformatics.
	Current: Data Scientist at DOE Joint Genome Institute.
2016–19	PhD Student, Derreck Carter-House. Plant Pathology.
0015	Current: Postdoc, UC Riverside
2015– 2015–	PhD Student, Sawyer Masonjones. Genetics, Genomics, & Bioinformatics PhD Student, Nuttapom Pombubpa. Plant Pathology
2015-	PhD Student, Nuttaponi Foniouopa. Frant Fathology PhD Student, Jesús Peña, Microbiology
2017-	PhD Student, Julia Adams, Plant Biology
2017-	
	PhD Student, Tania Kurbessoian, Microbiology
Doctdocto	PhD Student, Tania Kurbessoian, Microbiology
	PhD Student, Tania Kurbessoian, Microbiology  ral Fellows:
Postdocto 2010–2011	PhD Student, Tania Kurbessoian, Microbiology  ral Fellows:  John Abramyan, Ph.D.
2010–2011	PhD Student, Tania Kurbessoian, Microbiology  ral Fellows:  John Abramyan, Ph.D.  Current: Assistant Professor, Univ of Michigan-Dearborn
	PhD Student, Tania Kurbessoian, Microbiology  oral Fellows:  John Abramyan, Ph.D.  Current: Assistant Professor, Univ of Michigan-Dearborn Sofia Robb, Ph.D.
2010–2011 2011–2014	PhD Student, Tania Kurbessoian, Microbiology  Pral Fellows:  John Abramyan, Ph.D.  Current: Assistant Professor, Univ of Michigan-Dearborn Sofia Robb, Ph.D.  Current: Genomics Scientist at Stowers Institute.
2010–2011	PhD Student, Tania Kurbessoian, Microbiology  oral Fellows:  John Abramyan, Ph.D.  Current: Assistant Professor, Univ of Michigan-Dearborn Sofia Robb, Ph.D.
2010–2011 2011–2014	PhD Student, Tania Kurbessoian, Microbiology  Pral Fellows:  John Abramyan, Ph.D.  Current: Assistant Professor, Univ of Michigan-Dearborn Sofia Robb, Ph.D.  Current: Genomics Scientist at Stowers Institute.  Brad Cavinder, Ph.D.

Current: Research Associate, Yangzhou University, CHINA

0010 0010	
2013–2019	Jinfeng Chen, Ph.D. Current: Staff Scientist, City of Hope, CA
2013-2015	Ousmane Cissé, Ph.D Swiss National Science Foundation Fellow.
2014–2015	Current: Staff Scientist at Critical Care Department, NIH Clinical Center. Rodrigo Olarte, Ph.D.
2017–19	Current: NSF Postdoctoral Fellow at Univ of Minnesota. Yan Wang, Ph.D.
2019– 2020–	Current: Assistant Professor, University of Toronto-Scarbourgh. Lotus Lofgren, Ph.D. Ying Sun, Ph.D.
Visitors:	
2010–2013 (	(4, 2-3 month vists) Anastasia Gioti, PhD, Dept of Evolution Biology, Uppsala University, SWE- DEN
2010 2011	Suzanne Joneson, PhD, Department of Biology, University of Idaho Edgar Medina Tovar, MSc Mycology and Phytopathology Lab, Universidad de Los Andes, Bogota, COLOMBIA
2012	Andrii Gryganski, PhD, Visiting Researcher, Duke University
2013–2014 2014	Venkatesh Moktali, PhD, FungiDB Project, Visiting Research Fellow, Oregon State University 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 Fellowship, University of Lagos, NIGERIA.
2015 2015–2016	Marco Marconi, Visiting Graduate Student, Universidad Politécnica de Madrid, Madrid, SPAIN Claudia Coleine, Visiting Graduate Student, Universitá degli Studi della Tuscia, Viterbo, ITALY
2013–2010	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. Omar Valencia, Volunteer.
	Omai valencia, voianteel.
Staff:	
2011–2012	Daniel Borcherding, Programmer (FungiDB). Current: Senior Software Build Engineer, Apple, Inc.
2011–2013	Raghuraman Ramamurthy, Programmer (FungiDB). Current: Senior Bioinformatics Associate, Gilead Sciences.
2013–2014	Venkatesh Moktali, Bioinformatics Scientist (FungiDB).
2017–2018	Current: Product Manager, Thermo Fisher Scientific. Jericho Ortanez, Junior Specialist. Current: Graduate Student, UC Riverside
Teaching:	
2010,2012	BIO5C - Introductory Ecology & Evolution
2011	BIO20 - The Dynamic Genome - Research module for <i>Neurospora</i> research
2011,2013	GEN240B - Tools for Bioinformatics and Genome Analysis
2015 2011–2016	MCBL124 - Microbial Pathogenesis MCBL211 - Microbial Ecology
2012-2015	MCBL202 - Microbial Pathogenesis & Physiology

2012- GEN220 - Computational Analysis of High Throughput Biological Data http://biodataprog.

github.io/

2016– BIO119 - Introduction to Genomics and Bioinformatics

# **Undergraduate Researchers:**

2010-	Sponsor for summer research students in MARCU, STEM, and CAMP programs at UCR.
2010-2012	Jessica De Anda, UCR. STEM grant participant (2010); MARC USTAR student 2010-12. Cur-
	rent: Career Development Coordinator at Unitek College
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
0010 0014	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
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. Meng (Josh) Chung, UCR.
2016–2018	
2017–2019 2018	Estefania Caldera, UCR.
2018–	Lily Bautista, UCR. Renata Haro, UCR.
2018–	Skylar McDonald, UCR.
2016–	Saisuki Putumbaka, The College of New Jersey, Summer REU student.
2019 2019–	Nicole Leung, UCR.
2019-	Nicole Leulig, OGK.

# **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 Raissa Green, PhD, GGB

2017 Raissa Green, PhD, GGB

Amelia Lindsey, PhD, Entomology Patrick Schriener, PhD, GGB Eric Smith, PhD, GGB

Katherine Picard, Univ Prog in Genetics & Genomics (Duke University)

Eric Gordon, Entomology

2018 Cynthia Dick, EEOB

Dan Vanderpool, Biology (University of Montana)

Steven Bolaris, GGB  $\triangle$ 

2019 Joseph Carrillo, Plant Pathology  $\triangle$ 

Dinusha Maheepala Mudalige, Plant Biology

Aaron Robinson, Biology (University of New Mexico)

Courtney Collins, Plant Biology

Edgar Medina, Genetics & Genomics (Duke University)

Lluvia Vargas, Microbiología (CICESE, MEXICO)

Derreck Carter-House, Plant Pathology \*

2020 Andrea Vu, Plant Pathology

ongoing Nuttapon Pombubpa, Plant Pathology \*

Sawyer Masonjones, GGB \*
Jesús Peña, Microbiology \*
Julia Adams, Plant Biology \*
Tania Kurbessoian, Microbiology \*
Nicole Ginnan, Plant Pathology

Caleb Hubbard, Medical and Veterinary Entomology

Alex Rajewski, Plant Biology Glen Morrison, Plant Biology

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

Mari West, Entomology Yi Huang, Plant Biology Christopher Ficus, GGB

Shannon Lynch, Environmental Studies (Univ of California-Santa Cruz)

Glen Morrison, Plant Biology Hannah Schulman, Microbiology

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

- 2019 · Phylogenomics Workshop, Cesky Krumlov, Czech Republic
  - · Middle Tennessee State University, Murfreesboro, TN
  - · Rosie Perez Memorial Seminar, North Carolina State University, Raleigh, NC
  - · University of North Carolina, Chapel Hill, NC
  - · California State University, Northridge, CA
- 2018 · UC Riverside Data Science Series. Riverside, CA
  - · University of Nebraska-Lincoln, Lincoln, NE
  - · Creighton University, Omaha, NE
  - · Marine Fungi Workshop. Marine Biological Lab, Woods Hole, MA.
  - · 11th International Mycological Congress. San Juan, Puerto Rico

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

- · 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 of 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.
  - · 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 28, 2020