

# 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. in Genetics and Genomics, Duke University, Durham, NC. Advisor: Dr. Fred S Dietrich  
1995–1999 B.S. in Computer Science, Duke University, Durham, NC

## Academic appointments:

2014– Associate Professor with tenure  
2009–2014 Assistant Professor  
Department of Plant Pathology & Microbiology.  
Institute of Integrative Genome Biology.  
University of California, Riverside, CA.

## Honors and Awards:

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: (Listed in reverse chronological order.)

### Peer Reviewed Publications

1. Nguyen, T. A., Cissé, O. H., Wong, J. Y., Zheng, P., Hewitt, D., Nowrousian, M., **Stajich**, J. E., and Jedd, G. 2016. Innovation and constraint leading to complex multicellularity in the Ascomycota. *Submitted*.
2. Ahrendt, S. R., Medina, E. M., Chia-en, A. C., and **Stajich**, J. E. 2016. Exploring the binding properties and structural stability of an opsin in the chytrid *Spizellomyces punctatus* using comparative and molecular modeling. *Peerj Preprints* 4:e2397v1. doi:10.7287/peerj.preprints.2397v1. Submitted.
3. Chen, J., Wrightsman, T., Wessler, S. R., and **Stajich**, J. E. 2016. RelocaTE2: a high resolution transposable element polymorphism mapping tool for population resequencing. *Peerj Preprints* 4:e2447v1. doi:10.7287/peerj.preprints.2447v1. Submitted.
4. Cissé, O. H. and **Stajich**, J. E. 2016. FGMP: assessing fungal genome completeness and gene content. *bioRxiv* doi:10.1101/049619. Submitted.
5. Short, D. P., O'Donnell, K., **Stajich**, J. E., Hulcr, J., Kijimoto, T., Berger, M. C., Macias, A. M., Spahr, E. J., Bateman, C. C., Eskalen, A., et al. 2016. PCR multiplexes discriminate *Fusarium* symbionts of invasive *Euwallacea* ambrosia beetles that inflict damage on numerous tree species throughout the United States. *Plant Disease* In press. doi:10.1094/PDIS-07-16-1046-RE.
6. Spatafora, J. W., Chang, Y., Benny, G. L., Lazarus, K., Smith, M. E., Berbee, M. L., Bonito, G., Corradi, N., Grigoriev, I., Gryganskyi, A., James, T. Y., O'Donnell, K., Roberson, R. W., Taylor, T. N., Uehling, J., Vilgalys, R., White, M. M., and **Stajich**, J. E. 2016. A phylum-level phylogenetic classification of zygomycete fungi based on genome-scale data. *Mycologia* 108:1028–1046. doi:10.3852/16-042.

7. Castanera, R., López-Varas, L., Borgognone, A., LaButti, K., Lapidus, A., Schmutz, J., Grimwood, J., Pérez, G., Pisabarro, A. G., Grigoriev, I. V., **Stajich, J. E.**, and Ramírez, L. 2016. Transposable elements versus the fungal genome: Impact on whole-genome architecture and transcriptional profiles. *PLoS Genet* 12(6):e1006108. doi:10.1371/journal.pgen.1006108.
8. Lee, M. J., Geller, A. M., Bamford, N. C., Liu, H., Gravelat, F., Snarr, B. D., Le Mauff, F., Chabot, J., Ralph, B., Ostapska, H., Lehoux, M., Cerone, R. P., Baptisa, S. D., Vinogradov, E., **Stajich, J. E.**, Filler, S. G., Howell, P. L., and Sheppard, D. C. 2016. Deacetylation of fungal exopolysaccharide mediates adhesion and biofilm formation. *mBio* 7(2). doi:10.1128/mBio.00252-16.
9. de Man, T. J. B., **Stajich, J. E.**, Kubicek, C. P., Teiling, C., Chenthamara, K., Atanasova, L., Druzhinina, I. S., Levenkova, N., Birnbaum, S. S. L., Barribeau, S. M., Bozick, B. A., Suen, G., Currie, C. R., and Gerardo, N. M. 2016. Small genome of the fungus *Escovopsis weberi*, a specialized disease agent of ant agriculture. *Proc Natl Acad Sci U S A* 113(13):3567–3572. doi: 10.1073/pnas.1518501113.
10. U'Ren, J. M., Miadlikowska, J., Zimmerman, N. B., Lutzoni, F., **Stajich, J. E.**, and Arnold, A. E. 2016. Contributions of North American endophytes to the phylogeny, ecology, and taxonomy of Xylariaceae (Sordariomycetes, Ascomycota). *Mol Phylogenet Evol* 98:210–232. doi:10.1016/j.ympev.2016.02.010.
11. Pieuchot, L., Lai, J., Loh, R. A., Leong, F. Y., Chiam, K.-H., **Stajich, J. E.**, and Jedd, G. 2015. Cellular subcompartments through cytoplasmic streaming. *Dev Cell* 34(4):410–420. doi:10.1016/j.devcel.2015.07.017.
12. Wang, Y., Smith, K. M., Freitag, M., and **Stajich, J. E.** 2015. Endogenous small RNA mediates meiotic silencing of a novel DNA transposon. *G3: Genes | Genomes | Genetics* 5(10):g3.115.017921. doi:10.1534/g3.115.017921.
13. Liu, P. and **Stajich, J. E.** 2015. Characterization of the Carbohydrate Binding Module 18 gene family in the amphibian pathogen *Batrachochytrium dendrobatidis*. *Fungal Genet Biol* 77:31–39. doi:10.1016/j.fgb.2015.03.003.
14. Willger, S. D., Liu, Z., Olarte, R. A., Adamo, M. E., **Stajich, J. E.**, Myers, L. C., Kettenbach, A. N., and Hogan, D. A. 2015. Analysis of the *Candida albicans* phosphoproteome. *Eukaryot Cell* 14(5):474–485. doi:10.1128/EC.00011-15.
15. Collins, R. A., **Stajich, J. E.**, Field, D. J., Olive, J. E., and DeAbreu, D. M. 2015. The low information content of *Neurospora* splicing signals: implications for RNA splicing and intron origin. *RNA* 21(5):997–1004. doi:10.1261/rna.047985.114.
16. Mérida, H., Sain, D., **Stajich, J. E.**, and Bulone, V. 2015. Deciphering the uniqueness of mucoromycotina cell walls by combining biochemical and phylogenomic approaches. *Environmental Microbiology* 17(5):1649–62. doi:10.1111/1462-2920.12601.
17. Teixeira, M. M., de Almeida, L. G., Kubitschek-Barreira, P., Alves, F. L., Kioshima, E. S., Abadio, A. K., Fernandes, L., Derengowski, L. S., Ferreira, K. S., Souza, R. C., Ruiz, J. C., de Andrade, N. C., Paes, H. C., Nicola, A. M., Albuquerque, P., Gerber, A. L., Martins, V. P., Peconick, L. D., Neto, A. V., Chaucanez, C. B., Silva, P. A., Cunha, O. L., de Oliveira, F. F., Dos Santos, T. C., Barros, A. L., Soares, M. A., de Oliveira, L. M., Marini, M. M., Villalobos-Duno, H., Cunha, M. M., de Hoog, S., da Silveira, J. F., Henrissat, B., Niño-Vega, G. A., Cisalpino, P. S., Mora-Montes, H. M., Almeida, S. R., **Stajich, J. E.**, Lopes-Bezerra, L. M., Vasconcelos, A. T., and Felipe, M. S. 2014. Comparative genomics of the major fungal agents of human and animal Sporotrichosis: *Sporothrix schenckii* and *Sporothrix brasiliensis*. *BMC Genomics* 15:943. doi:10.1186/1471-2164-15-943.
18. Ouyang, S., Park, G., Atamian, H. S., Han, C. S., **Stajich, J. E.**, Kaloshian, I., and Borkovich, K. A. 2014. Regulation of innate immunity to the fungal pathogen *Fusarium oxysporum* by microRNAs in tomato. *PLoS Path* 10(10):e1004464. doi:10.1371/journal.ppat.1004464.

19. Inglis, D. O., Skrzypek, M. S., Liaw, E., Moktali, V., Sherlock, G., and **Stajich**, J. E. 2014. Literature-based gene curation and proposed genetic nomenclature for *Cryptococcus*. *Eukaryot Cell* 13(7):878–883. doi:10.1128/EC.00083-14.
20. Treseder, K. K., Maltz, M. R., Hawkins, B. A., Fierer, N., **Stajich**, J. E., and McGuire, K. L. 2014. Evolutionary histories of soil fungi are reflected in their large-scale biogeography. *Ecol Lett* 17(9):1086–1093. doi:10.1111/ele.12311.
21. Janbon, G., Ormerod, K. L., Paulet, D., Byrnes, E. J., 3rd, Yadav, V., Chatterjee, G., Mullapudi, N., Hon, C.-C., Billmyre, R. B., Brunel, F., Bahn, Y.-S., Chen, W., Chen, Y., Chow, E. W. L., Coppée, J.-Y., Floyd-Averette, A., Gaillardin, C., Gerik, K. J., Goldberg, J., Gonzalez-Hilarion, S., Gujja, S., Hamlin, J. L., Hsueh, Y.-P., Ianiri, G., Jones, S., Kodira, C. D., Kozubowski, L., Lam, W., Marra, M., Mesner, L. D., Mieczkowski, P. A., Moyrand, F., Nielsen, K., Proux, C., Rossignol, T., Schein, J. E., Sun, S., Wollschlaeger, C., Wood, I. A., Zeng, Q., Neuvéglise, C., Newlon, C. S., Perfect, J. R., Lodge, J. K., Idnurm, A., **Stajich**, J. E., Kronstad, J. W., Sanyal, K., Heitman, J., Fraser, J. A., Cuomo, C. A., and Dietrich, F. S. 2014. Analysis of the genome and transcriptome of *Cryptococcus neoformans* var. *grubii* reveals complex RNA expression and microevolution leading to virulence attenuation. *PLoS Genet* 10(4):e1004261. doi:10.1371/journal.pgen.1004261.
22. Sachs, J. L., Skophammer, R. G., Bansal, N., and **Stajich**, J. E. 2014. Evolutionary origins and diversification of proteobacterial mutualists. *Proc Biol Sci* 281(1775):20132146. doi:10.1098/rspb.2013.2146.
23. Traeger, S., Altegoer, F., Freitag, M., Gabaldon, T., Kempken, F., Kumar, A., Marcet-Houben, M., Pöggeler, S., **Stajich**, J. E., and Nowrousian, M. 2013. The genome and development-dependent transcriptome of *Pyronema confluens*: a window into fungal evolution. *PLoS Genetics* 9(9):e1003820. doi:10.1371/journal.pgen.1003820.
24. Gryganskyi, A. P., Humber, R. A., **Stajich**, J. E., Mullens, B., Anishchenko, I. M., and Vilgalys, R. 2013. Sequential utilization of hosts from different fly families by genetically distinct, sympatric populations within the *Entomophthora muscae* species complex. *PLoS One* 8(8):e71168. doi:10.1371/journal.pone.0071168.
25. Gioti, A., **Stajich**, J. E., and Johannesson, H. 2013. *Neurospora* and the dead-end hypothesis: genomic consequences of selfing in the model genus. *Evolution* 67(12):3600–3616. doi:10.1111/evo.12206.
26. James, T. Y., Pelin, A., Bonen, L., Ahrendt, S., Sain, D., Corradi, N., and **Stajich**, J. E. 2013. Shared signatures of parasitism and phylogenomics unite Cryptomycota and Microsporidia. *Curr Biol* 23(16):1548–1553. doi:10.1016/j.cub.2013.06.057.
27. Rosenblum, E. B., James, T. Y., Zamudio, K. R., Poorten, T. J., Ilut, D., Rodriguez, D., Eastman, J. M., Richards-Hrdlicka, K., Joneson, S., Jenkinson, T. S., Longcore, J. E., Parra Olea, G., Toledo, L. F., Arellano, M. L., Medina, E. M., Restrepo, S., Flechas, S. V., Berger, L., Briggs, C. J., and **Stajich**, J. E. 2013. Complex history of the amphibian-killing chytrid fungus revealed with genome resequencing data. *Proc Natl Acad Sci U S A* 110(23):9385–9390. doi:10.1073/pnas.1300130110.
28. Robb, S. M. C., Lu, L., Valencia, E., Burnette, J. M., 3rd, Okumoto, Y., Wessler, S. R., and **Stajich**, J. E. 2013. The use of RelocaTE and unassembled short reads to produce high-resolution snapshots of transposable element generated diversity in rice. *G3: Genes|Genomes|Genetics* 3(6):949–57. doi:10.1534/g3.112.005348.
29. Jamieson, K., Rountree, M. R., Lewis, Z. A., **Stajich**, J. E., and Selker, E. U. 2013. Regional control of histone H3 lysine 27 methylation in *Neurospora*. *Proc Natl Acad Sci U S A* 110(15):6027–6032. doi:10.1073/pnas.1303750110.
30. Cheng, C. K., Au, C. H., Wilke, S. K., **Stajich**, J. E., Zolan, M. E., Pukkila, P. J., and Kwan, H. S. 2013. 5'-serial analysis of gene expression studies reveal a transcriptomic switch during fruiting body development in *Coprinopsis cinerea*. *BMC Genomics* 14(1):195. doi:10.1186/1471-2164-14-195.

31. Gioti, A., Nystedt, B., Li, W., Xu, J., Andersson, A., Averette, A. F., MÅijnch, K., Wang, X., Kappauf, C., Kingsbury, J. M., Kraak, B., Walker, L. A., Johansson, H. J., Holm, T., LehtiÄ, J., **Stajich**, J. E., Mieczkowski, P., Kahmann, R., Kennell, J. C., Cardenas, M. E., Lundeborg, J., Saunders, C. W., Boekhout, T., Dawson, T. L., Munro, C. A., de Groot, P. W. J., Butler, G., Heitman, J., and Scheynius, A. 2013. Genomic insights into the atopic eczema-associated skin commensal yeast *Malassezia sympodialis*. *MBio* 4(1):e00572–e00512. doi:10.1128/mBio.00572-12.
32. 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.
33. 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.
34. 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.
35. **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.
36. 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.
37. 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.
38. 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.
39. 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.
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- pathogen, *Pythium ultimum*, reveals original pathogenicity mechanisms and effector repertoire. *Genome Biol* 11(7):R173. doi:10.1186/gb-2010-11-7-r73.
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  43. 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.
  44. **Stajich, J. E.**, Wilke, S. K., Ahrén, 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., Rehmeier, 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.
  45. 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.
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  48. 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.
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1. 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.
2. 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.
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. **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.
5. **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.

### Books and Book Chapters

1. **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.
2. **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.
3. 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.
4. 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.
5. Edwards, D., **Stajich**, J. E., and Hansen, D., editors. 2009. *Bioinformatics*. Springer, NY.
6. **Stajich**, J. E. 2007. An introduction to BioPerl. *Methods Mol Biol* 406:535–548.



7. **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.
8. 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.

### Meeting and Technical Reports

1. 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.
2. 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.
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. MlXs-BE: a MlXs 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. 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.
5. 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.

### Commentaries and Book Reviews

1. **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.
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. 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.

### 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 Genomics  
 Website & Database (Collaboration): <http://fungidb.org>

## Grant Support:

### Ongoing support

2011-2016 W.M. Keck Foundation. \$1M  
 "New Active Transposable Elements for Mosquito Genetics."  
 Co-PI with PI SR Wessler and P Atkinson (UC Riverside).  
 2011-2017 National Science Foundation. Plant Genome - IOS-1027542. \$4.9M  
 "CPGS: Genome-wide impact of *mPing* transposition on rice phenotypic diversity."  
 Co-PI with PI SR Wessler (UC Riverside); T Brutnell (Danforth), Q Sun (Cornell).  
<http://dynamiterice.org>  
 2014-2017 National Institutes of Health - 1-R01-GM108492-01. \$1.5M  
 "Dynamics of bacterial-fungal interactions in chronic lung infections"  
 Co-PI with PI D Hogan (Dartmouth)  
 2015-2018 National Science Foundation. GO Life DEB-1441715. \$714k (\$2.5M total award)  
 "Collaborative Research: The Zygomycetes Genealogy of Life (ZyGoLife)- the conundrum of Kingdom Fungi"  
 PI. Collaborative award with 4 other primary PIs and 12 collaborating labs including J Spatafora (Oregon State), TY James (U Michigan), R Robertson (Arizona State)  
<http://zygolife.org>  
 2016-2019 National Science Foundation. DEB-1557110. \$317k (\$709k total award)  
 "Collaborative Research: Phylogenomics and evolutionary history of the anaerobic fungal group, Neocallimastigomycota"  
 PI. Collaborative award with Noha Youssef and Mostafa Elshahed (Oklahoma State)

### Completed support

2010-2013 Burroughs Wellcome Fund. \$500k  
 "FungiDB: A Pan Fungal Genome Database".  
 Co-PI with PI DS Roos (U Pennsylvania)  
 2011-2012 UC Riverside, Chancellor's Strategic Investment Funds. \$25k  
 "Coelomomyces Genomics for Mosquito Vector Control"  
 Co-PI with B Federici, A Ray (UC Riverside)  
 2013-2014 UC Riverside, Office of Research Strategic Investment Funds. \$50k  
 "High-throughput synthetic biology for natural products discovery"  
 Co-PI with PI K Borkovich, C. Larive (UC Riverside)  
 2013-2014 National Institutes of Health - 1-R03-AI105636-01. \$168k  
 "Annotation of *Cryptococcus* genomes by comprehensive curation of published literature"  
 PI with Co-PI G Sherlock (Stanford)  
 2011-2014 Alfred P. Sloan Foundation. \$750k  
 "MoBe DAC: A data coordinating center for the Sloan Indoor Environment Metagenomic Project - Fungal resources".  
 PI. Coordinated with F Meyer (U Chicago/ANL), R Knight (U Colorado), M Sogin (Marine Biological Lab).  
 2014-2015 National Science Foundation. DBI-1429826. \$548k  
 "MRI: Acquisition of a Big Data Compute Cluster for Interdisciplinary Research" Co-PI with PI T Girke, Co-PIs J Bailey-Serres, M Allen, and S Lonardi (UCR)

## **Service**

### **University and Departmental**

- 2015–2016 Director & Admissions Advisor, Microbiology Graduate Program
- 2014–2015 Graduate Advisor, Microbiology Graduate Program

### **Editorial Boards**

- 2016– Editorial Board, Current Opinion in Microbiology
- 2015– Associate Editor, Microbial Genomics
- 2014– Associate Editor, Fungal Genetics & Biology
- 2013,2015 Guest Associate Editor, PLoS Genetics
- 2013 Guest Associate Editor, Mycologia
- 2011– Faculty Member in Microbial Genetics & Genomics, Faculty of 1000
- 2010–2015 Editorial Board, Eukaryotic Cell.
- 2009–2016 Section Editor, PLoS One.
- 2007–2016 Academic Editor, PLoS One.

### **Professional Service**

- 2018–2020 Co-Vice Chair (2018) and Co-Chair (2020) of Cellular and Molecular Fungal Biology, Gordon Research Conference
- 2014–2018 Neurospora Policy Committee
- 2013–2019 Fungal Genetics Policy Committee
- 2012–2017 Scientific advisory board, Plant Microbe Interactions - DOE Science Focus Area, Oak Ridge National Laboratory
- 2012–2018 Scientific advisory board, WormBase
- 2012–2015 Scientific advisory board, Ensembl Genomes
- 2010–2012 Councilor for Genetics & Molecular Biology, Mycological Society of America
- 2009–2010 Advisory Board for Genomic Encyclopedia of Fungi, Joint Genome Institute, US Department of Energy.
- 2009–2010 Pan-Fungal Database Steering Committee for Burroughs Wellcome Fund.
- 2007–2009 Scientific advisory board for NSF funded Computer Science Education Revitalization project to PI Owen Astrachan, Duke University.
- 2005–2008 Scientific advisory committee for Information Technology and Computing infrastructure for the National Center for Evolutionary Synthesis (NESCent).
- 2005–2011 President and Board Member [2005–Present], Open Bioinformatics Foundation <http://www.open-bio.org/>
- 2001– Co-Project leader, BioPerl. <http://www.bioperl.org/>

### **Membership in Professional Societies:**

- 2002– International Society for Computational Biology
- 2004– Society for Molecular Biology and Evolution
- 2007– American Society for Microbiology
- 2004– Genetics Society of America
- 2007– Mycological Society of America
- 2001– BioPerl developed. Co-Project leader (2001–2012).
- 2002– Open Bioinformatics Foundation

### **Graduate Students:**

- 2009–13 PhD student, Divya Sain. Genetics, Genomics, & Bioinformatics. Currently: Bioinformatics Scientist at Ambry Genetics.

2010–12 MS student, Yi (Zoe) Zhu. Genetics, Genomics, & Bioinformatics. Currently: Biostatistician at Biostatistical Consulting Inc.

2014 MS student, Elizabeth Holmes, Plant Pathology & Microbiology

2010–14 PhD student, Yizhou Wang. Plant Biology. Currently: Research Bioinformatician at Cedars Sinai.

2011–15 PhD student, Steven Ahrendt. Genetics, Genomics, & Bioinformatics. Currently: Postdoc at UC Berkeley/LBNL & DOE Joint Genome Institute.

2015– PhD Student, Sawyer Masonjones. Genetics, Genomics, & Bioinformatics

2015– PhD Student, Nuttapom Pombubpa. Plant Pathology.

2016– PhD Student, Derreck Carter-House. Plant Pathology

2016– PhD Student, Jesús Peña, Microbiology

### Postdoctoral Fellows:

2010–2011 John Abramyan, PhD. Currently: Postdoc at Univ of West Virginia

2011–2014 Sofia Robb, PhD. Currently: Genomics Scientist at Stowers Institute.

2012–2014 Brad Cavinder, PhD. Currently: Research Associate at Michigan State University

2012–2015 Peng Liu, PhD.

2013– Jinfeng Chen, PhD

2013–2015 Ousmane Cissé, PhD - Swiss National Science Foundation Fellow. Currently: Postdoctoral Fellow at NIH Clinical Center.

2014–2015 Rodrigo Olarte. Currently: NSF Postdoctoral Fellow at Univ of Minnesota.

### Visitors:

2010–13 (4, 2-3 month visits) Anastasia Gioti, PhD, Dept of Evolution Biology, Uppsala University, SWEDEN

2010 (Spring) Suzanne Joneson, PhD, Department of Biology, University of Idaho

2011 (Spring) Edgar Medina Tovar, MSc Mycology and Phytopathology Lab, Universidad de Los Andes, Bogota, COLOMBIA

2012 (Summer) Andrii Gryganski, PhD, Visiting Researcher, Duke University

2013–14 Venkatesh Moktali, PhD, FungiDB Project, Visiting Research Fellow, Oregon State University

2014 Raúl Castanera Andrés, Visiting Graduate Student, Universidad Pública de Navarra, Pamplona, SPAIN

2015 (Spring) Natalie Vande Pol, Visiting Graduate Student (Bonito Lab), Michigan State University

2015–16 Zhinquan Song, Visiting Graduate Student (Guangyi Wang Lab), Tianjin University, CHINA

2015 (Fall) John Yinka Odebo, Visiting Graduate Student on a West African Research Association Fellowship, University of Lagos, NIGERIA.

2015 (Fall) Marco Marconi, Visiting Graduate Student, Universidad Politécnica de Madrid, Madrid, SPAIN

2015–2016 Claudia Coleine, Visiting Graduate Student, Università degli Studi della Tuscia, Viterbo, ITALY

### Teaching:

2010,2012 BIO5C - Introductory Ecology & Evolution

2011 BIO20 - The Dynamic Genome - Research module for *Neurospora* research

2011,2013 GEN240B - Tools for Bioinformatics and Genome Analysis

2015 MCBL124 - Microbial Pathogenesis

2011– MCBL211 - Microbial Ecology

2012-2015 MCBL202 - Microbial Pathogenesis & Physiology

2012- GEN220 - Computational Analysis of High Throughput Biological Data [http://hyphal.tip.github.io/GEN220\\_2015](http://hyphal.tip.github.io/GEN220_2015)

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. Current MS Student, Claremont 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 Summer Undergraduate Research (Summer 2012)
2012–2014	Erum Khan, UCR.
2012–2014	Sapphire Ear, UCR. Current: CityYear and matriculating MD student (TBD).
2012–2014	Megna Tiwari, UCR. Current: MS student at Cal State-Long Beach
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)
2015–2016	Justin Shen, UCR.
2015–2016	Serena Choi, UCR.
2015–	Dillon McDonald, UCR Summer HSI-STEM (2015) and lab researcher
2015	Christina Uriarte, UCR. Pre-MARC USTAR student.
2015–	Jericho Ortanez, UCR.
2015–2016	Leandra Ibrahim, UCR.
2015–	Deane Kim, UCR.
2016–	Georgiy Smirnov, UCR.
2016–	Meng (Josh) Chung, UCR.

## **Dissertation and thesis 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 *
2015	Zhigang Wu, PhD, GGB Presha Shah, PhD, Biochemistry Ming Wang, PhD, Plant Pathology Steven Ahrendt, PhD, GGB *
2016	Ilva Cabrera, PhD, GGB Jinfeng Lu, PhD, GGB James Ricci, MS, Entomology
ongoing	Ryan Arvidson, PhD, Biochemistry Francis Na, MS, Microbiology Jishu Ha, PhD, GGB Arit Gosh, PhD, GGB Kelsey Gano, Microbiology Kun Liu, Plant Biology Raissa Green, GGB Amelia Lindsey, Entomology Patrick Schriener, GGB Cynthia Dick, EEOB Eric Gordon, Entomology Eric Smith, GGB

Dereck O'Meara, EEOB  
Yi Zhai, CMDB  
Andrea Vu, Plant Pathology  
Steven Bolaris, GGB  
Dinusha Maheepala Mudalige, Plant Biology  
Nuttapon Pombubpa, Plant Pathology ★  
Derreck Carter-House, Plant Pathology ★  
Sawyer Masonjones, GGB ★  
Jesús Peña, Microbiology ★  
Nathan Robinett, Joint Doctoral Program in Evolutionary Biology, SDSU-UCR  
Katherine Picard, UPGG - Duke University  
Edgar Medina, UPGG - Duke University  
Lluvia Vargas, Microbiología - CICESE, MEXICO  
Dan Vanderpool, Biology, University of Montana

October 30, 2016