

KELLY D. CRAVEN

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PERSONAL

Nationality:	United States
Date of birth:	August 8th, 1970
Place of birth:	Phoenix, AZ
Spouse:	Erin
Children:	Jackson Doyle (born 2006)

CURRENT POSITION

Assistant Professor Plant Biology Division, Samuel Roberts Noble Foundation Ardmore, OK, 73401	2006 – present
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CURRENT RESEARCH INTERESTS

Enhancement of plant performance, biomass characteristics, and stress tolerances through incorporation of symbiotic microbes; glucose and redox-signaling in fungi; apoptosis in fungi

EDUCATION

<i>University of Kentucky, Lexington, KY</i> Ph.D. in Plant Pathology Dissertation: "Coevolution and genetic diversity in grass-endophyte symbioses"	2003
<i>University of Kentucky, Lexington, KY</i> M.S. in Plant Pathology Thesis: "Evolution of <i>Epichloë</i> and <i>Neotyphodium</i> endophytes, fungal symbionts of grasses"	2000
<i>Arizona State University, Tempe, AZ</i> B.S. in Zoology Minor: Philosophy	1994

SOCIETY MEMBERSHIP

American Phytopathological Society	2003 - present
Mycological Society of America	2005 - present
British Mycological Society	2007 - present

GRANT AWARDS

- United States Department of Energy Bioenergy Research Centers. (\$125 million proposal with Oak Ridge National Laboratory as lead organization). (Noble Foundation PIs R.A. Dixon, F. Chen, R.S. Nelson, Z.Y. Wang, M. Udvardi, Y. Tang, E. Blancaflor, K. Craven, M. Saha and J. Bouton). 2007-2012 (\$8,265,872)

PATENTS

- Fungal apoptosis genes and uses thereof (Provisional filed: 01/09)
- Enhancement of biomass and productivity in grasses (Provisional filed: 12/08)

INVITED TALKS/SEMINARS

West Virginia University – 10/07
Rice University – 12/07
University of Delaware – 11/08
Oklahoma State University – 09/09
Oklahoma School of Science and Math – 12/09

POST-DOCTORAL RESEARCHERS SUPERVISED

Sita R. Ghimire (2007 – present)
Haiyan Li (2007 – 2009)
Nikki D. Charlton (2007 – present)
Sumana Bhat (2009 – present)
Myoung-Hwan Chi (2009 – present)

PUBLICATIONS

- (1) **Craven, K. D.**, Clay, K., and Schardl, C. L. (2009). Tall fescue – systematics and morphology *in* Tall Fescue for the Twenty-First Century. Tri-Societies Publishers.
- (2) Ghimire, S. R, Charlton, N., and **Craven, K. D.** (2009). The mycorrhizal fungus, *Sebacina vermifera*, enhances seed germination and biomass production in switchgrass (*Panicum virgatum* L). *Bioenergy Research* 2: 51-58.
- (3) Tsui, C. K., Marshall, W., Yokoyama, M. L., Honda, D., Lippmeier, J. C., **Craven, K. D.**, Peterson, P. D., & Berbee, M. L. (2009). Labyrinthulomycetes phylogeny and its implications for the evolutionary loss of chloroplasts and gain of ectoplasmic gliding. *Molecular Phylogenetics and Evolution*, 50 (1), 129-140
- (4) **Craven, K. D.**, Vélèz, H., Cho, Y., Lawrence, C. B., and Mitchell, T. K. (2008). Anastomosis is required for virulence of the fungal necrotroph, *Alternaria brassicicola*. *Eukaryotic Cell* 7: 675-683.
- (5) Schardl, C. L., **Craven, K. D.**, Speakman, S., Stromberg, A. Lindstrom, A, and Yoshida, R. (2008). A novel test for host-symbiont codivergence indicates ancient origin of fungal endophytes of grasses. *Systematic Biology* 57: 483-498.

- (6) Moon, C. D., Guillaumin, J-J., Li, C., **Craven, K. D.**, and Schardl, C. L. (2007). New *Neotyphodium* endophyte species from the grass tribes Stipeae and Meliceae. *Mycologia* 99: 895-905.
- (7) Cramer, R. A., La Rota, C. M., Cho, Y., Thon, M., **Craven, K. D.**, Knudson, D. L., Mitchell, T. K., Lawrence, C. B (2006). Bioinformatic analysis of expressed sequence tags derived from a compatible *Alternaria brassicicola-Brassica oleracea* interaction. *Molecular Plant Pathology* 7: 113-124.
- (8) **Craven, K. D.**, Peterson, P. D., Widham, D. E., Mitchell, T. K., Martin, S. B. (2005). Molecular identification of the turfgrass rapid blight organism. *Mycologia* 97: 160-166.
- (9) Gentile, A. M., Rossi, S., Cabral, D., **Craven, K. D.**, and Schardl, C. L. (2005). Origin, divergence and phylogeny of epichloë endophytes of native Argentine grasses. *Molecular Phylogenetics and Evolution* 35: 196-208.
- (10) Moon, C. D., **Craven, K. D.**, Leuchtman, A., Clement, S. L., Schardl C. L. (2004). Prevalence of interspecific hybrids amongst asexual fungal endophytes of grasses. *Molecular Ecology* 13: 1455-1467.
- (11) Schardl, C. L., **Craven, K. D.** (2003). Interspecific hybridization in plant-associated fungi and oomycetes: a review. *Invited review. Molecular Ecology* 12: 2861-2873.
- (12) **Craven, K. D.**, Tsai, P. T. W., Leuchtman, A., Hollin, W. and Schardl, C. L. (2001). Multigene phylogeny of *Epichloë* species, fungal symbionts of grasses. *Annals of the Missouri Botanical Garden*. 88: 14-34.
- (13) **Craven, K. D.**, Blankenship, J. D., Leuchtman, A., Hignight, K., and Schardl, C. L. (2001). Hybrid fungal endophytes symbiotic with the grass *Lolium pratense*. *Sydowia* 53 (1): 44-73.