

BIOGRAPHICAL SKETCHES

Kirankumar S. Mysore

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Education

University of Agricultural Sciences	Agriculture	B.Sc.	1991
Clemson University	Horticulture	M.S.	1994
Purdue University	Genetics	Ph.D.	1999
Boyce Thompson Institute, Cornell Univ.	Plant Genomics	Postdoctoral Fellow	1999-02

Professional Experience

10/07 – Present **Associate Professor**, Plant Biology Division, Samuel Roberts Noble Foundation
08/02 – 10/07 **Assistant Professor**, Plant Biology Division, Samuel Roberts Noble Foundation
08/03 – Present **Adjunct Professor**, Dept. of Plant Pathology, Oklahoma State University
03/99 – 08/02 **Postdoctoral Fellow**, Boyce Thompson Institute for Plant Research, Cornell University
05/96 – 03/99 **Graduate Research Assistant**, Department of Biological Sciences, Purdue University
08/95 – 05/96 **Graduate Teaching Assistant**, Department of Agronomy, Purdue University
08/94 – 08/95 **Predoctoral Fellow**, Genetics Program, Purdue University
08/92 – 08/94 **Graduate Assistant**, Department of Horticulture, Clemson University

Five Publications Related to Proposal

- Uppalapati, S. R., Marek, S. M, Lee, H-K., Nakashima, J., Tang, Y., Sledge, M. K., Dixon, R. A., and **Mysore, K. S.** 2009. Global gene expression profiling during *Medicago truncatula-Phymatotrichopsis omnivora* interaction reveals a role for jasmonic acid, ethylene and the flavonoid pathway in disease development, *Molecular Plant-Microbe Interactions*, 22:7-17.
- Kang, L., Wang, Y-S., Uppalapati S. R., Wang, K., Tang, Y., Vadapalli, V., Venables, B. J., Chapman, K. D., Blancaflor, E. B., and **Mysore, K. S.** 2008. Overexpression of a fatty acid amide hydrolase compromises innate immunity in *Arabidopsis*. *Plant Journal*, 56:336-349.
- Uppalapati, S. R., Ishiga, Y., Wangdi, T., Urbanczyk-Wochniak, E., Ishiga, T., **Mysore, K. S.**, Bender, C. L. 2008. Pathogenicity of *Pseudomonas syringae* pv. *tomato* on tomato seedlings: Phenotypic and gene expression analyses of the virulence function of coronatine. *Molecular Plant-Microbe Interactions*, 21:383-395.
- Uppalapati, S. R., Ishiga, Y., Anand, A., Wangdi, T., Kunkel, B., **Mysore, K. S.**, and Bender, C. L. 2007. The phytotoxin coronatine contributes to pathogen fitness and is required for suppression of salicylic acid accumulation in tomato inoculated with *Pseudomonas syringae* pv. *tomato* DC3000. *Molecular Plant-Microbe Interactions*, 20:955-965.
- Wang, K. Kang, L., Anand, A. and **Mysore, K. S.** 2007. Monitoring *in planta* bacterial infection and population at both cellular and whole plant levels using *GFPuv*. *New Phytologist*, 174:212-223.

Five Other Significant Publications

- Anand, A., Uppalapati, S. R., Ryu, C. M., Allen, S., N., Kang, L., Tang, Y., and **Mysore, K. S.** 2008. Salicylic acid and systemic acquired resistance play a role in attenuating crown gall disease caused by *Agrobacterium tumefaciens*. *Plant Physiology*, 146:703-715.
- Anand, A., Krichevsky, A., Schornack, S., Lahaye, T., Tzfira, T., Tang, Y., Citovsky, V. and **Mysore, K. S.** 2007. VIP2- a VirE2 interacting protein is required for *Agrobacterium* T-DNA integration in plants. *Plant Cell*, 19:1695-1708.
- Anand, A., Vaghchhipawala, Z., Ryu, C. M., Kang, L., Wang, K., del-Pozo, O., Martin, G. B., and **Mysore, K. S.** 2007. Identification and characterization of genes involved in *Agrobacterium*-mediated plant transformation by virus-induced gene silencing. *Molecular Plant-Microbe Interactions*, 20:41-52.
- Ryu, C. M., Anand, A., Kang, L., and **Mysore, K. S.** 2004. Agrodrench: a novel and effective agroinoculation method for virus-induced silencing in roots and diverse Solanaceous species. *Plant Journal*, 40:322-331.
- Mysore, K. S.**, D'Ascenzo, M, He, X., and Martin, G. B. 2003. Overexpression of the disease resistance gene *Pto* in tomato induces gene expression changes similar to immune responses in human and fruitfly. *Plant Physiology*, 132: 1901-1912.

Synergistic Activities

- Development of protocols for tomato microarray hybridizations.
- Involvement in optimizing conditions to make publicly available tomato cDNA microarrays.
- Constantly review proposals for USDA and NSF.
- Review articles for many international journals like Plant Cell, Plant Journal, JBC and Planta.
- Developed publicly available insertion mutants in *Medicago truncatula*.
- Organize a large scale *M. truncatula* mutant screening event every year for the *Medicago* community.

Collaborators and Other Affiliations

Collaborators

- Adi Avni (Tel Aviv U)
- Elison Blancaflor (Noble Foundation)
- Vitaly Citovsky (State Univ. of New York)
- Pascal Ratet (CNRS, France)
- Marilyn Roossinck (Noble Foundation)
- Carol Bender (Oklahoma State University)
- Richard Dixon (Noble Foundation)
- Kent Chapman (University of North Texas)
- Michael Udvardi (Noble Foundation)

Graduate and Postdoctoral Advisors

- Vance Baird, Clemson University (M.S. advisor)
- Stan Gelvin, Purdue University (Ph.D. advisor)
- Greg Martin, BTI/Cornell University (Postdoctoral advisor)

Postdoctoral Fellows in Training During Past 1 Year

- Ajith Anand (Noble Foundation)
- Million Tadege (Noble Foundation)
- Srinivasa Rao Uppalapati (Noble Foundation)
- Zarir Vaghchhipawala (Noble Foundation)
- Keri Wang (Noble Foundation)
- Senthil-kumar Muthappa (Noble Foundation)
- Clemencia Rojas (Noble Foundation)

Satish Nagaraj (Noble Foundation)
Yasuhiro Ishiga (Noble Foundation)

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