

## Dr. Srinivasa Rao Uppalapati, Biographical Sketch



### Professional Preparation

Nagarjuna University, N. Nagar, India	Botany	B.S., 1986
Sardar Patel University, V.V. Nagar, India	Botany	M.S., 1989
Nagasaki University, Nagasaki, Japan	Marine Biology (Plant Pathology)	Ph.D., 2000

### Professional Experience

Research Scientist	Samuel Roberts Noble Foundation	2008-present
Postdoctoral Fellow	Samuel Roberts Noble Foundation	2005-2008
Research Associate	Oklahoma St. University	2001-2005
Research Associate	Okayama University, Japan	2000-2001
Research Fellow	Coun. Sci. & Industrl. Res., India	1990-1996
Graduate Assistant	Nagasaki University, Japan	1996-2000

### Honors and Awards

NSF, Oomycete Molecular Genetics Research Collaboration Network fellowship (\$3000)  
Travel awards: International Plant Metabolomics Congress, 2004; Plant Bionet-Oklahoma State University, 2003 and 2004.

Young Scientist-Postdoctoral Research Fellowship, Japan Society for Promotion of Science, 2000-2001, Japan.

Finalist, Luigi Provasoli Award 2001, Cellular and Molecular Biology Research-American Society of Phycology.

Monbusho (Govt. of Japan) Graduate Research Fellowship, 1996-2000, Japan.

### Publications (five most closely related to proposed project):

1. **Uppalapati, S. R.**, Marek, S.M., Hee-Kyung, L., Nakashima, J., Tang, Y., Sledge, M.K., Dixon, R.A. and Mysore, K.S. 2009. In the interaction of *Medicago truncatula* with *Phymatotrichopsis omnivora*, global gene expression profiling reveals a role for jasmonic acid, ethylene and the flavonoid pathway. **Molecular Plant Microbe Interactions**, 22: 7-17. (Cover page, Spot light article)
2. **Uppalapati, S. R.\***, Ishiga, Y., Wangdi, T., Wochniak, E-W., Ishiga, T., Mysore, K.S., and Bender. C.L. 2008. Pathogenicity of *Pseudomonas syringae* pv. *tomato* on tomato seedlings: Phenotypic and gene expression analysis of the virulence function of coronatine. **Molecular Plant Microbe Interactions**, 21: 383-395. (\*Corresponding author)
3. **Uppalapati, S. R.**, Ishiga, Y., Wangdi, T., Kunkel, B.N., Anand, A., Mysore, K.S., and Bender. C.L. 2007. The phytotoxin coronatine is required for pathogen fitness and suppression of salicylic acid accumulation in tomato inoculated with *Pseudomonas syringae* pv. *tomato* DC3000. **Molecular Plant Microbe Interactions**, 8:955-965.
4. **Uppalapati, S. R.**, Ayoubi, P., Weng, H., Palmer, D. A., Mitchell, R. E., Jones, W., and Bender. C. L. 2005. The phytotoxin coronatine and methyl jasmonate impact multiple phytohormone pathways in tomato. **Plant Journal**, 42:201-217.
5. **Uppalapati, S. R.**, and Fujita, Y. 2000. Carbohydrate regulation of attachment, encystment and appressorium formation by *Pythium porphyrae* (Oomycota) zoospores on *Porphyra*

*yezoensis* (Rhodophyta). **Journal of Phycology**, 36:359-366.

**Patents (most closely related to proposed project):**

**Uppalapati, S.R.**, Wensheng, L., Sumner, L.W., Dixon, R.A., and Mysore, K.S. Cotton root rot resistant plants (pending)

Wensheng, L., **Uppalapati, S.R.**, Mysore, K.S., Dixon, R.A., and Sumner, L.W. Metabolic engineering for plant disease resistance (pending)

**Other Selected Publications:**

1. Ishiga, Y., **Uppalapati, S. R.\***, Ishiga, T. and Bender, C.L. 2008. Coronatine-induces light dependent reactive species in tomato seedlings. **New Phytologist**, 181: 147-160. (\*Corresponding author)
2. 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. 2007. Overexpression of a fatty acid amide hydrolase compromises innate immunity in *Arabidopsis*. **Plant Journal**, 56:336-349.
3. Anand, A., **Uppalapati, S. R.**, Ryu, C-H., Allen, S. A., Kang, L., Tang Y., and Mysore, K. S. 2007. Salicylic acid inhibits *Agrobacterium vir* gene induction and attenuates crown gall disease in plants. **Plant Physiology**, 146, 703-715. DOI:10.1104/pp.107.111302.
4. **Uppalapati, S. R.\***, Yasuhiro, I., Toyoda, K., Ichinose, Y., and Shiraishi, T. 2004. Differential regulation of MBP kinases by a glycoprotein elicitor and a polypeptide suppressor from *Mycosphaerella pinodes* in pea. **Physiological and Molecular Plant Pathology** 64:17-25. (\*corresponding author).
5. Keith, R. C., Keith, L. M., Hernandez-Guzman, G., Uppalapati, S. R., and Bender. C. L. 2003. Alginate gene expression by *Pseudomonas syringae* pv. *tomato* DC3000 in host and non-host plants. **Microbiology**, 49:1127-1138.
6. **Uppalapati, S.R.** and Y. Fujita. 2000. Red rot resistance in interspecific protoplast fusion product progeny of *Porphyra yezoensis* and *P. tenuipedalis* (Bangiales, Rhodophyta). **Phycological Research**, 48: 281-289.

**Synergistic Activities**

1. Organizer, Chair, Special session on “Molecular mechanism of disease susceptibility” American Phytopathological Society annual meeting, Portland, 2009.
2. Guest lecturer in a graduate level class in *Molecular Plant-Microbe Interactions*, offered by Dr. Carol Bender, Oklahoma State University which is delivered via Internet 2 to multiple classes to different Universities; and *Phytobacteriology*.
3. Molecular and Cellular Phytopathology, Soil Microbiology Committees, American Phytopathological Society, 2004-present.
4. Review articles for many international journals like *Molecular Plant-Microbe interactions*, *Molecular General Genetics*, *Physiological and Molecular Plant Pathology*, *Plant Disease*, *Environmental Microbiology and Plant Physiology and Biochemistry*, *Plant and Soil*
5. Co-chair, Scientific session at American Phytopathological Society meeting, Austin, 2005.
6. Panel Member, *Porphyra* Biology, Natural History Museum, Chiba city, Japan,
7. Participant in Noble Foundation program which provides research-shadow mentoring opportunities for high school students.
8. I involve in activities to take Plant Biology to elementary school students and graduate research activities in the laboratory.