Guo-liang Wang's picture:

://plantpath.osu.edu/~wang/index.php)

understand the mechanism of plant-pathogen interactions,
s leading to the induction of disease resistance responses.
natics approaches are being used in the program. We are
nt since it is one of the most important food crops in the
among cereals and the genome sequence is publicly
eneration of novel genomics tools and resources for

Biosketch of Guo-Liang Wang, PhD

Associate Professor, Department of Plant Pathology
The Ohio State University, Columbus, OH, Phone (614) 292 1375; Fax (614) 292 4455
Email: wang.620@osu.edu, lab website: http://plantpath.osu.edu/~wang/

Education:

Ph.D. 1992, Plant Genetics and Breeding, University of the Philippines at Los Banos and International Rice Research Institute (IRRI), Philippines.

M.Sc. 1985, Plant Genetics, Fujian Agricultural University, Fuzhou, China.

B.Sc. 1982, Plant Genetics, Hunan Agricultural University, Changsha, China

Research/Professional Experience:

Associate Professor, Department of Plant Pathology, Ohio State University, Columbus, Ohio. 5/2004-present.

Adjunct Professor, Hunan Agricultural University, Hunan, China, 3/2004-present.

Adjunct Professor, Institute of Genetics, Chinese Academy of Sciences, 1996-present

Assistant Professor, Department of Plant Pathology, Ohio State University, Columbus, Ohio. 10/1999-5/2004.

Senior Scientist and Principal Investigator, Institute of Molecular Agrobiology, The National University of Singapore, 8/1996-9/99.

Postdoctoral Research Associate, University of California at Davis, 8/1993-8/96

Postdoctoral Research Associate, Texas A&M University, 6/1992-8/1993.

Awards, Honors and Services

The Syngenta Award of the American Phytopathology Society, 8/2006
Panel member, USDA-NRI Functional Genomics, 10/2005
OARDC Distinguished Junior Faculty Research Award, 5/2005
Panel member: OARDC Research Committee, 9/2004-present
Panel member: USDA-NRI Genetic Mechanism, 3/2004
Outstanding Overseas Young Scientist Award, National Science Foundation of China (2001)
DuPont Young Professor Award. (2000)

Society Memberships:

American Association for the Advancement of Science (AAAS), American Society for Plant Biologists (ASPB), American Phytopathological Society (APS)

Funding Agency: NSF-Plant Genome Research, USDA-NRI, Ohio Agricultural Research and Development Center (OARDC), USAID and Dupont.

Publications in the last five years

Malali Gowda, Haumeng Li, Joe Alessi, Feng Chen, Richard Pratt, **GL.Wang**. Robust Analysis of 5'-Transcript Ends (5'-RATE): A novel technique for transcriptome analysis and genome annotation. NAR, in revision.

Bo Zhou, Shaohong Qu, Guifu Liu, Maureen Dolan, Hajime Sakai, Guodong Lu, Maria Bellizzi, **GL.Wang** (2006) The eight amino acid differences within three leucine-rich repeats between Pi2 and Piz-t resistance proteins determine the resistance specificity to *Magnaporthe grisea,* MPMI, Accepted with minor changes.

Songbiao Chen, Lizhen Tao and **GL.Wang**. 2006. Protoplast-based transient assay system for gene expression and protein-protein interaction study in rice. Molecular Plant Pathology, in press.

Zeng LR. Vega-Sánchez, M., Zhu T. and **GL.Wang**. (2006) Ubiquitination-mediated protein degradation and modification: an emerging theme in plant-microbe interactions. Cell Research, in press.

Hak-Seung Ryu, Muho Han, Sang-Kyu Lee, Jung-Il Cho, Nayeon Ryoo, Sunggi Heu, Youn-Hyung Lee, Seong Hee Bhoo, Tae-Ryong Hahn, **GL Wang**, Jong-Seong Jeon. (2006). A comprehensive expression analysis of *WRKY* gene superfamily in rice plants during defense response. Plant Cell Reporter, in press.

Qu SH, Liu GF, Zhou B, Bellizzi M, Zeng LR, Dai LY, Han H and **Wang GL**. 2006. The Broad-Spectrum Blast Resistance Gene Pi9 Encodes an NBS-LRR Protein and is a Member of a Multigene Family in Rice. Genetics 172: 1901-1914.

Gowda M, Reddyvarichannarayappa Venu, Jia Y, Stahlberg E, Pampanwar V, Soderlund C, **GL Wang** (2006). Use of RL-SAGE Analysis to Identify Novel Fungal and Plant Genes Involved in Host-Pathogen Interactions. In: Ronald PC (ed) "Methods in Molecular Biology:Plant-Pathogen Interactions". Humana Press, In press.

Malali Gowda and **GL Wang** (2006) Robust-LongSAGE (RL-SAGE): an improved LongSAGE method for high-throughput transcriptome analysis. In: Kåre Lehmann Nielsen (ed) "Methods in Molecular Biology-SAGE". Humana Press. In press.

Wu JL, Wu C, Lei C, Baraoidan M, Bordeos A, Madamba MR, Ramos-Pamplona M, Mauleon R, Portugal A, Ulat VJ, Bruskiewich R, **Wang GL,** Leach J, Khush G, Leung H. (2005) Chemical- and Irradiation-induced Mutants of Indica Rice IR64 for Forward and Reverse Genetics**.** Plant Mol Biol. 2005 59(1):85-97.

Wang, ZL, L.Dai, Z. Jiang, W. Peng, L. Zhang, **GL. Wang**, D. Xie. (2005) GmCOI1, a soybean F-box protein gene, shows ability to mediate jasmonate-regulated plant defense and fertility in Arabidopsis. Molecular Plant-Microbe Interactions, 18:1285-1295.

Gu K, Yang B, Tian D, Wu L, Wang D, Sreekala C, Yang F, Chu Z, **Wang GL**, White F, Yin Z. (2005) Type III effector-induced R gene expression triggers disease resistance in rice. Nature*,* 435:1122-1125.

Jantasuriyarat C, Gowda M, Haller K, Hatfield J, Lu G, Stahlberg S, Zhou B, Li H, Kim HR, Yu YS, Dean RA, Wing RA, Soderlund C and **GL Wang** (2005). Large-scale identification of ESTs involved in rice and rice blast (*Magnaporthe grisea*) interaction. *Plant Physiology*, 138: 105-15

Yi G, Lee SK, Hong YK, Cho YC, Nam MH, Kim SC, Han SS, **Wang GL**, Hahn TR, Ronald PC, Jeon JS. (2004) Use of Pi5(t) markers in marker-assisted selection to screen for cultivars with resistance to Magnaporthe grisea. *Theor Appl Genet*. 109 (5):978-85.

Zeng L-R, Qu S, Bordeos A, Yang C, Baraoidan M, Yan H, Xie Q, Nahm BH, Leung H, and **Wang GL** (2004) *Spotted leaf11*, a Negative Regulator of Plant Cell Death and Defense, Encodes a U-Box/Armadillo Repeat Protein Endowed with E3 Ubiquitin Ligase Activity.*Plant Cell* **16(10)**: 2795-2808

Wang GL , Wu C, Zeng L, He C, Baraoidan M, William CE, Ronald P, Leung H (2004) Isolation and characterization of rice mutants compromised in the Xa21-mediated resistance to *Xamthomonas oryzae* pv *oryzae* . *Theoretical and Applied Genetics*, 108:379-84.

Gowda M, Jantasuriyarat C, Dean R., **Wang GL** (2004) A robust-longSAGE method for large-scale gene discovery and transcriptome profiling. Plant Physiology, 134:890-7.

Lu G, Jantasuriyarat C, Zhou B, **Wang GL** (2004). Isolation and characterization of novel defense response genes involved in compatible and incompatible interactions between rice and *Magnaporthe grisea* . Theoretical and Applied Genetics, 108:525-34.

Gu K, Tian D, Yang F, Wu L, Chellamma S, Wang D, **Wang GL** , Yin Z (2003) . High-resolution genetic mapping of Xa27(t), a new bacterial blight resistance gene in rice, Oryza sativa L. Theoretical and Applied Genetics, Theoretical and Applied Genetics, 108(5):800-7.

Qu S, Coaker G, Francis D, Zhou B, **Wang GL** (2003) Development of a new transformation-competent artificial chromosome (TAC) vector and construction of tomato and rice TAC libraries. Molecular Breeding, *12:297-308* .

Jeon JS, Chen D, Yi GH, **Wang GL** , Ronald PC (2003) . Genetic and physical mapping of *Pi5(t)* , a locus associated with broad-spectrum resistance to rice blast. Molecular Genetics and Genomics *,* 269(2):280-289 *.*

Zeng L, Yin Z, Chen J, Leung H, **Wang GL** (2002) Fine genetic mapping and physical delimitation of the lesion mimic gene Spl11 to a 160 kb DNA segment of the rice genome. Molecular Genetics and Genomics 268:253-261.

Liu G, Lu G, Zeng L, **Wang GL** (2002) The two broad-spectrum blast resistance genes, *Pi9(t)* and *Pi2(t)* , are physically linked on rice chromosome 6. Molecular Genetics and Genomics 267:472-480.

Zhai WX, Wang WM, Zhou YL, Li XB, Zheng XW, Zhang Q, **Wang GL** , Zhu LH. (2002) Breeding bacterial blight resistant hybrid rice with the cloned bacterial resistance gene *Xa21* . Molecular Breeding 8:285-293.

Wang Z, Taramino G, Yang D, Tingey SV, Miao GH, Wang GL (2001) Rice ESTs with disease resistance gene- or defense response gene-like sequences mapped to regions containing major resistance genes or QTLs. Molecular Genetics and Genomics 265:302-310.

Yin Z, Chen J, Zeng L, Goh G, Leung H, Khush GS, **Wang GL** (2000) Characterization of rice lesion mimic mutants and identification of a mutant with broad-spectrum resistance to rice blast and bacterial blight. Molecular Plant-Microbe Interactions 13:869-876.