

## PRADEEP REDDY MARRI

**Asst. Research Scientist**

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### EDUCATION

2003	<b>Ph.D in Plant sciences</b>	University of Hyderabad, India
1998	<b>M.S in Biotechnology</b>	Guru Nanak Dev University, India
1996	<b>B.S in Genetics</b>	Osmania University, India

### RESEARCH EXPERIENCE

2008 - present	<b>Asst. Research Scientist</b> , University of Arizona, Tucson, Arizona
2006 - 2008	<b>Research Associate</b> , University of Arizona, Tucson, Arizona
2004 - 2006	<b>Postdoctoral Fellow</b> , McMaster University, Hamilton, Canada

### FELLOWSHIPS AND AWARDS

**Who's Who in America** (2010 - )

**Travel Grant** (2009) to attend 6<sup>th</sup> International Rice Genetics Meeting, Manila (Nov 15 - 20), Philippines.

**Winning proposal** (2008) in 'Opportunity knocks - genome sequencing' competition announced by Arizona Research Laboratories, University of Arizona.

**Senior Research Fellowship** (1998-2003) from the Indian Council of Agricultural Research (ICAR) under the National Professor Project, Directorate of Rice Research, Hyderabad.

**National Scholarship** (1996-1998) from Department of Biotechnology, Government of India, for pursuing M S in Biotechnology.

### GRANTS

**P30 ES06694**

**Microbial communities in induced sputum in relation to asthma status and associated exposures**

The goal of this study is to investigate the microbial community structure in induced sputum that are associated with asthma in young adults, and to determine if the organisms in sputum vary with regard to dogs and cats in the household environment.

**Role:** Principal Investigator

**Funding Agency:** Southwest Environmental Health Sciences Center (SWEHSC)

## PUBLICATIONS

Goicoechea, J.L., Ammiraju, J.S.S., **Marri, P.R.**, Chen, M., Jackson, S., Yu, Y., Rounsley, S. and Wing, R.A. 2010. The future of rice genomics: Sequencing the collective *Oryza* genome. **RICE** 3:89-97.

**Marri, P.R.**, Paniscus, M., Weyand, N.J., Rendon, M.A., Calton, C.M., Hernandez, D.R., Higashi, D.L., Sodergren, E., Weinstock, G.M., Rounsley, S. and So, M. 2010. Genome sequencing reveals widespread virulence gene exchange among human *Neisseria* species. **PLoS ONE** 5(7): e11835.

Lepp, D., Roxas, B.P., Parreira, V.R., **Marri, P.R.**, Rosey, E.L., Gong, J., Songer, J.G., Vedantam, G., Prescott, J.F. 2010. Identification of novel pathogenicity loci in *Clostridium perfringens* strains that cause avian necrotic enteritis. **PLoS ONE** 5(5): e10795.

Rounsley, S., **Marri, P.R.**, Yu, Y., He, R., Sisneros, N., Goicoechea, J.L., Lee, S.J., Angelova, A., Kudrna, D., Luo, M., Affourtit, J., Desany, B., Knight, J., Niazi, F., Egholm, M. and Wing, R.A. 2009. De novo next generation sequencing of plant genomes. **RICE** 2: 35-43.

**Marri, P.R.**, Harris, L.K., Houmiel, K., Slater, S.C. and Ochman, H. 2008. The effect of chromosome structure on genetic diversity. **Genetics** 179: 511-516.

van Passel, M.W.J\*, **Marri, P.R.\*** and Ochman, H. 2008. The emergence and fate of horizontally acquired genes in *Escherichia coli*. **PLoS Computational Biology** 4(4):e1000059.

**Marri, P.R.** and Golding, G.B. 2008. Gene amelioration demonstrated: The journey of nascent genes in bacteria. **Genome** 51: 164-168.

**Marri, P.R.\*** Hao, W.\* and Golding, G.B. 2007. The role of laterally transferred genes in adaptive evolution. **BMC Evolutionary Biology** 7(Suppl 1):S8.

**Marri, P.R.\*** Hao, W.\* and Golding, G.B. 2006. Gene gain and gene loss in *Streptococcus*: Is it driven by habitat? **Molecular Biology and Evolution** 23(12): 2379-2391.

**Marri, P.R.**, Bannantine, J.P. and Golding, G.B. 2006. Comparative genomics of metabolic pathways in *Mycobacterium* species: gene duplication, gene decay and lateral gene transfer. **FEMS Microbiology Reviews** 30(6): 906-925.

**Marri, P.R.**, Bannantine, J.P., Paustian, M.L. and Golding, G.B. 2006. Lateral gene transfer in *Mycobacterium avium* subspecies *paratuberculosis*. **Can. J. Microbiology** 52: 560-569.

**Marri, P.R.**, Sarla, N., Reddy, L.V. and Siddiq, E.A. 2005. Identification and mapping of yield and yield related QTLs from an Indian accession of *Oryza rufipogon*. **BMC Genetics** 6: 33.

**Marri, P.R.**, Sarla, N, Reddy, V.L.N and Siddiq, E.A. 2004. Introgression and mapping of yield enhancing QTLs from *Oryza rufipogon*. **Rice Genetics Newsletter** 21: 25.

**Marri, P.R.**, Sarla, N., and Siddiq, E.A. 2002. Inter simple sequence repeat (ISSR) polymorphism and its application in plant breeding. **Euphytica** 128: 9-17.

Sarla, N., **Marri, P.R.**, and Siddiq, E.A. 2001. Application of inter simple sequence repeat (ISSR) polymorphism in assessing diversity in crop plants. **Indian J. Plant Genet. Resources** 14(2): 246-247.

\* equal contribution

### **Invited/Contributed Talks**

**Marri, P.R.** 2010. Genomics and Bioinformatics: New tools for understanding pathogenesis. University of Arizona. **Invited Talk as part of Graduate course in Immunobiology.**

**Marri, P.R.** 2010. Widespread gene exchange in Neisseria. Microlunch (Feb 03), University of Arizona. **Invited Talk**

**Marri, P.R.** 2009. Next generation sequencing of rice genomes: A peek into the genome sequence of *Oryza glaberrima*. Acharya N. G. Ranga Agricultural University, Hyderabad, India. **Invited Talk**

**Marri, P.R.** 2009. Commensal bacteria as a source of new virulence alleles. University of Hyderabad, India. **Invited Talk**

**Marri, P.R.**, Bannantine, J.P., and Golding, G.B. 2006. Has *Mycobacterium avium* subspecies paratuberculosis acquired the virulence genes to compensate for the loss of PE/PPE genes? Molecular Biology and Evolution conference on Genomes, Evolution and Bioinformatics, Phoenix, Arizona, USA. **Contributed Talk**

**Marri, P.R.** 2005. Lateral gene transfer in *Mycobacterium avium* subsp. *paratuberculosis*. University of Arizona, USA. **Invited Talk**

**Marri, P.R.** 2002. The potential of wild rice species for yield enhancement in rice. 25th Mahabaleshwar Conference on Modern Biology, Mahabaleshwar, India. **Contributed Talk**

### **Posters and Presentations**

**Marri, P.R.**, Yu, Y., Sisneros, N., Kudrna, D., Goicoechea, J.L., Lee, S., Kim, W., Zuccolo, A., Braidotti, M., Sebastian, A., Collura, K., Wissotski, M., Golser, W., Wing, R.A. and Rounsley, S.R. (2009). Genome Sequence of African Cultivated Rice *Oryza glaberrima*. 6<sup>th</sup> International Rice Genetics meeting (Nov 15 - 20), Manila, Philippines. **Poster**

**Marri, P.R.**, Yu, Y., He, R., Sisneros, N., Goicoechea, J.L., Lee, S.L., Angelova, A., Kudrna, D., Luo, M., Affourtit, J., Desany, B., Knight, J., Niazi, F., Egholm, M., Wing, R.A. and Rounsley, S.R. (2009) Pyrosequencing of chromosome 3 short arms of rice. Society for Molecular Biology and Evolution (SMBE) Meeting (June 3- 7) Iowa City, Iowa. **Poster**

**Marri, P.R.**, Hao, W., and Golding, G.B. 2006. Fast Evolution of laterally transferred genes. Molecular Biology and Evolution conference on Genomes, Evolution and Bioinformatics, Phoenix, Arizona, USA. **Poster**

**Marri, P.R.** and Golding, G.B. 2006. Lateral gene transfer in *Mycobacterium avium* subsp. *Paratuberculosis*. Annual Meeting of the Canadian Society of Ecology and Evolution, Montreal, QC, Canada. **Poster**

**Marri, P.R.**, Bannantine, J.P., and Golding, G.B. 2005. Lateral gene transfer in *Mycobacterium avium* subsp. *paratuberculosis*. ISMB Meeting (June 12-15), Michigan, USA. **Poster**

**Marri, P.R.** and Golding, G.B. 2005. Lateral gene transfer in *Mycobacterium avium* subsp. *Paratuberculosis*. Eastern Great Lakes Molecular Evolution Meeting, Toronto, ON, Canada. **Poster**

#### **PROFESSIONAL ACTIVITIES**

- **Reviewer** for Genetics, Genome Research, Genome, FEMS microbiology letters
- **Associate Editor**, Sequencing, Hindawi publishing corporation