Ramanjulu Sunkar, Ph.D.

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Department of Biochemistry and Molecular Biology
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Education:
1992: Senior Research Fellowship, Council of Scientific and Industrial Research, India
1995: DAAD Fellowship, DAAD, Germany
1996: Research Associate, Council of Scientific and Industrial Research, India
1997-1998: Feinberg Post-doctoral Fellowship, Weizmann Institute of Science, Israel
1999-2000: Sir Charles Clore Post-doctoral Fellowship, Weizmann Institute of Science, Israel
2000-2002: Alexander-Von-Humboldt Fellowship, Alexander Von Humboldt Foundation, Germany

Academic Appointments:
1997-2000: Postdoctoral Fellow, Weizmann Institute of Science, Rehovot, Israel
2000-2002: Postdoctoral Fellow, University of Bonn, Germany
2003: Postdoctoral Fellow, University of Arizona, Tucson, USA
2004-2005: Visiting Professional Researcher, University of California, Riverside, USA
2006: Research Specialist, University of California, Riverside, USA
2006-present: Assistant Professor, Oklahoma State University, Stillwater, OK, USA

Awards and Honors:
1992: Senior Research Fellowship, Council of Scientific and Industrial Research, India
1995: DAAD Fellowship, DAAD, Germany
1996: Research Associate, Council of Scientific and Industrial Research, India
1997-1998: Feinberg Post-doctoral Fellowship, Weizmann Institute of Science, Israel
1999-2000: Sir Charles Clore Post-doctoral Fellowship, Weizmann Institute of Science, Israel
2000-2002: Alexander-Von-Humboldt Fellowship, Alexander Von Humboldt Foundation, Germany

Other Professional Experiences and Memberships:
American Society for Plant Biologists

Ad-hoc reviewer:
2005-2009: NSF, USA
2008: BBSRC, UK
2009: NSERC, Canada
2009: US-Israel Bi-National Science Foundation
2009: Kentucky Science and Engineering Foundation (Kentucky, USA)

Associate Editor
2009-present: BMC Plant Biology
2010-present: BMC Genomics

Editorial Board
2007-present: Current Trends in Biotechnology and Pharmacy (ISSN 0973-8916)
2009-present: Molecular Biotechnology (ISSN: 1559-0305, Humana Press)
2009-present: World Journal of Biological Chemistry

Selected Publications:

1. Li YF, Zheng Y, Addo-Quaye C, Li Z., Saini A, Jagadeeswaran G, Axtell M, Zhang W, Sunkar R. (2010).Transcriptome-wide identification of microRNA targets in rice. Plant Journal, 62, 742-759. (*corresponding author).
2. Sunkar, R. (2010). MicroRNAs with macro-effects on plant stress responses (invited review). Seminars in Cell and Developmental Biology, (doi: 10.1016/j.semcdb.2010.04.001.
3. Jagadeeswaran, G., Saini, A and Sunkar, R* (2009). Biotic and abiotic stress down-regulate miR398 expression in Arabidopsis. Planta, 229: 1009-1014. (*corresponding author).
4. Jagadeeswaran, G., Zheng, Y., Li, Y., Shukla, L., Matts, J., Hoyt, P., Graham, M.S., Roe, B.A., Zhang, W,and Sunkar, R* (2009). Sequencing of a small RNA library from Medicago truncatula revealed four families of novel legume-specific and candidate microRNAs. New Phytologist, 184:85-98.(*Corresponding author).
5. Zhou, X., Sunkar, R., Jin, H., Zhu, J-K and Zhang, W. (2009). Genome-wide identification and analysis of small RNAs originated from natural antisense transcripts Oryza sativa. Genome Research, 19: 70-78.
6. Subramanian, S., Fu, Y., Sunkar,R., Barbazuk, B. W., Zhu, J-K. and Yu, O. (2008). Novel and nodulationregulated microRNAs in soybean roots. BMC Genomics, 9:160.
7. Sunkar,R*, Zhou, X., Zheng, Y., Zhang, W. and Zhu, J-K. (2008). Identification of novel and candidate miRNAs in rice by high throughput sequencing. BMC Plant Biology, 8:25. (*Co-corresponding author).
8. Sunkar,R.* Chinnusamy, V., Zhu, J. and Zhu, J.K. (2007). Small RNAs as big players in plant abiotic stress responses and nutrient deprivation. Trends in Plant Sciences, 12: 301-309. (*Co-corresponding author).
9. Sunkar,R., Kapoor, A. and Zhu, J.K. (2006). Posttranscriptional induction of two Cu/Zn superoxide dismutase genes in Arabidopsis is mediated by down-regulation of miR398 and important for oxidative stress tolerance. Plant Cell, 18, 2051-2065.
10. Borsani, O. Zhu, J.H., Verslues, P.E., Sunkar,R. and Zhu, J.K. (2005). Endogenous siRNAs derived from a pair of natural cis-antisense transcripts regulate salt tolerance in Arabidopsis. Cell, 123, 1279-1291.
11. Sunkar,R., Girke, T. and Zhu, J-K. (2005). Identification and characterization of endogenous smallinterfering RNAs from rice. Nucleic Acids Research, 33, 4443-4454, 2005.
12. Sunkar, R., Girke, T., Jain, P.K. and Zhu, J-K. (2005). Cloning and characterization of microRNAs from rice. Plant Cell, 17, 1397-1411. (one of the highlighted papers in the same issue of Plant Cell).
13. Bartels, D. and Sunkar, R. (2005). Drought and salt tolerance in plants. Critical Reviews in Plant Sciences, 24, 23-58.
14. Sunkar,R. and Zhu, J-K. (2004). Novel and stress-regulated microRNAs and other small RNAs from Arabidopsis. Plant Cell, 16, 2001-2019. (Highlighted in Plant Cell 16, 1951-1954, 2004).
15. Sunkar,R., Bartels, D and Kirch, H-H. (2003). Improved abiotic stress tolerance of transgenic Arabidopsis plants overexpressing a stress-inducible aldehyde dehydrogenase. Plant Journal, 35, 452-464.