

Abhijit Karve

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EDUCATION:

- 2003-2008 **Ph.D.**, Clemson University, Clemson, SC
Major: Genetics
Thesis: Functional characterization of hexokinase like-1(HKL1) from *Arabidopsis thaliana*
- 2001-2003 **M.Sc.**, Mahatma Phule Agricultural University, Rahuri, India
Major: Cytogenetics and Plant Breeding
Thesis: Gamma ray induced mutagenesis in senna (*Cassia angustifolia*)
- 1995-1999 **B.Sc.**, Konkan Agricultural University, Dapoli, India
Major: Agriculture

PROFESSIONAL EXPERIENCE:

- Mar 2009-present **Post doctoral Research Associate**, Plant Systems Biology Group, Environmental Sciences Division, Oak Ridge National Lab, Oak Ridge, TN.
Supervisor: Dr. David Weston/Dr. Stan Wullschlegler
Molecular characterization of shade avoidance response in Poplar
Biochemical characterization of high temperature acclimation of plants
- Sep 2008- Mar 2008 **Research Associate**, Department of Genetics and Biochemistry, Clemson University Clemson, SC.
Supervisor: Dr. Julia Frugoli
*Understanding the role of lss and sun in regulation of nodule number in *Medicago truncatula**
- Aug 2003-Aug 2008 **Research Assistant**, Department of Genetics and Biochemistry, Clemson University, Clemson, SC.
Supervisor: Dr. Brandon Moore
Functional analysis of Arabidopsis HKL1 in glucose signaling and plant growth
Understanding the role of actin cytoskeleton in plant sugar signaling
- Aug 2003-Aug 2008 **Teaching Assistant**, Department of Genetics and Biochemistry, Clemson University BIOCH 302: Molecular Biochemistry lab, GEN 303: Fundamentals of Genetics lab, BIOCH 306: Essential elements of Biochemistry lab.
- Jul 2000-Oct 2001 **Marketing Executive**, Bangalore Genei India Pvt Ltd, Mumbai, India
Advertizing and sale of instruments reagents to the life science research community.

PUBLICATIONS:

- Weston DJ, **Karve AA**, Gunter LE, Jawdy SS, Allen SM, Wullschlegler SD. 2010. Increased Thermotolerance of Soybean Relative to Populus and Arabidopsis Revealed in a Comparative Systems Biology Analysis of the Heat Shock Response. *Manuscript in preparation.*
- Schnabel E, **Karve AA**, Mukherjee A, Hall T, Smith L, Long S, Frugoli J. 2010. Expression of the SUNN Symbiotic Regulatory Kinase. Invited paper for *Plant Cell Physiol*, due March 2010

- **Karve AA**, Moore BD. 2009. "Function of Arabidopsis Hexokinase Like 1 (HKL1) as a Negative Regulator of Plant Growth". *J Exp Bot* 60(14): 4137-4149.
- **Karve AA**, Rauh B, Xia X, Kandasamy A, Meagher BR, Sheen J and Moore BD. 2008. "Expression and Evolutionary Features of the Hexokinase Gene Family in Arabidopsis". *Planta*. 228(3):411-425.
- Balasubramanian R, **Karve AA** and Moore BD. 2008. "Actin-based Cellular Framework for Glucose Signaling by Arabidopsis Hexokinase1". *Plant signaling and behavior* 3(5):324-325.
- Balasubramanian R*, **Karve AA** *, Kandasamy M, Meagher RB and MooreBD. 2007. "A Role for F-Actin in Hexokinase Mediated Glucose Signaling". *Plant Physiol.*145: 1423-1434.
* *These authors contributed equally to the paper.*

SELECTED ORAL PRESENTATIONS AND POSTERS:

- **Karve AA**, Weston DJ, Jawdy SS, Gunter LE, Wullschleger SD. and Doktyz MJ. "Functional analysis of phytochrome signaling in *Populus*". *2010 Genomic Science Contractor-Grantee and Knowledgebase Workshop, Crystal City, VA, February 7-10, 2010.*
- **Karve AA** and Moore, BD. "A role of Hexokinase Like1 (HKL1) from *Arabidopsis* in Glucose Signaling". *Plant Biology, Merida Mexico, June 26- July 1, 2008.*
- **Karve AA** and Moore BD. "Functional Characterization of Hexokinase Like 1(HKL1) from *Arabidopsis thaliana*". *Southern section of American Society of Plant Biologists Meeting, Daytona Beach, FL, February 25-27, 2006.*
- Balasubramanian R, **Karve AA**, Kandasamy M, Meagher R and Moore, B. D. "A Role for the Actin Cytoskeleton in Hexokinase Mediated Glucose Signaling". *16th International Conference on Arabidopsis Research, Madison, WI, June 15-19, 2005.*
- Metter H, **Karve AA**, Sheen J and Moore BD. "Characterization of Arabidopsis Hexokinase-Like Genes in Glucose Signaling". *Plant biology, Lake Buena Vista, FL, July 24-28, 2004.*

SCHOLARSHIPS AND AWARDS:

- **Travel Award:** American Society of Plant Biologists (ASPB), Plant Biology, Merida, Mexico, 2008
- **Travel Award:** Southern Section-ASPB, 2006 and 2008.
- **Outstanding Teaching Assistant Award:** College of Agriculture, Forestry and Life Science Studies, Clemson University, Clemson, SC 2007.
- **Sir Robert Allen Gold Medal:** Meritorious performance in the Undergraduate program in Agriculture, College of Agriculture, Dapoli, India, 1999.

PROFESSIONAL AFFILIATIONS:

- American Society of Plant Biologists.
- American Association for the Advancement of Science

SOCIAL ACTIVITIES:

- **Student Representative:** Genetics and Biochemistry Chair Search Committee, 2007
- **Treasurer:** 'Surabhi', a student organization devoted to Indian Classical Music, 2007-08
- **Senator:** Graduate Student Government, Clemson University, 2006-07.