

Joshua A. Udall

Department of Plant and Animal Sciences
295 WIDB, Brigham Young University
Provo, UT 84602

Office: (801) 422-9307
FAX: (801) 422-0008
Email: jaudall@byu.edu

Professional Preparation

Brigham Young University	Botany/Biotechnology	B.S. 1995
University of Idaho	Plant Science	M.S. 1997
University of Wisconsin	Plant Breeding and Genetics	Ph.D. 2003
Iowa State University	Ecology, Evolution, and Organismal Biology	Postdoc. 2003-06

Appointments

2006-present Associate Professor, Plant and Wildlife Sciences Dept., BYU (50% teaching, 50% research)

Publications*Five most relevant publications:*

- Rambani, A., J.T. Page, K. Grupp, **J.A. Udall**. 2014. Polyploidy and the petal transcriptome of *Gossypium*. *BMC Plant Biology* 14:3
- Bowman, M.J., W. Park, P.J. Bauer, **J.A. Udall**, J.T. Page, J. Raney, B.E. Scheffler, D.C. Jones, B.T. Campbell. 2013. RNA-seq transcriptome profiling of upland cotton (*Gossypium hirsutum* L.) root tissue under water-deficit stress. *PLOS ONE* 8:e82634.
- Page, J.T., M.D. Huynh, Z.S. Liechty, K. Brupp, D. Stelly, A. Hulse, H. Ashrafi, A. Van Deynze, J.F. Wendel, **J.A. Udall**. 2013. Insights into the evolution of cotton diploids and polyploids from whole-genome re-sequencing. *G3:Genes|Genetics|Genomes* 3:1809-1818
- Page, J.T., Gingle, A., **Udall, J.A.** 2013. PolyCat: A Resource for Genome Categorization of Sequencing Reads from Allopolyploid Organisms *G3:Genes|Genetics|Genomes* 3:517-525.
- Paterson, A. et al. 2012. Repeated polyploidization of *Gossypium* genomes and the evolution of spinnable cotton fibres *Nature* 492:423-427.

Six other relevant publications:

- Richardson, B.A., Page, J.T., Bajgain, P., Sanderson, S.C., **Udall, J.A.** 2012. Deep Sequencing of Amplicons Reveals Widespread Hybridization and Polyploidization in Big Sagebrush *American Journal of Botany* 99:1962-1975.
- Flagel, L. E., Wendel, J. F., & **Udall, J. A.** 2012. Duplicate gene evolution, homoeologous recombination, and transcriptome characterization in allopolyploid cotton. *BMC Genomics*, 13: 302.
- Salmon, A., **Udall, J.A.**, Jeddelloh, J. Wendel, J.F. 2012. Targeted capture of homoeologous coding and non-coding sequence in polyploid cotton. *G3:Genes|Genetics|Genomes* 2:921-930.
- Maughan, P. J., Smith, S. M., Rojas-Beltrán, J. A., & Elzinga, D., Raney, J.A., Jellen, E.N., Bonifacio, A., **Udall, J.A.**, and Fairbanks, D. 2012. Single nucleotide polymorphisms identification, characterization and linkage mapping in *Chenopodium quinoa*. *The Plant Journal* 5:1-7.
- Byers, R. L., Harker, D. B., Yourstone, S. M., Maughan, P. J., & Udall, **J. A.** 2012. Development and mapping of SNP assays in allotetraploid cotton. *Theoretical and Applied Genetics*, 124:1201–1214.
- Cronn, R., Knaus, B. J., Liston, A., Maughan, P. J., Parks, M., Syring, J. V., & **Udall, J.** 2012. Targeted enrichment strategies for next-generation plant biology. *American Journal of Botany*, 99:291–311.

Awards

Graduate Mentoring in Research 2008, ORCA, BYU
2013 Outstanding Faculty Researcher, College of Life Science, Brigham Young University

Synergistic Activities

Exploring the Genetic Diversity of Sagebrush. Collaboration with Bryce Richardson
 Lupine Gene Discovery. Collaboration with Ivan Mauriera of CNGA, Chile
 Sequencing the genome of Red Raspberry. 2009-present. Collaboration with Mark Clement,
 BYU; Courtney Weber, Cornell; Dan Sargent, East Malling Reasech, UK

Professional Service

UDSA-ARS Genomics of Feedstocks Panelist 2012
 NSF Post-doc Fellowship Panelist 2012
 Organizer of the Utah Plant Genetics Conference 2012, Feb. 2012
 NSF Plant Genome Panelist 2009
Ad hoc reviewer NSF MRI and PGRP 2009, 2010, 2011
 International Cotton Genomics Initiative Steering Committee (2012-2013) - Functional Genomics
Journal Reviewer (2013) Nature Genetics, Nature Communications, Plant and Cell Biology,
 BMC Plant Biology (2 papers), Genome Biology and Evolution, Nucleic Acids Research, PLOS
 Genetics, PLOS ONE (2), Theoretical and Applied Genetics (**2012**) Theoretical and Applied
 Genetics, BMC Genomics (2), Molecular Ecology Resources, Bioinformatics, The Plant Journal,
 Crop Science, G3:Gene|Genetics|Genomes (3), PLoS ONE, Functional and Integrative
 Genomics (**2011**) Plant Cell, BMC Plant Biology (**2010**) BMC Genomics

Invited Seminars and Symposia since 2011

Plant Genomics Congress 2013, St. Louis, MO
 International Cotton Genome Initiative Workshop, PAG 2013, San Diego, CA
 Genome Evolution, Minisymposium, ASPB 2012, Austin, TX
 Next Generation Sequencing Workshop, 2012, Temuco, Chile
 ICGI Research Conference 2012, Cary, NC
 2nd Progress and Applications of Next-Generation Sequencing Workshop 2012, Saskatoon,
 Canada
 Sequence Capture/454 Sequencing Seminar 2012, University of Utah, SLC, UT, USA
 Utah Plant Genetics Conference 2012, Aspen Grove, UT, USA
 Botany, Advances in Plant Systematics and Population Genomic: Applications of Next Generation
 Techniques, 2011
 ICGI Cotton Workshop, Plant and Animal Genome Conference XIX, 2011

Collaborators and Other Affiliations

Collaborators:

Ivan Mauriera, CGNA, Chile
 Ravi Rajekavsevan, Tamil Nadu, India
 Michael Gore, Cornell University
 Bryce Richardson, Western Shrub Lab, U.S. Forest Service, Provo, UT

Graduate and Postdoctoral Advisors:

Edward Souza, USDA-ARS (M.S. Advisor)
 Thomas Osborn, Monsanto (Ph.D. Advisor)
 Jonathan F. Wendel, Iowa State University (Postdoc Advisor)