



**VI. Publications**

1. Li, S., Ault, A., Malone, C.L., Deschenes, R.J., and J.S. Fassler. (1998) Skn7 and Ypd1 are Intermediates in the Yeast Sln1-Mcm1 Signal Transduction Pathway. EMBO J. 23:6952-6962.
2. Deschenes, R.J., Lin, H., Ault, A.D., Fassler, J.S. (1999) Antifungal Properties and Target Evaluation of Three Putative Bacterial Histidine Kinase Inhibitors. Antimicrobial Agents and Chemotherapy 43:1700-1703.
3. Tao, W., Malone, C.L., Ault, A.D., Deschenes, R.J., and J.S. Fassler. (2002) A cytoplasmic coiled-coil domain is required for histidine kinase activity of the yeast osmosensor, SLN1. Molecular Microbiology 43(2): 459-473.
4. Ault, A.D., Fassler, J.S., Deschenes, R.J. (2002) Altered Phosphotransfer in an Activated Mutant of the Yeast Two-Component Osmosensor, Sln1. Eukaryotic Cell 1(2): 174-180
5. Zhao, L., Lobo, S., Dong, X., Ault, A.D., and R.J. Deschenes. (2002) Erf4p and Erf2p form an endoplasmic reticulum-associated complex involved in the plasma membrane localization of yeast Ras proteins. J Biol Chem. 277: 49352-49359.
6. Ault, A.D., Broach, J.R. (In press) Creation of GPCR-based Chemical Sensors Using Directed Evolution in Yeast. Protein Engineering, Design and Selection.  
This manuscript will be accessible online: [peds.oxfordjournals.org](http://peds.oxfordjournals.org)

**VII. Seminars**

- 'Biochemical Analysis of the Sln1 Phosphorelay pathway.' University of Iowa Biochemistry Department 5<sup>th</sup> Semester Seminar, April, 1998.
- 'Molecular Mechanisms of Stress Signaling in the Yeast *S. Cerevisiae*.' University of Iowa Center on Aging, October, 2000.
- 'Biochemical mechanisms of signaling by Sln1, a yeast histidine kinase.' Princeton Area Yeast Meeting, June, 2001.
- 'Design and Synthesis of Yeast Chemosensors.' Princeton Area Yeast Meeting, March, 2002.
- 'Directed Evolution and Chemical Sensing.' Princeton Postdoctoral Researcher's Association, November, 2002.
- 'Directed Evolution of Yeast-Based Chemical Sensors.' Sandia National Labs, December, 2003
- 'Directed Evolution of Yeast-Based Chemical Sensors.' Princeton Area Yeast Meeting, February, 2004.
- 'Design of yeast-based chemosensory arrays.' Princeton University Department of Molecular Biology Retreat, October, 2004.
- 'Design of yeast-based chemosensory arrays.' Evolution@Princeton, December, 2004.
- 'Creation of Chemical Sensors Using GPCRs Expressed in Yeast.' Princeton Area Yeast Meeting, February, 2005.

**VIII. Abstracts & Symposia, unpublished**

Poster, July, 1998. Yeast genetics and Molecular Biology Meeting, College Park, MD:  
Deschenes, R.J., Li, S. Ault, A.D., Malone, C., Dean, S, Fassler, J.S. A Sln1-Ypd1-Skn7 two-component signal transduction pathway in *S. cerevisiae*.

Poster, 1998 Iowa/Iowa State genetics retreat, Grinnell, IA:  
Ault, A.D. Li, S., Malone, C., Deschenes, R.J., Fassler, J.S. Osmotic stress signaling via Sln1, a yeast 'two component' sensor/kinase.

Poster, January, 2000. Exploiting Yeast Molecular Biology for Therapeutics, Miami, FL:  
Ault, A.D. Lin, H., Fassler, J.S., Deschenes, R.J. Utilization of a Yeast Histidine Kinase Signaling pathway for Target Evaluation of Novel Antimicrobials.

Poster, October 2001. Princeton University Department of Molecular Biology Retreat. Ault, A.D., Xu, E., Broach, J.R., Teaching Yeast to Smell.

Poster, October 2002. Princeton University Department of Molecular Biology Retreat. Ault, A.D., Broach, J.R., Functional 'Tuning' of a Genetic Switch.

Poster, October 2003. Princeton University Department of Molecular Biology Retreat. Ault, A.D., Broach, J.R., GPCR Biosensors in Yeast .

Poster, June, 2004. Synthetic Biology 1.0. Ault, A.D., Ramanathan, S., Broach, J.R. GPCR Chemosensors in Yeast.

Poster, April, 2005. World Congress in Industrial Biotechnology and Bioprocessing. Ault, A.D., Broach, J.R. Creation of GPCR-based chemosensors by Directed Evolution in Yeast.

**References:**

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