

College of Science
UtahStateUniversity

Faculty and Staff Activities and Achievements

May 2012

Contracts and Grants

Biology

Claudia Nischwitz

“Identification of Alternate Inoculum Sources for *Erwinia amylovora* in Apple and Pear Orchards in Utah”

USDA Specialty Crop Block Grant

15 April 2012 - 30 March 2013

\$9,595

Claudia Nischwitz

“Identification of Powdery Mildew Species and Inoculums Sources for Improved Timing and Reduction of Fungicide Applications in Utah Fruit Tree Orchards”

USDA Specialty Crop Block Grant

1 May 2012 - 30 April 2013

\$9,758

Claudia Nischwitz and Diane Alston

“Identification of Onion Pathogens, Alternate Hosts and Vectors in Utah”

USDA Specialty Crop Block Grant

15 April 2012 - 30 March 2013

\$10,553

Diane Alston

“A New Cherry Insect Pest, the Spotted Wing *Drosophila*”

Utah Department of Agriculture and Food (USDA Specialty Crop Block Grant Program)

1 January 2012 - 31 December 2013

\$10,755

Mathematics & Statistics

Nathan Geer

National Science Foundation

“Moab Topology Conference 2012

1 April 2012 - 31 March 2013

\$25,000

Presentations

undergraduate* graduate**

Biology

The following oral presentations were given at the 86th Orchard Pest and Disease Management Conference, Portland, OR, 11-13 January 2012:

Diane Alston, Michael Pace, James Barbour, Glenn Thayer, and John Borden. “*Prionus californicus* Mating Disruption and Trap Capture in Sweet Cherry”

Diane Alston and Thor Lindstrom. “Rosy Apple Aphid Control with Flupyradifurone”

Mathematics & Statistics

S.C. Isom, John R. Stevens, R. Li, W. Spollen and R.S. Prather presented “Transcriptional profiling by high-throughput sequencing of porcine pre- and peri-implantation embryos.” Poster presented at the Annual Conference of the International Embryo Transfer Society, Phoenix, Arizona, January 2012.

S.C. Isom, John R. Stevens, R. Li, W. Spollen and R.S. Prather presented a poster titled “Transcriptional Profiling By High-Throughput Sequencing of Porcine Pre- and Peri-Implantation Embryos” at the Annual Conference of the International Embryo Transfer Society, Phoenix, Arizona, 7-10 January 2012.

Publications

undergraduate* graduate**

Biology

Theresa L. Pitts-Singer, James S. Buckner, Thomas Freeman, and Christelle Guédot**. 2012. “Structural Examination of the Dufour’s Gland of the Cavity-nesting Bees *Osmia lignaria* Say and *Megachile rotundata* (Fabricius) (Hymenoptera: Megachilidae).” *Annals of the Entomological Society of America* 105: 103-110.

Chemistry & Biochemistry

Alexander S. Ivanov**, Konstantin V. Bozhenko, and Alexander I. Boldyrev. 2012. Peculiar Transformations in the $C_xH_xP_{4-x}$ ($x = 0-4$) Series. *Journal of Chemical Theory and Computations* 8: 135-1408.

Jared K. Olson and Alexander I. Boldyrev. 2012. Electronic Transmutation: Boron Acquiring an Extra Electron Becomes “Carbon.” *Chemical Physics Letters* 523: 83-86.

Mathematics & Statistics

S.C. Isom, Stevens J.R., R. Li, W. Spollen, and R.S. Prather. 2012. Transcriptional profiling by high-throughput sequencing of porcine pre- and peri-implantation embryos. *Reproduction, Fertility and Development* 24(1):184.

David E. Brown, L. Langley. 2012. Forbidden Subgraph Characterization of Bipartite Unit Probe Interval Graphs. *Australasian J. Combinatorics*, 52 19-31.