

Grants: March 2007

1. **Clark-Friedman, Christina.** National Institutes of Health. \$52,943. Use of fine-scale mapping to understand the genetic basis of variation in life span in *Drosophila melanogaster*. (Biology)
2. **Covington, William Wallace.** United States Forest Service. \$350,000. Develop and implement comprehensive, restoration-based forest treatments. (Forestry)
3. **Hoisch, Thomas D.** Science Foundation Arizona. \$109,515. Enhancing teaching effectiveness in undergraduate Geology with pen-tablet computers and mobile wireless networks. (Geology)
4. **Koerner, David.** National Aeronautics and Space Administration. \$69,029. Survey of substellar companions to nearby stars. (Physics and Astronomy)
5. **Solop, Fred.** Williams Health Care Center. \$14,871. Perceptions and attitudes of 300 residents regarding the Williams Health Care Center. (Social Research Laboratory)
6. **Wiebke, Kathleen.** Governor's Office. \$208,776. Establishment of a collaborative accountability system that will result in continuous monitoring. (Arizona K-12 Center)

Selected Books/Creative Activity/Recognition & Awards: March 2007

1. **Balda, Russ P.** (2007). Corvids in combat: With a weapon? *The Wilson Journal of Ornithology*, 119(1), pp. 100-102. (Biology)
2. **Barlow, Nadine.** (March, 2007). *Martian central pit craters: Characteristics, distribution, and comparison with central pit craters on Ganymede*. 38th Lunar and Planetary Science Conference, Houston, Texas. (Physics and Astronomy)
3. Carney, K. M., **Hungate, Bruce A.**, Drake, B.G., & Megonigal, J. P. (2007). Altered soil microbial community at elevated CO₂ leads to loss of soil carbon. *Proceedings of the National Academy of Science*, 104, pp. 4990-4995. (Biology)
4. **Cronin, Amanda E. & Ostergren, David M.** (2007). Tribal watershed management: Culture, science, capacity, and collaboration. *American Indian Quarterly*, Vol. 31(1):87-109. (Forestry)
5. **Gray-Rosendale, Laura.** (2007). *Pop perspectives*. Boston: McGraw-Hill. (English)
6. **Gruber, Sibylle.** (2007). *Literacies, experiences, and technologies: Reflective practices of an alien researcher*. Cresskill, NJ: Hampton Press. (English)
7. Mushita, Andrew. & **Thompson, Carol B.** (2007). *Biopiracy of biodiversity: Global exchange as enclosure*. Trenton, NJ: Africa World Press. (Political Science)
8. **Odgers, Pattie.** (2008, available now). *The world of customer service* (2nd ed.). Belmont, CA: Thomson South-Western. (Education)
9. Nyinguro, Philip O. & **Otenyo, Eric E.** (2007). Social movements and democratic transitions in Kenya. *Journal of Asian and African Studies*, 42 (1), pp. 5-24. (Political Science)

Arizona K-12 Center

The Arizona K-12 Center is managed and run by Northern Arizona University's College of Education. It was created in 1999 by the Governor's Office. The mission of the Center is to improve teaching and learning in Arizona's schools through high quality professional development and teacher leadership. The Center collaborates with Arizona State University, the University of Arizona, and other state-wide education organizations to provide training in state-of-the-art learning techniques and innovative teaching practices. Its goals are to build the capacities of teachers and schools, promote action research, and coordinate statewide teacher development initiatives. To find out more, go to <http://www.azk12.org>.

Research Profiles

Nadine G. Barlow received her PhD in 1987 from the University of Arizona. She was Assistant Professor in NAU's Physics and Astronomy Department between 2002 and 2006, and has been Associate Professor since 2006. Before that, she conducted research at NASA's Johnson Space Center and the Lunar and Planetary Institute in Houston, Texas. She also began the Astronomy program at the University of Central Florida in Orlando and served as the first director of the UCF Robinson Observatory. She is an internationally recognized expert on Mars and Martian impact craters.

Dr. Barlow's many accomplishments include:

- \$350,000 in grants and awards from NASA since at NAU
- Over 25 journal articles and book chapters and 3 books, including *Mars: An Introduction to its Atmosphere, Surface, and Interior* due out this Fall (Cambridge University Press)
- 8 awards and honors, including the naming of Asteroid 15466 Barlow
- Recommendations to NASA regarding target landing sites for robotic Mars landers and rovers
- More than 50 conference presentations and 22 invited talks at colleges and universities

Additionally, Dr. Barlow is a frequent spokesperson for current events relating to space exploration and Martian discovery. She can often be heard in radio interviews or quoted in newspaper articles. Many of her professional organization activities and recognitions have centered on promoting women scholars in the sciences.

Thomas D. Hoisch received his PhD in 1985 from the University of Southern California and began his career at NAU in 1987. He was Assistant Professor from 1987 to 1992, Associate Professor from 1992 to 1998, Professor since 1998, and served as Chair of the Geology Department from 2000 to 2003. A leading expert in mineralogy and petrology, Dr. Hoisch has recently been granted a National Science Foundation grant to conduct studies of metamorphic rocks from an ancient mountain belt that stretches from California to Idaho. He has also recently received a Competitive Advantage Award from Science Foundation Arizona to explore the teaching effectiveness of pen-tablet computers and mobile wireless networks in undergraduate Geology courses with application in both traditional classroom settings and remote field locations.

Among Dr. Hoisch's many accomplishments are:

- Nearly 1 million in grants, primarily from US Geological Survey and National Science Foundation
- Over 30 published research articles and technical reports in major geological journals and field guides
- Served as Associate Editor of *The American Mineralogist* and *Geological Society of America Bulletin*
- Authored more than 50 abstracts presented at national and international conferences
- Chaired or served on 38 MS or PhD thesis committees

Dr. Hoisch's continuous work as a research geologist and his constant pursuit of improving teaching in the geosciences by integrating technology make him an exemplary faculty member. The work of Dr. Hoisch and his collaborators on technological teaching enhancements could transform the teaching of Geology at NAU and other universities worldwide.