The relationship between research and graduate education is considered of tremendous value to both faculty and students. Why are the two so mutually beneficial?

By Suzan DiBella
Photography by Geri Kodey

First, there was the freezing rain, followed by three weeks of extreme heat with intermittent high winds. Then there were encounters with an assortment of bugs, as well as myriad challenges presented by confusing maps and unreliable Jeep trails. There were sheer cliffs to scale by day and just the eerie silence of the desert at night.

And, of course, there were no showers, cell service, or bathrooms.

These were just a few of the tribulations geoscience doctoral student Robyn Howley braved last summer while camping in the high desert of Western Utah to conduct her dissertation field work.

Despite the discomforts and the small torments of the month-long expedition, she’s the first to say that she’d do it again in a heartbeat—all in the name of research.

“Every morning, my research assistant and I would get up, put on all our gear, and go out to the rock formations,” she says. “We would spend the days identifying rock layers, taking measurements, and collecting samples. I loved it.”

Howley’s field work was part of her dissertation research, which was designed to determine how the changing levels of ancient seas in the area contributed to rock formations. The evidence of sea life in these rock outcroppings—either in the form of fossils or traces of tiny burrows made by long-dead, minute creatures—provided her with mountains of information that she is still analyzing.

“Conducting research has been such a wonderful experience,” says Howley, who is now writing her dissertation based, in part, on her month in the desert. “The skills I acquired and the hands-on learning I gained in the field combined perfectly with my classroom preparation. Together, they enabled me to think critically and create new knowledge, which is really the point of conducting research.”

While Howley’s research experience may be a bit more adventure-filled than that of many graduate students, it is...
Enhancing Research

Typical in many ways, according to Ron Smith, UNLV’s vice president for research and dean of the Graduate College. He notes that graduate school offers students the opportunity to become intensely focused on a given area of study and to begin the path of becoming a scholar in that field.

“When students enter graduate school, they are really moving into a more sophisticated realm of learning, where they are not only examining other scholars’ work but also exploring new ideas of their own,” Smith says. “They base these novel ideas on earlier research and scholarly thought but then expand upon them with studies and projects that they themselves conduct. The goal, of course, is to create new knowledge, building on the foundation of those scholars who have gone before.”

This academic experience is designed to generate not only innovative ideas, but also to produce new scholars and professionals who have a fresh perspective on their disciplines, says Kate Hausbeck, senior associate dean of the UNLV Graduate College.

“These students are tomorrow’s leaders who will enhance the quality of life in our community,” Hausbeck says. “These are the people who will teach our children, help us stay healthy, solve our environmental problems, address our social issues, and run our government.”

And research, both Smith and Hausbeck agree, is the integral activity that drives the advanced education of graduate students and contributes in innumerable ways to the academic success and prestige of the institution.

Working with Faculty

The pairing of research and graduate study is a valued tradition in academia, according to Hausbeck, an associate professor of sociology who has mentored several graduate students.

“It’s a mutually beneficial arrangement,” she says. “When faculty conduct their research, they receive critical assistance from graduate students, who are often conducted in teams, and graduate students are vital members of the research teams. This occurs at all major research institutions the world over, and as research grows at UNLV, this activity will continue to be supported and enhanced.”

She adds that graduates students, in turn, gain experience discovering how to apply classroom learning to real-world research scenarios.

“In the Graduate College, we believe that faculty mentorship is critically important to student success,” Hausbeck says. “With the constructive guidance of faculty, graduate students design their research projects, collect data, and disseminate their findings at conferences and in scholarly publications. This is great for graduate student scholars and it benefits the university and community at the same time.”

This emphasis on mentorship is a source of pride with UNLV Faculty, who consider the opportunity for student involvement in research an excellent recruitment tool to attract the best and brightest to the more than 75 master’s degree and 36 doctoral/professional programs offered at UNLV, Hausbeck notes.

Graduate Assistantships and Fellowships

Faculty are also able to offer graduate student positions as graduate assistants, enabling them to earn stipends working in campus laboratories and classrooms to provide research and/or teaching support to faculty.

“Graduate assistantships play a critical role in the university setting,” Hausbeck says. “Graduate assistants provide indispensable support to UNLV faculty, aiding with research and augmenting classroom learning. Additionally, the GAs themselves benefit from the experience. Serving in this capacity provides them with valuable professional development, enhances their learning, and helps defray the expense of graduate education.”

Because graduate students value this experience, Hausbeck says, UNLV’s ability to offer competitive compensation packages to graduate assistants is important to the recruitment of the most talented and qualified prospective graduate students. Graduate fellowships are likewise critical to the advancement of graduate education, Hausbeck says. “They provide the support students need to finalize their research and complete their doctoral dissertations.” (See related story “What Are Graduate Fellowships?”)

Assistantships and fellowships both support graduate education and advance the university’s research agenda; this, in turn, enhances institutional reputation in the higher education community and beyond, says Smith.

“In order to continue building UNLV’s reputation as a nationally recognized research university, support of graduate education is vital,” Smith says. “Through support of our strong, highly regarded graduate programs, we can have a significant impact on the success of research at our institution.”

Supporting Graduate Student Research

To Howley, one of two recipients of the 2007-08 UNLV President’s Graduate Research Fellowship, the financial support she has received through the fellowship has had a tremendous impact on her ability to finalize her dissertation.

“It’s the dream of all researchers to be able to focus entirely on their research,” says Howley, whose dissertation will help exists learn more about patterns of hydrocarbon deposits, how to locate them, and what techniques are best used to do so.

“Like most graduate students, for the past three years I’ve had to balance research, classes, teaching, and service activities. I was so pleased to receive support this year—it has allowed me to spend more time synthesizing data I collected in the field, critically examining results, and formulating new ideas and hypotheses. I’ve been able to work through the most difficult portions of my Ph.D. dissertation.”

Howley, who expects to graduate in December 2008, plans to coauthor a scholarly publication with her dissertation adviser, UNLV geoscience professor Gaqing Jiang, on her research. After all, she notes, one of the central goals of research is to disseminate one’s findings, which builds on the collective body of knowledge in a given field of study.

“As a graduate student, I feel extremely fortunate to have the opportunity to share my research with the top scientists in my discipline,” Howley says. “It’s very rewarding to know I can make a contribution to my field of study.”

What Are Graduate Fellowships?

Graduate fellowships will play an increasingly important role at UNLV as research and graduate education continue to progress, according to Kate Hausbeck, senior associate dean of the Graduate College.

“Writing a doctoral dissertation is a full-time endeavor,” Hausbeck says. “The President’s Graduate Research Fellowship Program provides advanced doctoral students the financial assistance they need to complete their research and write their dissertations—pivotal requirements for earning the doctoral degree. This kind of support enables doctoral students to focus on their degrees rather than having their progress slowed or delayed due to financial pressures to pursue outside employment.”

The President’s Graduate Research Fellowship will allow students such as this year’s recipients, Jonathan Foster and Robyn Howley, to focus solely on their research and professional development. Hausbeck notes.

Foster, a doctoral student in the history department, is conducting a comparative examination of stigmatized cities from the late nineteenth through the twentieth century. His dissertation explores anti-urban bias and regional stereotypical tropes throughout U.S. history.

Howley, a doctoral student in geoscience, is researching the relationships between rock formations and global sea-level changes with the goal of using this information to help identify hydrocarbon reservoirs.

“Given the rigor of doctoral-level work, advanced doctoral students have little time to make ends meet as they finalize their research and write their dissertations,” Hausbeck says. “These fellowships allow them to focus on the ‘finish line’ of doctoral work—the dissertation.”

The President’s Graduate Research Fellowships support doctoral students much in the way scholarships benefit undergraduates. Up to four awards are given annually, each offering a fellowship package including a stipend, tuition (up to 12 credits), fees, and health benefits totaling $24,000. Funding is currently provided by the UNLV Foundation and the Franklin-Knoebel Living Trust.

“These fellowships benefit not only the graduate students who receive them,” she adds. “They also enable our doctoral students to conduct valuable research that can impact the quality of life in the community and advance the reputation of the university. They are truly a wonderful way of supporting both the students and the research endeavor at the same time.”

How Can You Help?

If you are interested in helping a graduate student by supporting research fellowships, please call UNLV Foundation Director of Scholarship & Tribute Giving Deborah Young at (702) 895-2818.