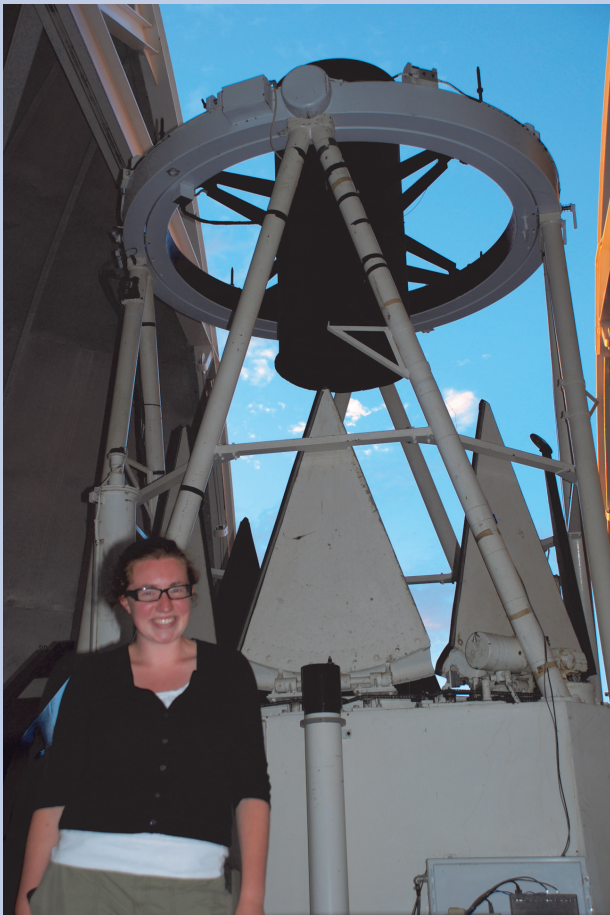


My Second Summer at Lowell Observatory

By Kathryn Neugent, Wellesley College

I first arrived at Lowell Observatory two winters ago as astronomer Henry Roe's Research Experiences for Undergraduates (REU) Field Camp student. The REU program is sponsored by the National Science Foundation and is based at Northern Arizona University in Flagstaff. After a wonderful and memorable month, it seemed only natural to find an acceptable reason to return. So luckily, Dr. Phil Massey chose me as his student this past summer. The research forced me to journey away from my planetary roots and compare two spectral modeling programs and their resulting fits using Phil's plethora of O-Star data. While the results were very interesting, they represent only a small fraction of what I took away from my summer experience.



Kathryn Neugent, summer 2009 Research Experiences for Undergraduates student, standing in front of the 2.1-m telescope at Kitt Peak before a night of observing.

More importantly, I learned valuable life lessons while working at Lowell. For example, when using FORTRAN 77 it is best to keep a line of code under 72 characters long. Or, if food (or really, anything) appears on the Hendrick's Center for Planetary Studies table, it will be long gone before you do a double take. Additionally, when prompted to type <CR>, one probably shouldn't type the actual letter C and then R.

While soaking in this important information, I also engaged in Lowell's fabulous culture through volleyball games, science teas, and tours of the Anderson Mesa site.

As a Wellesley College student I've spent almost every clear night observing asteroid light curves against the brightly lit skies of Boston. So, when Phil asked me if I wanted to accompany him on an observing run down to Kitt Peak I was ecstatic. I loved learning about spectroscopy by changing the 2.1-meter's grating, looking at Saturn through the 91-inch and taking stunning astrophotography images against a completely dark sky. It didn't matter to me (though, I'm sure it mattered to Phil) that we failed to acquire any useful data that night thanks to a light haze.

I was lucky enough to repeat this experience a few weeks ago with Phil at the MMT and at Kitt Peak (except this time we actually collected something USEFUL). Ideally, I'll be looking at some of this data when I, once again, return to Lowell this spring as Phil's research assistant. After so many amazing experiences at Lowell Observatory, I just can't help coming back for another round.

Discovery Channel Telescope Exhibit



The Discovery Channel Telescope has significantly altered nearly every aspect of Observatory operations, including our interaction with the public. We are in the process of refocusing programming and exhibits to address DCT and research in general. One component of this change is a new DCT exhibit in the Steele Visitor Center lobby, made possible by the GeoFund and the Flagstaff Community Foundation. Conceptualized and designed by Michael Chabin, this display compares the diameter of the DCT primary mirror to Galileo's first telescope, the Clark 24-inch refractor, and the Perkins 72-inch. This stunning visual demonstration is a first step towards visitors' understanding of the scale and breadth of DCT. Display cases housing DCT components, informational posters, and DCT content in the hourly daytime tours result in a better comprehension by visitors of the DCT and what it will allow our astronomers to do.