



Undergraduate Research and Scholarly Activity

MURRAY STATE UNIVERSITY

For Immediate Release

Contact: Jody Cofer

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Newton Receives Undergraduate Research Grant

Nicole Newton was recently awarded a \$500 grant from the Office of Undergraduate Research and Scholarly Activity (URSA) for her proposal entitled "Solving the Charioteer's Mystery."

Newton, a junior physics major from Calvert City, Ky., will be studying epsilon Aurigae, a star in the constellation Aurigae (more commonly known as the charioteer). Epsilon Aurigae is a variable star, or one that changes brightness over time. Astronomers have yet to definitively determine the reason behind epsilon Aurigae's extended pattern of fading and returning to its usual brightness in about 700 days once every 27.1 years. Newton will be collecting and analyzing data on epsilon Aurigae's brightness through the use of a low light video camera.

Dr. Arthur K. Pallone, Assistant Professor of Physics and Engineering, will serve as faculty mentor on the project. "Ms. Newton demonstrates all the traits needed to succeed at this project and in her further pursuits of astronomy in graduate school and beyond. She is enthusiastic about astronomy, dedicated to the research, and understands the science and the scientific process," Pallone stated.

Newton will submit her finding for inclusion in both *Citizen Sky* and the American Association of Variable Star Observers databases. She will also submit her work to other peer-reviewed journals, in addition to presenting her progress to date from this ongoing project during *Scholars Week*, which will take place on Murray State's main campus April 19-23, 2010.

More information about the URSA program can be found online at <http://campus.murraystate.edu/services/ursa/> or by calling (270) 809-3192.