

Fowler Joins USTAR Researchers on Intuitive Buildings Study

When researchers at Utah State University were looking for an expert on circadian rhythms for a project designed to save energy and improve lighting in buildings, Lauren Fowler, a psychology professor at Weber State University, was a perfect fit.

Every summer since 2005, Fowler has organized a 10-week research program for undergraduate students and faculty mentors through the National Science Foundation to study the impact of fatigue on shift-work personnel and ways to improve performance, including fatigue countermeasures through lighting.

“In a nutshell, this USTAR project is designed to develop technologies and create jobs related to intuitive lighting,” Fowler said. “So we are working to decrease energy expenditure and increase effectiveness of building lighting systems, while at the same time enhancing human performance with those lighting systems — or at least minimizing lighting-induced fatigue.”

The research team received \$5 million over six years from the Utah Science, Technology and Research initiative (USTAR) to study what they are calling “intuitive buildings.” They hope to develop “a system of intelligent, self-adapting lamps capable of meeting variable lighting needs without loss of productivity and with a desirable comfort level,” the grant proposal states.

USTAR is a state initiative designed to facilitate the commercialization of new technologies developed on university campuses. USTAR consists of research teams from the University of Utah and Utah State University, and four outreach centers located throughout the state, including one at WSU.

The intuitive building project is the 22nd major initiative funded through USTAR’s research teams since its inception in March 2006, and Fowler is the first WSU faculty member to be part of one of those teams.

“Weber State University is pleased to participate in this important research initiative,” said Michael Vaughan, WSU provost. “The selection of Dr. Fowler for this project illustrates the quality of the research being conducted by our faculty.”