

## ***WSU Faculty Groups Give Undergraduate Scholar Awards***

Six Washington State University students have won Undergraduate Scholar Awards for 2003 from the Faculty Association for Scholarship and Research (FASR) and the WSU chapter of Sigma Xi. This achievement awards program recognizes outstanding original research and creative scholarship by undergraduate students at WSU. Students must be nominated by a faculty advisor with whom the project was undertaken, and must submit a research paper, project report, or portfolio of creative work for competitive evaluation.

Senior Lisa Cannon, the winner of Sigma Xi's first place award of \$400, has worked in the laboratory of Zhaohui Sunny Zhou, assistant professor of chemistry, since February 2001. Her work on S-adenosylmethionine, a key metabolite in many biological processes, has already resulted in a paper in the peer-reviewed journal *Analytical Biochemistry*, on which she was first author. A second project is nearing completion on LuxS, a recently discovered enzyme that plays a critical role in bacterial infection. Zhou credits her with quickly becoming one of the best researchers in his group, showing the commitment and dedication of a superb graduate student rather than an undergraduate. He said, "I anticipate her work on the LuxS project will be published in top journals, and will help us to receive grants from the National Institutes of Health or the National Science Foundation." Lisa plans to start medical school in the fall, with the goal of becoming a surgeon.

FASR's first place award, also \$400, was won by Ryan Jespersen, a junior who has been studying composition and arranging with Greg Yasinitsky, professor of music, for over three years. Yasinitsky notes "Ryan is an unusually prolific composer. He has written a significant number of pieces for a variety of ensembles – everything from music for classical duos to compositions for vocal jazz ensemble to orchestrations for jazz big band." Ryan "is already building a national reputation while attending WSU." Several of his works have already been published, and he has received a first place jazz composition award at the Lionel Hampton Jazz Festival.

Second place awards of \$200 went to J. Ross Lance, whose faculty mentor was Tom Dickinson, professor of physics, and Sonja Billes, a dual major in neuroscience and psychology, who worked in the laboratory of Bob Ritter. Dickinson said of Lance, "He has a knack for finding

### Scholar Award Descriptions

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#### 2003 Scholar Award Recipients

From left to right, front row :  
3rd place FASR, Rachel Britt;  
2nd place FASR, Sonja Billes;

1st place Sigma Xi, Lisa Cannon.

From left to right, second row:  
3rd place Sigma Xi, Pasha Petite;  
2nd place Sigma Xi, J. Ross Lance;  
1st place FASR, Ryan Jespersen.

solutions to very knotty problems. His software has worked very dependably – it would match Bill Gates, any day!” Their project involves development of web-based software for assessment of students’ problem solving in introductory physics courses. Billes studied the role of forebrain and hindbrain receptors for the hormone GLP-1 in reducing food intake during illness. Ritter commented, “Sonja is one of the very best undergraduate students with whom I have had the privilege to work. I have supported and coached her work, but it truly is the product of her independent creativity and hard work.”

Third place awards of \$100 were won by Rachel Britt, who began her research in the laboratory of the late Jeremy Evans and has continued to work with Wendy Shuttleworth, instructor in biochemistry, and Pasha Petite, who is mentored by Tom Dickinson. Rachel is focusing on characterizing EPSP synthase, an enzyme found only in plants, bacteria and fungi, and a “hot target” for both new antibiotic drugs and herbicides, including the active ingredient in Roundup®. Pasha’s project concerns mechanisms for recovery from irradiation-induced damage in calcium fluoride, a material widely used in vacuum ultraviolet optical components.

FASR, founded in 1975, is a WSU faculty group interested in promoting research and scholarship. Sigma Xi is a pure and applied science honorary with over 500 chapters worldwide. Five years ago, the two groups combined their undergraduate research awards, which previously were separate. The 2003 awards program was supported by FASR, the WSU Sigma Xi chapter, and the WSU President’s Office.