February 2003

Motion

University of Missouri-Rolla

Physics Department

A publication for alumni, friends, faculty, and staff of the MSM-UMR Physics Department

Space Age Moving Day for UMR Physics Alum Sandra Magnus

Last October, UMR Alum Sandra Hall Magnus (BS '86) became the third UMR

Kavandi as UMR

graduate to fly into space—a trip that fulfilled a longtime dream. "It's not like I saw a film or anything to make me want to become an astronaut," Magnus said in an MSM-UMR Alumnus article (Reaching for the Stars, spring 2002). "No light bulb went off. It's just something I latched on to. The whole idea of exploring and being on the edge, that whole sense of adventure, it just appealed to me." Magnus lifted off October 7 on the shuttle Atlantis, joining alumni Tom Akers and Janet



Sandra Hall Magnus

space sojourners. When Atlantis reached the International Space Station, Magnus operated the station's Canadarm2 robotic arm during a spacewalk mission to install a 45-foot long, 15ton truss. The truss forms part of the structural backbone for the station and will provide cooling and support for solar arrays. "The station arm (which transports the spacewalkers) is pretty huge and it's a pretty exciting piece of equipment to operate," Magnus told the Belleville News-Democrat last spring. Magnus was also responsible for storage and transfer activities between the shuttle and space station, delivering equipment, mail, food and clothes to the station, and bringing back things that were no longer needed. "It's kind of like moving a house or small apartment in the

space of a few days and keeping track of everything." One of Magnus' mentors at NASA is female astronaut, **Shannon Lucid**, who lived for 188 days in 1996 on the space station Mir. The two shared an office at the Johnson Space Center. "She comes from a generation that had to knock down a lot of walls," Magnus said. "She made it easier for my generation. Hopefully, I'll be able to make it easier for the next." Adapted from a story in the MSM-UMR Alumnus, Fall 2002, reprinted with permission. See "Memo from the Chair" for comments regarding the recent Columbia tragedy.

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Phonathon 2003

More than 160 physics alumni pledged \$14.523 in donations to the MSM-UMR Physics Department during last year's fund-raising Phonathon with an average gift of \$88. The department greatly appreciates your generous donations, which goes towards scholarships and helps to support student activities like the Society of Physics Students. "Your support makes a tremendous difference to our department, particularly with the recent economic downturn and budgets tightening across the board," says Dr. Paul Parris, Chair of Physics. "In times like these, a committed alumni base really makes a difference to a department dedicated to providing a high quality education to tomorrow's scientific leaders." Your continued support helps us to attract great students and provide them with the resources they need to succeed.

This year, we will begin calling alumni on February 25. When the phone rings, please take a moment to share some of your Rolla experiences with a current UMR student, and pledge whatever you can. Taxpayer support accounts for only 40 percent of the university's revenue, so your contribution is an important part of the department's total income. Any amount you give is appreciated. It helps make UMR a leader in alumni giving among public universities, increases the value of your degree, and helps the Physics department fulfill its educational mission.

Department of Physics

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Matter

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at physics@umr.edu. Thanks for keeping in touch. It's always good to hear from old friends.

Name: Phone: E-mail:

Mailing Address: Job Title (if appropriate):

So What's New with You?

We hope you enjoyed this year's edition of **Matter 'n Motion**. We enjoy keeping you informed about what is going on at UMR,

but we'd also like to know what's new with you, both personally and professionally. Any information you send will be circulated

Please print or type your information, and include your mailing address so that we can update our records. Mail to: UMR Physics Department, University of Missouri-Rolla, 65409-0640. Or, if you would prefer, you can e-mail us your comments

in the department and, if appropriate, inserted in the next physics newsletter unless you request otherwise.

Business Address: News or Comments: