FERMINEWS

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COOPERATIVE EDUCATION FOR STUDENTS: A HANDSHAKE WITH THE FUTURE AT FERMILAB

Julie Prince and Tony Schooler are optimistic about their own futures as electrical engineers and optimistic that tomorrow's science in this nation will hold for them many challenges and opportunities.

The two college students have been at Fermilab since January participating in the Laboratory's cooperative education program. Through this program, students attending participating schools alternate periods of work and education. The objective, of course, is to better prepare them for their careers. Jim Lasenby, personnel administrator at Fermilab, is coordinator of the cooperative education program here.

Julie and Tony have nearly finished their sophomore year of study: she at the University of Illinois-Champaign, and he at the Illinois Institute of Technology, Chicago. Both are studying to be electrical engineers. They will finish their first period of work here in early June, then will continue their studies at their respective schools. The two engineering students plan to return here in the fall.

Julie has been with the Particle Instrumentation Group in Research Services, working under the direction of Kathy Turner. They have been expanding the memory into the M7 computer--the famous and brightly decorated Magnificent Multi-Muon Mass and Momentum Monitoring Machine. Tony is working under the supervision of Bob Ducar in the Accelerator Controls Group, where he is helping build and test a variety of electronic equipment. Most of his projects are related to the new control facilities for the Tevatron.

Both young people said their experience at Fermilab has been worthwhile and valuable. "I'm getting a lot of practical experience, such as soldering and wiring," said Tony. "I'm also building up my background and learning about things that will help me when I return to school."

Julie said her experience here is important to her. "Ditto what Tony said, and I'm able to see exactly what I'll be doing after I graduate from school and get a job. Not many people who go to school and get their degrees know what they'll be doing when they leave school. I'm constantly learning things and picking up a basic

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Julie Prince (Left) and Kathy Turner work on the M-7 trigger processor.

Tony Schooler (Right) and Bob Ducar with the link driver.

COOPERATIVE EDUCATION,
(Continued from page 1)

vocabulary and concepts I haven't learned in school."

They both praised their co-workers' patience with them and their eagerness to help the two students learn. "This place has been pretty good to me," said Tony. I'd like to thank everybody for giving me a chance here." Julie said, "And I'd like to thank the people in our group for being patient and for sharing their knowledge with me."

After Julie graduates, she plans to work as an electrical engineer and obtain her master's degree by attending school in the evenings. Tony, on the other hand, plans to remain at IIT, studying for his master's degree in electrical engineering.

Another similarity shared by the students is that they have always been interested in science. Tony's dad, Russell Schooler, is a structural engineer, and this had, Tony admits, some influence in his leaning toward engineering. But he wasn't quite sure what field would interest him most. The co-op program helped him make up his mind. "I think I'll stick with electrical engineering," he said. He had chosen IIT originally because it is widely recognized for its excellent electrical engineering curriculum.

Julie chose electrical engineering because "I like it - it's such a diverse field. There is so much you can do with an EE education."

Overall, both students are optimistic about the future of science in this country, although Tony is more reserved and notes that science's growth depends on how much money the government and the people want to spend on it. This could change at any time, he said. But he is impressed with the willingness of the people to spend the amount of money they do on this Laboratory and its amazing technology.

Julie said she is "really optimistic" about the strength of science and technology in the coming years. She feels the present emphasis on advanced technology will continue into the future, both in industry and in government.

(An article on page 1 of the Jan. 8 issue of FERMINEWS provides additional background on this promising program.)

***1**

Alexander Marshack

MARSHACK TO SPEAK HERE

by Ruth Ganchiff
Cultural Editor

For some surprising insights into the question of how advanced we are today compared to the primitive people who lived during the Ice Age, plan to attend the next Science and Human Values Lecture on April 24.

Author Alexander Marshack--"The Roots of Civilization"-- will speak at 8 p.m. in Wilson Hall auditorium. His lecture, "From the Space Age to the Ice Age," is free and open to the public. But because of limited seating, admission is by ticket only. They may be obtained at the ticket sales desk in the atrium, Ext. 3353.

Marshack is a research associate of the Peabody Museum of Archeology and Ethnology at Harvard University. He also is curator of the Ice Age exhibit at the American Museum of Natural History in New York. In 1973, he was honored by the Rochester Museum with its annual citation for distinguished contributions to archeology.

In his illustrated lecture here he will present a display of Ice Age art that extends across Europe and into Russia and Siberia. Included will be some magnificent cave paintings of animals at Lascaux and Altamira, lifelike portraits of Ice Age men and women, and even percussion and wind instruments from that period of time. Clearly this art was neither an isolated phenomenon nor were the renderings of those people random or primitive.

Since 1963, Marshack has been changin the way both scientists and laymen view early man. In "Civilization," he challenges our understanding of the origins of man's thought and his use of language and symbols.

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CLIMBING STAIRS GOOD FOR HEALTH

Go ahead, climb those stairs, it's good for you.

At least that's what Dr. Kelly S. Brownell, a psychologist at the University of Pennsylvania School of Medicine, says.

This Philadelphia researcher claims that it's the best exercise of all, according to an article in the Chicago Tribune. Brownell claims that climbing stairs is the best of exercises in terms of burning up calories and strengthening the heart, and that includes other activities such as tennis, jogging, cycling, racquetball.

So help the Laboratory conserve energy by climbing those stairs on each side of Wilson Hall instead of taking the elevators, said John Paulk, head of Site Services, and at the same time reap the free bonus of better health. But back to Brownell. Walking up stairs burns more energy per minute of activity than almost anything else, except for such strenuous pursuits as dragging logs and sprinting, he said.

Climbing stairs burns up 250 percent more calories than swimming for the same amount of time, 23 percent more than running, 150 percent more than tennis, 550 percent more than dusting around the house, 150 percent more than bowling, 63 percent more than cycling, 400 percent more than walking (at two miles an hour) and 94 percent more than racquetball, according to Brownell.

The article appeared in the Jan. 11 1981, issue, and was written by Ronald Kotulak, the Tribune's science editor.

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EMPLOYEES HELP WITH TOURS

A number of Fermilab employees helped the Public Information Office during March with its tours. During that month, 25 tours were conducted with more than 800 visitors participating in them.

Assisting were Dick Andrews, Joe Biel, George Biallas, Dave Bintinger, Chuck Brown, Jack Couch, Paul Czarapata, Mark Fischler, Peter Garbincius, Jan Gregory, Deb Grobe, Joe Hoften, Drasko Jovanovic, Cordon Kerns, JoAnne Mansell, Ralph Pasquinelli, Roger Rice, Wes Smart, Elton Smith, Tim Toohig and Ray Yarema. Jan Burdick spoke to a group outside the Laboratory.

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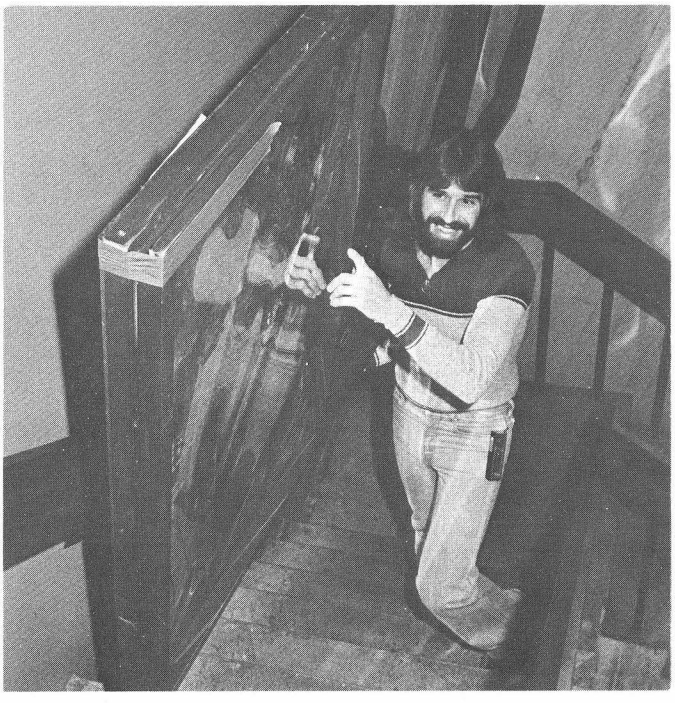

That's Don Rapovich carrying a storm window up the west stairwell in Wilson Hall. Bulky, yes, but it's not too heavy, just 50 pounds. It's plastic. But that's not the point. Don has to use the stairs because the windows are too large for the elevators. And climbing the stairs is good for his health. (See the accompanying story on this page.) In fact, Don holds (we believe) the world championship for Fermilab in stair climbing. One day between 9 a.m. and 4 p.m. he climbed from the basement to the 12th floor 17 times--that's a total of 221 stories--all while carrying those 50 lb. plastic storm windows. So he and the Carpenter's Shop, where he works, have issued a challenge to all sports enthusiasts who have an eye on world records--come and beat his. It may be a lot tougher than whipping the Main Ring marathon record. Don has been with Fermilab for six years.

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MUSIC CLUB PRESENTS SPRING DANCE.

The Fermilab Music Club will hold its eighth annual spring dance April 25. The event will run from 9 p.m. to 1 a.m. (April 26) in the Village Barn and will feature the Third Rail. Admission is by advance ticket only. They may be obtained from Johnny Geralds, Ext. 3259; Marilyn Bailey, 3282; Ron Davis, 3077; Joyce Curry, 4632; Ed Justice, 4284; Larry Tate, 3141; and Theo Gordon, 4455.

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ALL ENGINEERS MEETING

An all engineers meeting with the director has been scheduled for April 10 at 10:30 a.m. in Curia II. Leon Lederman, Fermilab director, will speak about Fermilab programs.

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NEXT MOVIE

"The Marriage of Maria Braun" will be shown by the Fermilab International Film Society April 10.

It will begin at 8 p.m. in Wilson Hall auditorium. This 1970 German film directed by Rainer Werner Fassbinder runs for 120 minutes and is in color. No rating is available. The film is a prodigious mixture of epic, comedy and soap opera that catches the flavor of postwar Germany by focusing on a woman (Hanna Schygulla) who builds a career while waiting for her long-lost soldier husband.

Tickets at $2 for adults and 50 cents for youths 12 and younger may be obtained at the door. Season passes at 33% discount are available through June 28.

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VOLLEYBALL ORGANIZATION MEETING

Fermilab Volleyball Leagues (recreation and competitive) will hold an organization meeting for employees and users April 16 at 5 p.m. in the lower level of the Village Barn. The purpose of the meeting will be to form teams. For additional information, contact Helen McCulloch, Fermilab recreation coordinator, Ext. 3126.

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GARDEN CLUB TO MEET

The Fermilab Garden Club will meet April 10 at noon in Curia II. David Eartly, Ext. 3125, will lead a discussion on rototilling alternatives.

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FOLK CLUB TO GIVE BARN DANCE

The Fermi Folk Club will hold a barn dance April 12 at 8 p.m. in the Village Barn. Masha Goodman and the Chicago Barn Dance Company will perform. Refreshments will be available. Admission is $3.

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Leslie Renfrow of Chicago, 1981 Miss Illinois-U.S.A., meets Leon Lederman, Fermilab director, prior to her tour of the Laboratory.

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REMINDERS

NALREC's popular Easter egg hunt will begin at 2 p.m. April 11 on the lawn around the Village Barn. It's for youngsters age 8 and younger. Under the watchful eye of the Easter bunny, they'll be looking for brightly colored plastic eggs filled with candy. The children should bring baskets or bags to put their eggs in.

The color film "What You Are is Where You Were When" will be shown April 15 at noon and 7:30 p.m. in Wilson Hall Auditorium. It will last 90 minutes and features Dr. Morris Massey of the University of Colorado giving an impressive talk on how different age groups have been programmed by the environment they grew up in and how these age groups interact with one another.

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AEROBICS DEMONSTRATION PLANNED

An aerobics in motion demonstration will be held April 13 at noon in Wilson Hall auditorium. The performance will be given by instructors from the Aurora YMCA. A beginners class will start on April 20 and will be held on Monday, Tuesday and Thursday from 6:30 to 7:30 p.m. for seven weeks. The cost is $35. Anyone interested can sign up the afternoon of the demonstration. For additional information, contact Helen McCulloch, Ext. 3126.

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