

## University conducts tests on effects of long term exercise

A unique study that should provide insight into the effects of long term exercise on the human body has begun on the University of Oregon campus. Subjects for the tests are 50 to 100 of the riders in the Bikecentennial 4,000 mile cross-country bike ride now leaving from Reedsport.

Tests will be conducted in Eugene then again near the end of the ride at the University of Virginia in Charlottesville.

Cliff Brubaker, a former University of Oregon professor of physical education, now at the University of Virginia, is the principal investigator for the series of tests. He says a comparison of the results from University of Oregon and University of Virginia tests may help determine the extent and type of overuse injuries that result from prolonged cycling.

Researchers already know that too much exercise can sometimes be harmful. It can cause bone and joint injuries, muscle strain and many more problems, Brubaker said.

With this study Brubaker and his associates hope to be able to learn why and how some of these things happen. They also speculate that the physical condition of some of the people will have deteriorated by the time they reach their destination of Jamestown, Virginia.

Brubaker says this is probably the first opportunity to study a group of people over a long period of time who are participating in nearly continuous exercise. It's also a different type of person than generally studied. Says Brubaker, "While many of these are people who are in top physical condition, they are not equivalent to the highly trained athletes that are generally studied."

At the University of Oregon the testing will be done in the Human Performance Laboratory (part of the College of Health, Physical Education and Recreation) and other campus locations. Brubaker says he chose the University of Oregon facility because it was near the beginning of the race and "it's the only testing lab in the state geared toward the study of stress."

Helping Brubaker to conduct the University of Oregon testing will be Eugene Evonuk, director of the performance laboratory and several University of Oregon graduate students.

The participants will be given tests for strength, work capacity, pulmonary function, cardiovascular, body composition and blood analysis. They also will be weighed and measured.

The subjects also will be tested at Sacred Heart Hospital (Eugene) where they will receive an "echo-cardiogram," which when readministered in Virginia will let the researchers know whether or not an individual's heart has grown in size or strengthened.

Brubaker says he got involved in the testing when Bob Buccini, an undergraduate at Virginia, brought the Bikecentennial to his attention. He was able to get funding for the project through the Biomedical Studies Grant program at the University of Virginia.

Conducting research along with Brubaker in Virginia will be Richard Crampton, M.D., University of Virginia professor of medicine; Daniel Kurland, M.D., assistant professor of orthopedic surgery at University of Virginia, and Karen Kuehl, a Ph.D. research fellow with the department of biochemistry at the University of Virginia.

## Work study programs aid administrative careers

Applications are being accepted through June 11, 1976, for the Portland Metropolitan Steering Committee-EOA (Incorporated) sponsored Summer Work-Study Program in Health Administration for Minority Group Students. A \$500 per month stipend is offered, subject to the availability of funds. The program is funded through the Association of University Programs in Health Administration and is scheduled for July and August.

The objective of the Program is to motivate minority group college students to identify health care administration as a realistic goal by providing them with meaningful work-study experience and assistance which will encourage said students to actively pursue and enter the field of health care administration.

Lorraine Duncan, Director of Special Programs and Coordinator of the Program said, "The work-study experience which places undergraduate minority group students in summer work-study positions in hospitals and other health care organizations is designed to provide the students with a basic understanding

and awareness of the operation and administration of the health care institution. The health care administrator who accepts the work-study preceptorship constructs a work experience with the student which is designed to expose him/her to all other areas of the facility's operation."

Ms. Duncan said, "The Program is primarily designed, but not limited to, sophomore and junior minority group students pursuing undergraduate degrees in business administration and related fields (accounting, economics, finance, etc.). The student must have an interest in health administration and a desire to learn about the field."

Ms. Duncan pointed out that local support has been encouraging. Ms. Duncan said, "The following health organizations have made a commitment to the program and will be placing students: Emanuel Hospital, Oregon State Health Department, St. Vincent Hospital the Veterans' Hospital, Providence Hospital and Kaiser Hospital."

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