

SIDELINES

Walk-ons
keep their
ace in the hole
See Page 2B

Wednesday, January 30, 1985

Emerald Sports Supplement

Are gymnastic routines safe?

Student granted Fulbright for research

Anyone who has seen women's Olympic gymnastics has to be impressed with both the young ages of the competitors and the incredible difficulty of the moves.

However, it is not without cost, says Victoria Panzer, a doctoral student in the University's Biomechanics/Sports Medicine Laboratory. Panzer recently received an International Telephone and Telegraph corporation-sponsored Fulbright Scholarship to study injuries in elite gymnasts in Australia.

Panzer, who has earned two masters'

degrees from Columbia University in educational administration and motor mechanics, has been at the University as a Graduate Teaching Fellow for the past year and a half working in the Biomechanics/Sports Medicine lab, which is known for its research in running injuries and other related sports.

Biomechanics is essentially the study of optimizing technique for preventing injuries related to physical activity, Panzer says.

It was the research of Dr. Kenneth

Singer, an orthopedic surgeon at the Eugene Orthopedic and Fracture Clinic, that interested Panzer in biomechanics.

Singer became concerned about the unusual number of elbow disorders gymnasts were treated for at the clinic and began studying the cases for an explanation. He found there was a correlation between a technique gymnasts used to execute a particular vault exercise and the elbow injuries he was treating.

A former gymnast and coach herself, Panzer feels that she was naturally led into this field as a result of her interest in both sports medicine and gymnastics.

The issue of performance and safety is becoming increasingly important in gymnastics. Panzer feels that when Olga Korbut arrived on the scene, the Soviet three-time gold medal winner in the 1972 Olympic Games presented some new issues for both gymnasts and coaches.

Korbut's introduction of difficult and potentially dangerous moves resulted in an increase in the number of risky moves required during gymnastic routines, Panzer says. She further notes that the young girl from Russia also added a new dimension to the sport — competitors were becoming increasingly younger.

Panzer says that many of the difficult moves now popular in gymnastics require great strength which puts lots of stress on the underdeveloped systems of the young gymnasts.

"The research I'll be doing is especially important because the average age of gymnasts is going down. We have the chance to protect a lot of young people," Panzer says.

"There is always going to be some inherent risk," she adds, "but the question is when does this risk become a danger?"

It is this question that Panzer hopes to help answer in Australia this September when she begins her Fulbright studies.

Her research will begin at the University of Western Australia in Perth, where she will program research data into computers. She will then go to the National Institute of Sport in Canberra to actually do the research.

Panzer will research under Dr. Bruce Mason, head of biomechanics at NIS. Mason is a former doctoral student of Dr. Barry Bates, one of the key researchers in the University's biomechanics lab.

Mason came to the Olympic Scientific Congress, hosted in Eugene last summer, and presented the preventative research being done at the institute and what they hope to accomplish in the future. Panzer attended the presentation and decided to apply for a Fulbright scholarship to study in Australia.

It would seem that some research would have been done in gymnastics prior to this, but this is not the case, Panzer says.

"There are studies done on football players and such, but not on gymnasts. There is lots of difference between an 18-year-old guy and a 13-year-old girl."

Panzer says gymnastics is becoming a strength sport, which it wasn't in the re-

cent past. Girls are working out with weights, but are they ready for it?

"Even though the muscles are strong, that doesn't mean that the underlying structures are," she adds.

Recent interest in gymnastics research has been inspired in part by a new awareness in coaches of the potential injuries involved without proper technique and training.

Dick Mulvihill, director of the Oregon Academy of Artistic Gymnastics in Eugene, says that new skills are being developed so fast that the coaches don't have a chance to research the damage these moves can do.

"You just don't know," he says. "We are working in a physiological vacuum. There is scanty information on gymnastics."

Unlike Panzer though, Mulvihill does not blame the increased risk factor on Korbut; he blames it, in part, on the 1964 Olympic Games in Tokyo.

"That was really a revolution in risk," he says. "The apparatus became better, and the sport became more popular."

Panzer has worked with the Oregon academy and is impressed with their attitude. They test each new move as it comes up, and have an orthopedic doctor look at it to evaluate its safety and potential danger.

Coaches are beginning to look more closely at their athletes and injuries, Panzer says. The investment of training a gymnast for six years makes a bit of prevention worth the cost if it keeps her healthy for competition.

"The national directors in Australia saw this," Panzer says. "They saw that you can invest lots of time in an athlete and then blow it with an injury."

Panzer says she was overwhelmed when she learned of that her Fulbright was accepted. "It was a big shock."

Bates, under whom she studies at the University, is excited for Panzer and enthused about her research.

"Getting this award is a prime example of intense initiative and motivation," he says. That's what it takes to get a

Fulbright he adds, along with a little bit of luck.

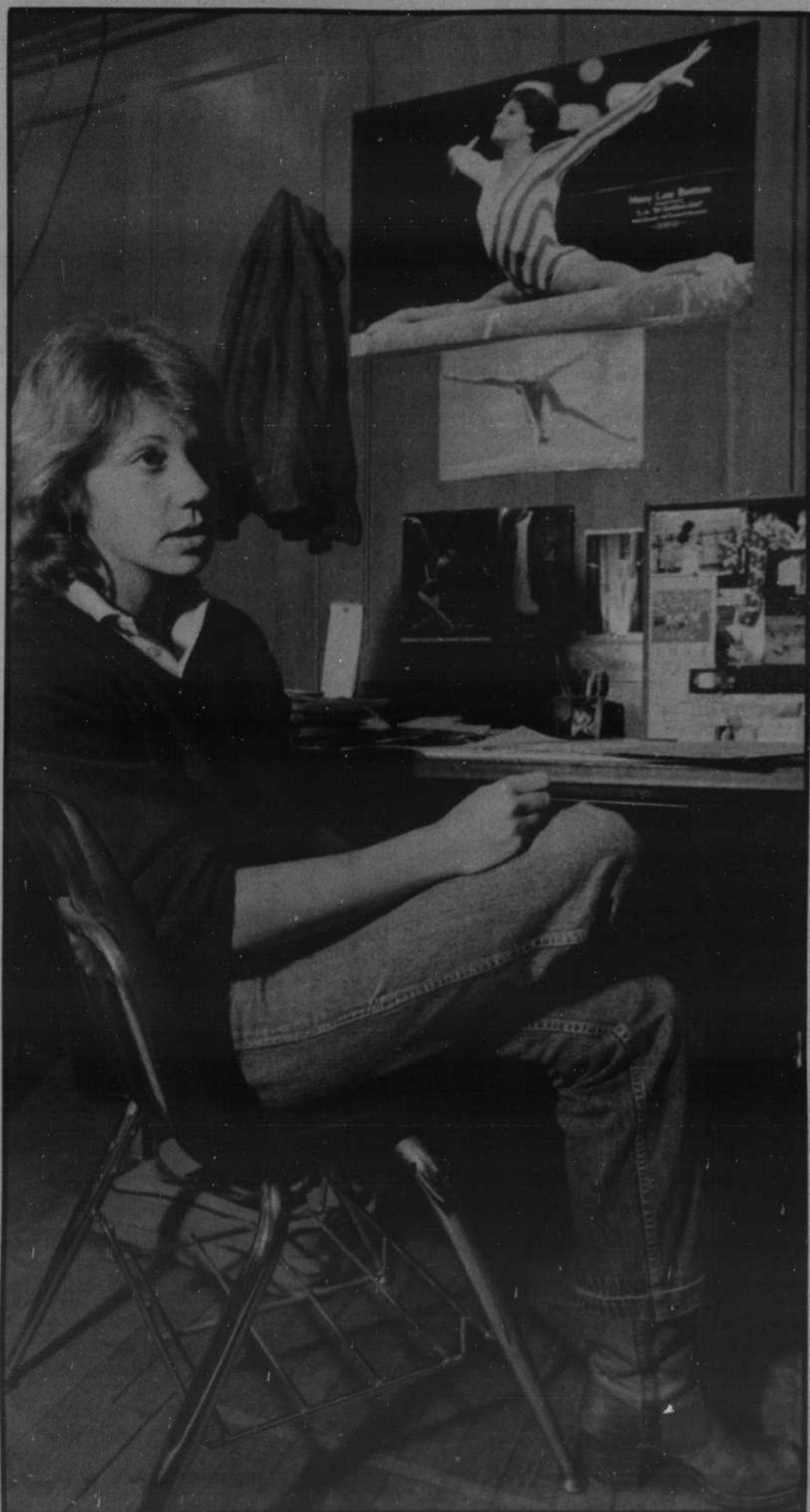
"There are a lot of people with good proposals that don't make it. It takes being in the right place at the right time," he says.

Bates is hopeful that such work with top level athletes will trickle down to the novice and intermediate gymnasts.

Ordinarily, Bates would have reservations about sending a student abroad to work under someone else. He says that if the work the student does under the Fulbright is not a success, ultimately the failure is his responsibility. But he says he is not worried about Panzer's success under Mason's supervision.

"He's probably the best student I ever had. I have no problems releasing Victoria into his care."

Story by Ken Armstrong
Photo by Michael Clapp



University doctoral student Victoria Panzer's research of injuries in elite gymnasts has landed her a spot at the University of Western Australia in Perth.