

Research

Continued from Page 1

grams, including the Applied Research Lab, the Environmental Resources Research Institute and the Institute for the Arts and Humanities. As well as several information-sharing consortiums with industries, are also part of the University's overall research network, he said.

Bernadine Prince, manager of relations for the Campaign for Penn State, said a large portion of the campaign money will be used to expand this research network.

"We've identified six areas of need for the campaign, including \$37.5 million for endowed faculty chairs, \$12.9 million to enhance academic programs and support new initiatives in instruction and research, \$9.3 million for library needs, and \$52.6 million in construction of new academic facilities," Prince said. "In all areas, and more specifically in those areas for endowed faculty chairs and academic programs, the search is a major part of the overall goals."

Leonard N. Zimmerman, associate dean of research in the College of Science, said research stems from curiosity.

"When we talk about research, we're talking about someone's curiosity—someone who has questions that are burning a hole in his or her head," Zimmerman said. "What is it, for instance, that makes this tree do this or makes this reaction go?"

Hoeler said that although curiosity is often a major motivating factor for research, the support of graduate students is the primary goal. "Research provides intellectual support for professors, but the principal thing

is really the support of graduate students," he said. "Several thousand graduate students are supported through research grants."

The sources of these grants, contracts and other funds range from federal agencies and industry to the Department of Defense and the National Endowment for the Humanities, Hoeler added.

Zimmerman said such sources are vital because universities no longer have the funds to support an extensive amount of research. "In most cases today, you can't research unless you get money from the government, for instance. Federal agencies support 90 percent of all the basic university research that goes on in this country."

"Each professor is an entrepreneur," Hoeler said. "We have professors here that bring in more money than all the bowl games put together. Research support all depends on the entrepreneurship and talent of the faculty."

The process of receiving grants and signing contracts is a competitive process that usually involves developing proposals for individual research projects, said Hoeler and several deans.

A professor will develop a proposal and send it to the Army, National Science Foundation or any other sponsor of research," Hoeler explained. "They then will rate it through a process called peer review. It's a highly competitive process."

Zimmerman said proposals have a high rejection rate when they are reviewed by panels. "Members of the panel want to know, 'Is he asking important questions and will his plan

answer them?'... 'Will the project lead to some significant research?'"

"Most proposals are turned in by a single professor, but we also have a lot of collaborations and team efforts. Some proposals submitted by professors (in the College of Science) are done with professors in other colleges," Zimmerman said, adding that proposals usually include background on the researchers, specific project plans and a proposed budget.

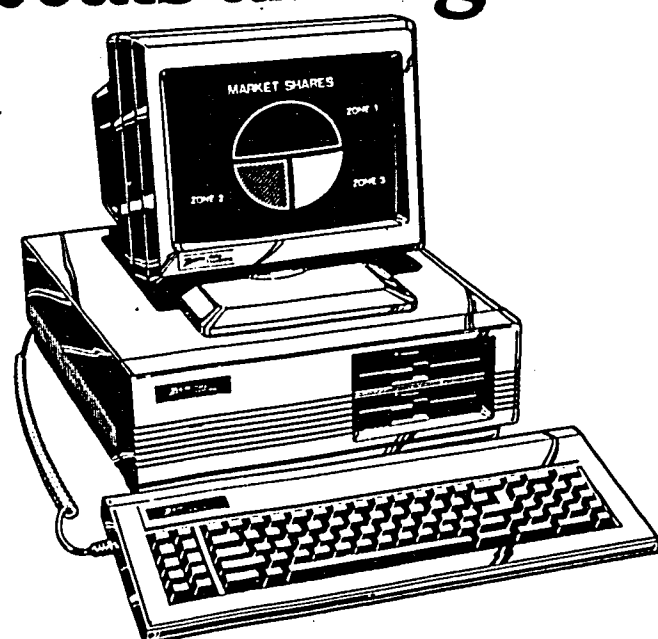
"We have statisticians working with the medical school and biochemists working with people in the animal physiology department on fertilization problems in cattle, for instance," Zimmerman said. "Projects can often be very interdisciplinary."

Zimmerman and Hoeler said the knowledge accumulated and enthusiasm exhibited by professors involved in research directly benefits both graduate and undergraduate students by improving the quality of education.

"Students are dealing with people in the classroom and in the lab who are on the frontiers of their fields," Hoeler said. "Today, fields—even in the social sciences and history—are advancing so rapidly that if (a professor) is not on top of things, he or she can be teaching in the last decade."

"Here, in an English class, you can be taught by a professor who has written novels and can teach from the standpoint of being an author. You can be taught by someone who has written a book rather than just read it," Hoeler said. "The professor who has researched or discovered something will always have more to share with his or her students.... This makes an education more valuable."

The Zenith Z-158 Enhanced PC. It beats all-nighters.



Get some shut-eye with the help of this Zenith Personal Computer... now at a Special Student Price!

Everyone brags about them, but no one really likes all-nighters. Especially when you consider the alternatives—sleep, parties, romance. But now you can finish your classwork in no time with the speedy Zenith Z-158 Enhanced PC... now yours at great savings!

Don't lose any step over your classwork... get your Zenith Z-158 Enhanced PC today!

Special Student Price: \$999.00
Suggested retail price \$1299

Special Student Price: \$1,399.00
Suggested retail price \$2799

The Logical Link
300 Pugh Street
State College, PA 16801
814-238-3104
Zenith Data Systems
215-668-2044

Special Student Prices are also available on these other exciting Zenith Personal Computers...

Zenith Z-148 Desktop PC 1.2MB PC compatible Single Drive Special Student Price: \$730.00 Suggested retail price: \$1299.00	Zenith Z-171 Portable PC 7.5MB 5 1/4" Drive, 1.2MB 5 1/4" Disk Special Student Price: \$2299.00 Suggested retail price: \$3299.00	Zenith Z-214 Advanced PC 2.0MB PC compatible Single Drive Special Student Price: \$1599.00 Suggested retail price: \$2299.00	Zenith Z-154 Monochrome Monitor High resolution Special Student Price: \$99.00 Suggested retail price: \$149.00

ZENITH data systems
THE QUALITY GOES IN BEFORE THE NAME GOES ON

Prescription drug use studied

By SHELLY NAPOLI
Collegian Staff Writer

Three University researchers in the College of Human Development received an additional \$220,000 from a Philadelphia-based medical charity trust to continue statistical analysis concerning prescription drug use among the elderly.

The team—Frank M. Aherm, a research associate in the College of Human Development; Michael A. Smyer, associate professor of human development; and Daniel J. Lago, research associate in human development—have been working with the Pennsylvania Department of Aging to fine-tune the Pharmaceutical Assistance Contract for the Elderly, known as PACE.

Ardella Darlington, assistant director for PACE, said the program, started in July 1984, allows the state's elderly to receive discounts on prescription drugs.

PACE recipients must be at least 65 years old, with a single income of \$12,000 or less or a combined income of \$15,000 or less, Darlington said.

The PACE card allows participants to receive prescription drugs such as insulin and drugs approved by the Food and Drug Administration at substantial discounts.

Discounts on over-the-counter medication, such as aspirin, are not made available under the PACE program, Darlington said.

Since the summer of 1984, University researchers have been conducting a random survey of 1,800 people that provides numbers of current PACE users, as well as estimated numbers of potential and ineligible recipients of the state program.

The additional \$220,000 funding will allow researchers to track survey respondents for two more years.

The survey included questions about health and well being, aimed at discovering how well respondents are able to take care of themselves, Lago said. The first stage of research, the three-year survey, is being completed and the research findings are expected to be published sometime this week, he said.

Clova Hess, a spokeswoman for the state's Department of Health, said that the cost of the state-run program has reached about \$300 million since it began in 1984.

Lago and his colleagues said they hope their research will help the Department of Aging "better understand the characteristics of those using the program, and the effects of the program on the participants' long-term well-being."

The effective use of medications should help people live in their homes instead of depending on institutional programs, Lago said, adding that overall public expenditure would be reduced.

The Keystone State's Commerce and Industry — A Memorable Book!

Pennsylvania: Keystone to Progress
By E. Willard Miller

- 640 9" x 12" pages
- Superbly Crafted Hardcover Edition
- 64 Pages of Equities, Full Color Plates!

From the discovery of iron in the Colonial Era to the 20th century's sophisticated high technology, here is the dramatic story of Pennsylvania's kaleidoscopic industry told with skill and authority. Richly informative, filled with intriguing anecdotes and a beautiful array of period paintings, drawings, maps, and photographs, this limited edition is a collector's treasure for readers of every age. Don't miss this opportunity to explore and savor a vital aspect of Pennsylvania's rich heritage.

A fine gift for family, friends, business associates, students, and history buffs.

Available at

Penn State Bookstore on campus
Owned and Operated by the Pennsylvania State University

Room 220 Shields Building
Department of Purchases

For more information call Marie Forster 863-0235

Meet the Author — E. Willard Miller — and Receive 20% Off Your Signed Copy of "Pennsylvania" on December 10th — Noon to 2 PM — A Wonderful Christmas Gift!

This holiday season, get the "Write Stuff" at the right price.

Now you can get the competitive edge when classes begin in January. With a Macintosh™ personal computer, and all the write extras.

We call it the Macintosh "Write Stuff" bundle. You'll call it a great deal! Because when you buy a Macintosh "Write Stuff" bundle before January 9, 1987, you'll receive a bundle of extras—and save \$250.

Not only will you get your choice of a Macintosh 512K Enhanced or a Macintosh Plus, you'll also get an Image Writer™ II printer, the perfect solution for producing near-letter-quality term papers or reports, complete with graphs, charts, and illustrations.

Plus, you'll get MacLightning, the premier spelling checker containing an 80,000 word dictionary with options for thesaurus, medical or legal dictionaries. Together with your favorite Macintosh word processing software, you can transform your notes into the clearest, most letter perfect papers you ever turned out. And turned in on time.

What's more, there's a Macintosh Support Kit filled with valuable accessories and computer care products from 3M.* Complete with all the things you need to keep your Macintosh running long after you've graduated.

Let us show you how to get through college better, faster, and smarter. Stop in and see us for more information.

Macintosh Support Package

With 53 seconds left and Penn State leading 70-68, the Huskies called timeout. Washington's Lisa Raschko had two chances as the clock ticked off, but missed both attempts from the floor. Fortunately for Penn State, Christmas came early. The Lady Lions hit 10 of 15 from the line, while Washington enjoyed only one good foul shot.

Penn State was led by Faloan, who scored 20, and Link, who had 22. The weekend was a milestone for Link—she reached the 1000 career-points plateau. Suzie McConnell, the assist machine, dished out 12 of those.

Going into this weekend's action, Head Coach Rene Portland was concerned with her team's inside game. That concern was justified: Washington outrebounced the Lady Lions 32-23, and Illinois destroyed Penn State

on the boards to the tune of 43-29.

"Our big kids didn't post up until late in the game," Portland said, commenting on the Illinois game. "All the pressure was on the guards. I'll give them (Illinois) a lot of credit, they were fired up."

One of the reasons Penn State is in trouble inside is that Bethany Collins is still not completely recovered from shoulder surgery. The 6-foot-3 center didn't start against Washington, and saw only 28 minutes of action against Illinois. Portland started three guards, McConnell, Faloan, Shelly Caplinger.

In Saturday's contest, the Lady Lions tied Illinois once—before the lipoff when the score was 0-0. Illinois scored the game's first basket and never surrendered the lead.

Penn State was down by 10 at the half, 42-32, but could not get closer. The Lady Lions scored just one point in the first five minutes of the second half, as Illinois turned it on to assure the victory.

Illinois committed 16 fouls to Penn State's 23. Illinois was into the bonus early in both the first and second halves.

"The situation reversed against Illinois, they went to the foul line more," Portland said. "It's always tough on the road."

Penn State was led by Faloan, who scored 15. McConnell continued her usefulness ways, dishing off 13 assists. Illinois was led by Jonelle Polk, who was named tournament MVP. Polk, a 6-foot-3 center, scored 32 points against the Lady Lions, going 13 for 20 from the field. She also had 10 rebounds. Polk scored 34 against Eastern Michigan the night before.

Before anyone begins blowing things for the Lady Lions, remember that Penn State still has not had the services of Vanessa Paynter, whose knee is still recovering.

... so be good for goodness' sake!

sports

Cagers self-destruct, drop 74-70 decision to Loyola

By MARK ASHENFELTER
Collegian Sports Writer

Tony Ward was feeling sick from the start and the feeling became contagious for the men's basketball team yesterday at Rec Hall. Ward, the team's starting point guard, was limited to just 14 minutes of action and the Lions' offense took on a sickening appearance down the stretch.

The Lions watched an 11-point lead evaporate in less than six minutes, as Loyola of Maryland charged to a 74-70 victory in front of 2,005 fans in the Lions' home opener. It was Penn State's second straight loss after winning the AMI Classic in Miami last weekend.

Penn State had a 40-32 lead at halftime as the team hit on 57 percent of its shots. The figure dropped to 43 percent after intermission, a fact that didn't surprise Head Coach Bruce Parkhill.

"We sure didn't look like we were ready to play," he said. "When we came out at halftime I was really concerned. They just didn't look like they were ready to play, for whatever reason."

Parkhill isn't sure what caused the Lions' lethargic performance, but he knows what did the team in. Tom Hovasse and Paul Murphy, normally two of the Lions' most dependable shooters, combined to hit just six of 21 shots on the day. Mike Peapos tried to pick up the slack inside, but his 18 points weren't enough to carry the club.

Penn State was also outrebounced, 35-34, despite the fact that not a single Greyhound player was taller than 6-5. Carl Chrabaszec led the Lions with eight rebounds, Ed Fogell added six and Peapos five for the Lions.

But it wouldn't have mattered if the Lions had maintained the shooting touch they had late in the first half. The Lions started the game slowly, and then put on a furious charge to build a 40-32 lead at the half. They led by one, 29-28, with 5:18 left, but Hovasse added five points, while Peapos and Chrabaszec added four each down the stretch to build the lead.

After intermission, however, the Greyhounds started running right past the Lions. Loyola took a 45-44 lead on David Gately's 15-foot jumper with 15:48 remaining, but a Murphy jumper put the Lions back in front. Peapos then scored 10 of the Lions' next 16 points as they built a 62-51 lead with 8:05 remaining.

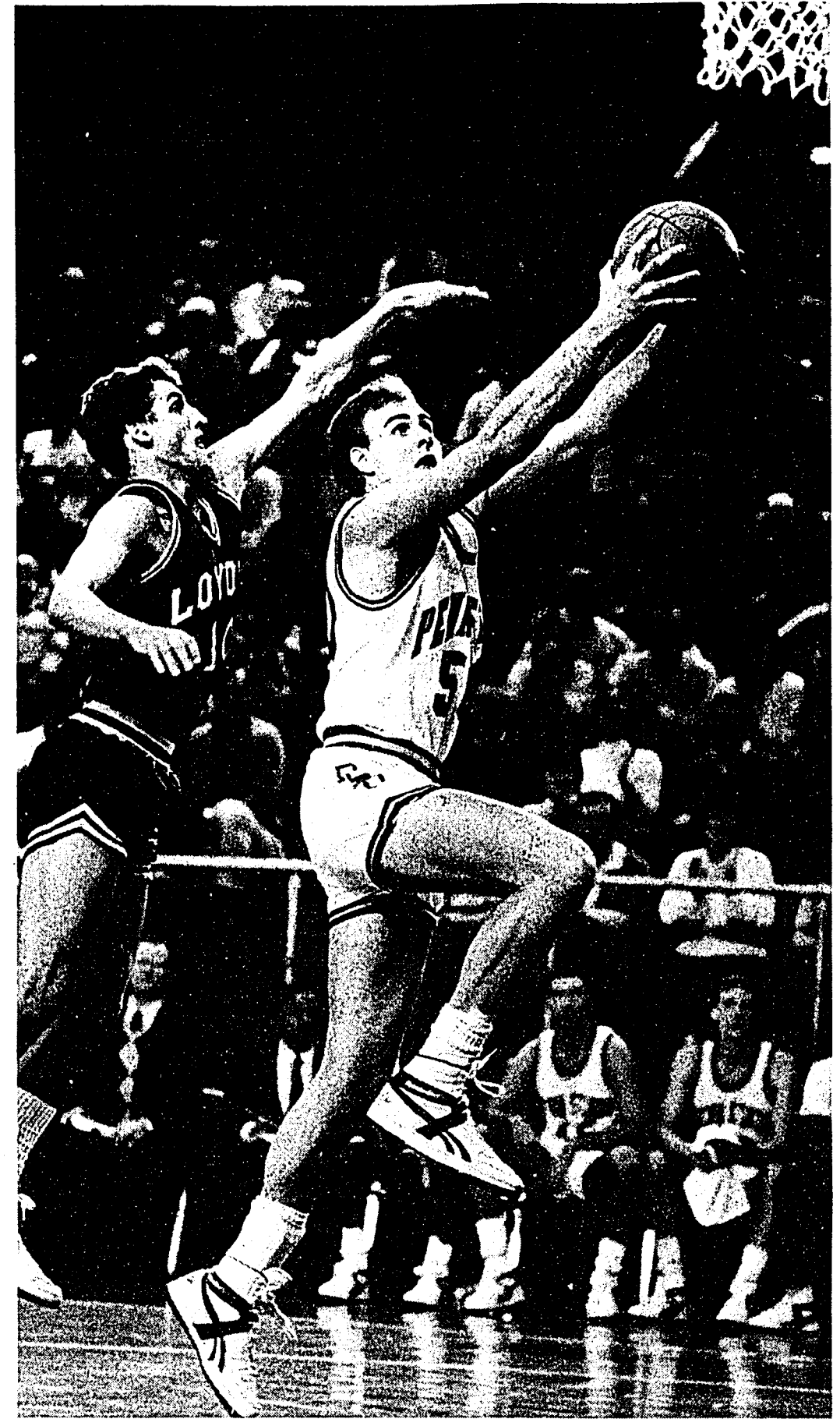
Things quickly went downhill after that, as the absence of Ward began to take its toll. The Lions got sloppy and didn't score again until Penn State's follow-up shot boosted their lead back to five with 4:51 left. Peapos, however, picked up his fourth foul 20 seconds later and was done for the day.

"I think we had a bit of a lapse defensively," Parkhill said of the Greyhounds' run. "I think Loyola hit a couple of big shots and kind of snuck their way back into it.... On the other end, we weren't doing a whole lot offensively."

Parkhill called Ward to his side late in the game, and sent him back to the bench. Parkhill said he only needed one look to tell that Ward was in no shape to help the Lions.

But Penn State still had a few chances to make Ward feel better down the stretch. Loyola took the lead for good, 69-68, on Byron Almon's layup with 2:51 remaining. Murphy missed the front end of a one-and-one with 1:12 left and Mike Iuzzolino couldn't connect on two jumpers down the stretch.

It was a sweet victory for Greyhound Head Coach Mark Amatuucci. He wasn't pleased with his club in the first half, but said it did everything he wanted down the stretch.



Penn State's Mike Peapos reaches for the hoop for two of his 18 points yesterday against Loyola of Maryland at Rec Hall. Despite Peapos' stellar performance, the Lions still dropped a 74-70 decision to the Greyhounds.

Peapos' fine effort goes all for naught

By MARK BRENNAN
Collegian Sports Writer



When center Mike Peapos entered the media room in Rec Hall following the men's basketball team's 74-70 loss to Loyola of Maryland yesterday, you could have sworn he single-handedly lost the game.

In fact, despite scoring 18 points (11 in the second half) in what was by far the best scoring output by the reserve center in four games this season, Peapos said he was not pleased with his own performance.

"I don't think so," Peapos said when asked if it had been his best game of the year. "For some reason we never got control of the game tonight. I don't think it was my best game."

But Head Coach Bruce Parkhill disagreed. Although each of the Lions' starting inside men were at least five inches taller than their Greyhound counterparts, Parkhill felt Peapos was the only Penn State player that was really effective in the game.

Starting guard Tony Ward was stopped by the fit, leaving the game at the beginning of the second half, but Parkhill said a fired up Loyola defense and poor outside shooting made the majority of the Penn State team look sick.

"We all played like we had the flu tonight, except Mike Peapos—I think he played hard," Parkhill said. "He was just going after it, he was really playing hard and going after the ball, and not standing and watching. Michael was giving it some second and third effort, and when you do that, things happen."

Peapos' 18 points gave him nearly half of Penn State's points inside. Maybe not a great statistic considering Loyola started a 6-5 center along with 6-4 and 6-4 forwards, but nonetheless something none of the other Lions could do.

The Lions starting front wall, which went 6-10, 6-11 and 6-8, scored only nine points combined.

That may explain why Parkhill became concerned when Peapos picked up his fourth foul with 4:22 left in the game and Penn State leading 64-61. Parkhill said although he did not want to, he was forced to pull the junior from Whitehall, Pa., out of the game at that point.

"It was a tough decision," Parkhill said. "We felt if we had a small

'For some reason we never got control of the game. Just because I scored points tonight, I don't think it was my best game.'

— Mike Peapos

lead later in the game, we were going to need him down the stretch. He was making his fouls shots and was giving us good play inside."

Peapos said he thought the foul that put him on the bench was a "stupid" one, which made it a little harder to swallow.

"It was a stupid foul, I boxed the guy out and then I released him, and he got the ball," Peapos said. "I should have come out of the game. I think Coach made a proper move."

Peapos said he then just wanted to get back in the game.

"You always want to get back in the game to try to help the team out," Peapos said.

As it turned out, the Greyhounds took the lead less than two minutes later, forcing the Lions to go with three and four guards pressing defenses to try to cut the lead.

Ironically, Peapos, who kept Penn State in the game in the second half, watched the final four minutes from the bench.

Lady cagers earn split at weekend tournament

By MARK FURRY
Collegian Sports Writer

The Lady Lion basketball team traveled to the University of Illinois this weekend and took second place in the Illini Classic. The Lady Lions got past defending PAC-10 champion Washington 70-68, but ran into an improving Illinois squad Saturday.

The Lady Lions lost to the Illini 88-70. The victory was Illinois' third straight—the Illini took the Syracuse Tournament last week, defeating Louisville and Holy Cross. The loss was the Lady Lion's first and puts the team's record at 2-1.

Friday's game against Washington was truly a nail-biter. The Lady Lions were losing the entire way until late in the second half. With 5:38 left, Lisa Faloan hit a jumper that gave Penn State a lead it would never relinquish.

In the last five minutes, the Lady Lions led the game with free-throw shooting. Faloan and Vicki Link both went two for two from the line and Link also added two field goals in the final five minutes.

With 53 seconds left and Penn State leading 70-68, the Huskies called timeout. Washington's Lisa Raschko had two chances as the clock ticked off, but missed both attempts from the floor. Fortunately for Penn State, Christmas came early. The Lady Lions hit 10 of 15 from the line, while Washington enjoyed only one good foul shot.

Penn State was led by Faloan, who scored 20, and Link, who had 22. The weekend was a milestone for Link—she reached the 1000 career-points plateau. Suzie McConnell, the assist machine, dished out 12 of those.

Going into this weekend's action, Head Coach Rene Portland was concerned with her team's inside game. That concern was justified: Washington outrebounced the Lady Lions 32-23, and Illinois destroyed Penn State

on the boards to the tune of 43-29.

"Our big kids didn't post up until late in the game," Portland said, commenting on the Illinois game. "All the pressure was on the guards. I'll give them (Illinois) a lot of credit, they were fired up."

One of the reasons Penn State is in trouble inside is that Bethany Collins is still not completely recovered from shoulder surgery. The 6-foot-3 center didn't start against Washington, and saw only 28 minutes of action against Illinois. Portland started three guards, McConnell, Faloan, Shelly Caplinger.

In Saturday's contest, the Lady Lions tied Illinois once—before the lipoff when the score was 0-0. Illinois scored the game's first basket and never surrendered the lead.

Penn State was down by 10 at the half, 42-32, but could not get closer. The Lady Lions scored just one point in the first five minutes of the second half, as Illinois turned it on to assure the victory.

Illinois committed 16 fouls to Penn State's 23. Illinois was into the bonus early in both the first and second halves.

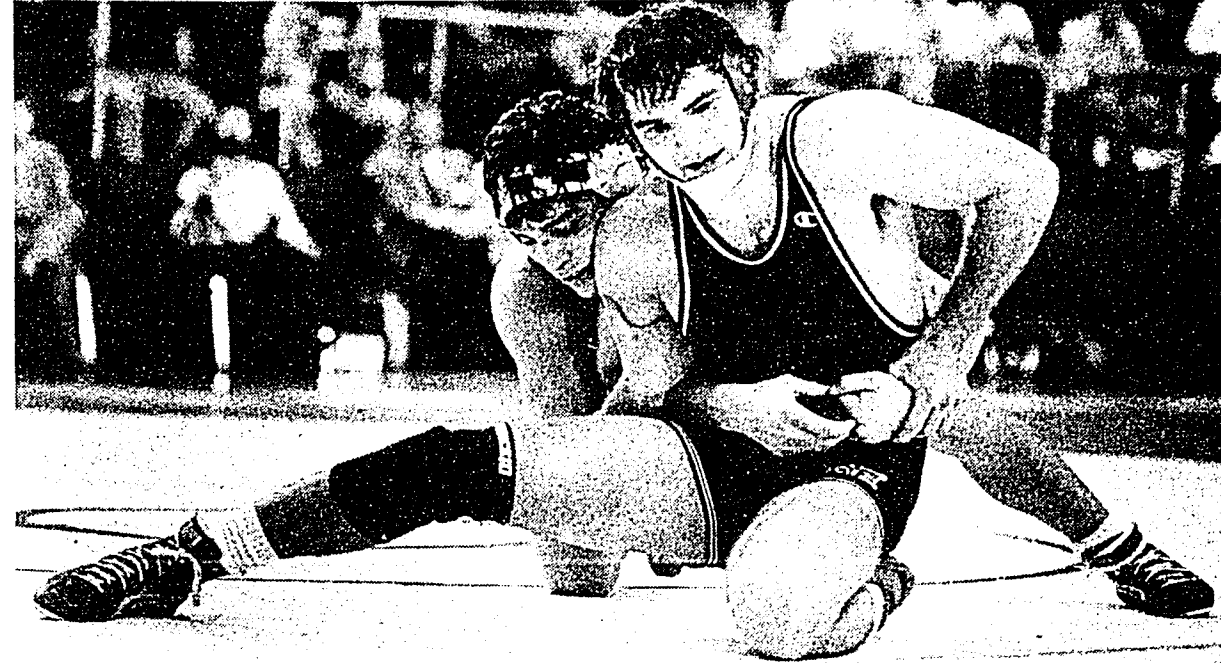
"The situation reversed against Illinois, they went to the foul line more," Portland said. "It's always tough on the road."

Penn State was led by Faloan, who scored 15. McConnell continued her usefulness ways, dishing off 13 assists. Illinois was led by Jonelle Polk, who was named tournament MVP. Polk, a 6-foot-3 center, scored 32 points against the Lady Lions, going 13 for 20 from the field. She also had 10 rebounds. Polk scored 34 against Eastern Michigan the night before.

Before anyone begins blowing things for the Lady Lions, remember that Penn State still has not had the services of Vanessa Paynter, whose knee is still recovering.

Grapplers capture three wins at Invite

By ANN GARRETT and MARK S. McWHIRTER
Collegian Sports Writers



Penn State's Dan Mayo, left, has a firm hold on Maryland's Steve Peparak during weekend action at the Penn State Invitational at Rec Hall. Mayo won the bout 3-2, en route to winning his weight division in the tournament.

After two full days of wrestling and more than 630 individual bouts, the 14th annual Penn State Invitational ended with three Lions capturing individual titles and four finishing in second place.

Penn State's Greg Elnisky, Ken Chertow, and Dan Mayo all finished on top in their respective weight classes. Tim Flynn, Jim Martin, Glenn Koser, and Duane Peoples also made the finals, but came up short.

Elnisky, a senior, became the first wrestler in Penn State's history to win four Invitational titles with a 7-2 decision over Army's 167-pounder, Dave McCormick. Elnisky said the victory meant more to him because he surpassed former Lion Chris Bevilacqua's invitational title record (Bevilacqua earned three Invite titles).

"With a long week like this one was, it has really been an act of attrition," Elnisky said of the team's overall performance after competing three times in four days. "Then again I think it's understandable because if you look at it logically, every match helps."

Elnisky, who has won two titles at both 158 and 167, defeated opponents from Cornell, Millersville, Maryland, and Virginia on his road to the title.

Chertow scored a takedown with eight seconds remaining to win a 10-9 decision over Montclair State's Pete Gonzalez. Early in the first period, Chertow scored a takedown with eight seconds remaining to win a 10-9 decision over Montclair State's Pete Gonzalez. Early in the first period, Chertow scored a takedown with eight seconds remaining to win a 10-9 decision over Montclair State's Pete Gonzalez. Early in the first period, Chertow scored a takedown with eight seconds remaining to win a 10-9 decision over Montclair State's Pete Gonzalez.

unsuccessful. Gonzalez had Chertow starting at the lights for a good part of the first period and had a 5-0 lead at its conclusion.

Chertow came back to life in the second and third periods as he took Gonzalez down twice in each. With less than 10 seconds remaining in the match and losing 8-4, Chertow scored a takedown to secure the win.

"I made a mistake falling behind early, I tried a move I usually try," Chertow said. "The first time I almost got it and the second time he caught me on it."

The only other Lion to come out on top was Mayo at 177. Mayo's match dragged along at a very slow pace as it was 1-1 late in the third period. Mayo took Maryland's Steve Peparak down with 30 seconds remaining to go up by two. Peparak escaped to bring it to within one, but fell short, losing by a final score of 4-2. The additional point was awarded to Mayo for riding time.

At 134, Flynn lost a controversial 3-2 decision to Paul Clark of Clarion. In the bout's final seconds, Flynn came out as close as he can get to a takedown but the referee said Flynn did not have control.

"It depends what referee you have at the time," Penn State Head Coach Rich Lorenzo said of Flynn's last-second decision. "Some officials call the best he had and some call it a two-point takedown."

Martin also fell victim to a controversial call near the end of his match at 118. Early in the third period, Martin tied the match up at one apiece with an escape. Edinboro's

Dave Rowan then took Martin down to go ahead by two. Martin promptly escaped and went on to take Rowan down to go in the match. The controversy came in the last two seconds when the referee awarded Rowan a reversal that Lorenzo did not agree with.

"We didn't think the guy ever established enough control for two points," Lorenzo said of Rowan's 5-4 win. "He still had his leg when it all ended up and I think the official anticipated there was a reversal there. He didn't quite get a reversal, the best he had was an escape and I don't think he even had that."

Other second-place finishers for Penn State were Koser at 150, losing to Indiana University's Scott Duncan 11-4, and Peoples at 158, bowing to Eric Wertz of Pittsburgh, 11-8.