

Minorities:

PSU to research education in science, technology and society

By CHRISTINE KILGORE
Collegian Science Writer

Although economic recovery has created new jobs in U.S. northeastern cities, many minority high school students are not receiving the science education needed to prepare them for technical jobs, said a University professor of Science, Technology and Society.

Leonard J. Waks said the STS department recently received a \$133,000 grant from the U.S. Department of Education, which will allow the University to develop science education programs designed to conquer this problem.

Waks, who is director of the programs, said the University competed with about 500 other institutions for one of 23 grants awarded nationally for education projects. University researchers will work in conjunction with Lincoln University in Oxford to develop the project, which will begin on Jan. 1, 1987, he added.

"In our major cities — like Philadelphia, New York, Baltimore and Newark — the residents going through public schools are increasingly minorities. There are more black and Hispanic students than caucasian students," Waks said. "Evidence shows that these kids aren't getting the science education and knowledge of skills that they should."

"They need to take advantage of jobs in cities which requires self-management skills, some technical knowledge and problem-solving abilities — all on top of basic skills," he said. "We're trying to look at what STS education can do to address the problem."

STS education is aimed at helping students realize how science and technology affect their lives and careers, from a new scientific devel-

opment to moral and religious implication. Waks said STS education, which is geared toward all students and not just those interested in science, could help increase the number of minorities in science and technological fields.

"STS has a strong social, decision-making aspect. It benefits not only oneself but one's community," he said. "And as opposed to traditional science education, it is geared to be beneficial to all students."

Teachers may integrate science with technology and society in high schools by supervising student projects resembling those a citizen might have to do, he said.

'Evidence shows that these kids aren't getting the science education and knowledge of skills that they should.'

—Leonard Waks, University STS professor

"A student might have to do an environmental impact report, for instance. Here the teacher is not only an information provider, but an advisor and a coach," he said. "And the teacher doesn't have to be a science teacher. An English teacher may teach technical writing, for instance."

Edward Fagan, a University professor of education and co-worker on the project, said teachers have been enthusiastic about STS education in the past. "Teachers in math and science are of course, very enthusiastic ... the group that is

hardest to convince is the English teachers," he said. "But once they understand what it's all about, they enthusiastically endorse the program."

Waks said the grant will be administered through the University's Center for Education in STS. Lincoln University researchers will provide expertise on the black youth unemployment crisis, he said.

"We have more of an understanding of (the problem) from a distance. Lincoln has closer ties to the black community and the school districts in cities like Philadelphia and Baltimore and their students are more directly involved," Waks said.

"We'll (also) have high school teachers come in as consultants."

Waks said the project will first involve gathering teaching materials and reviewing past STS curricula to see what has or has not been effective.

"At this point, we're scoping the problem. We want to know what works and what doesn't," he said. "We also want to produce a handbook of materials on all kinds of concerns — like food, clothing, and the space shuttle — that will be readily available to teachers."

Fagan said "There is a lot of material out there, but it's scattered around. We want to search, organize and set priorities."

Waks said the project will be led by Fagan; Peter Rubba, associate professor of education and director of the Center for Education in STS; Mary Dupuis, professor of education; and James Stewart, associate professor of labor studies and director of the black studies program.

Waks said University researchers are looking for a graduate student to assist with the project. Anyone interested can call Paula Mourant at 855-9951.

Gift to benefit math dept.

By CAROLYN SORISIO
Collegian Staff Writer

The University department of mathematics will have a new endowed professorship, thanks to a \$250,000 gift to the University from an executive committee member of the Campaign for Penn State.

Raymond N. Shibley, a 1949 graduate of the University in commercial chemistry, said he donated to the math department because his father, Jabir Shibley, was a former University math professor.

Shibley said he believes professorships are an important donation to the campaign because they improve the academic quality at the University and help to attract and retain quality professors.

Math Professor Stephen Simpson, who specializes in logic, will be the first recipient of the five-year professorship.

Norman Freed, associate dean for the College of Science, said the professorship is a significant honor for Simpson and added that the math department and the College of Science have high esteem for Simpson.

This is the second endowed position in the math department. It is significant because it will help attract and retain "star

quality" professors at the University, Freed said.

The endowment, he said, should generate about 10 percent interest, which would give the endowed professor about \$25,000 a year.

Shibley said, "I think the campaign is right on target in its attempt to develop professorships, chairs, and fellowships instead of being directed solely toward athletics, buildings, bricks and mortar."

"I felt it would be desirable to do something in retaining or attracting additional professors of the caliber that is being developed," he added.

Freed said the development "raises academic level of excellence in the institution itself," because the more outstanding a University's faculty members are, the better reputation it builds.

Shibley has previously established 12 permanent student scholarships in areas at the University including philosophy, theater and the Penn State Blue Band.

His contribution, Shibley said, is a "special devotion to the University ... in appreciation of the track that it has taken in bringing itself into the high-caliber educational sphere."

The campaign is a five-year, \$200 million fund raising effort designed to enhance the academic quality of the University.

Researchers study hole in ozone

By MICHAEL VENNUM
Collegian Staff Writer

Researchers at the South Pole are searching for the cause of a hole in the ozone layer which has expanded in size to an area equivalent to the United States.

A group of 13 researchers from throughout the country are presently attempting to establish a possible cause for the hole, which is largest during October.

In the upper atmosphere, ozone — an unstable form of oxygen with three oxygen atoms in a molecule rather than the normal two — acts like a shield to protect the earth from the sun's ultraviolet radiation. Excessive amounts of such radiation can cause skin cancer, crop damages, and wildlife death.

Currently, the scientists say they have evidence that a chemical process is causing the hole. In a statement read from McMurdo Station in Antarctica, the scientists said "At present we have not conclusively established the cause of the ozone hole. However, we have strong evidence against theories that upward winds or high solar activities caused the depletion. We suspect a chemical process is fundamentally responsible for the formation of the hole."

If the hole has been caused by a series of chemical reactions, it could be linked to the gradual depletion of the ozone layer which had already been observed.

"This is caused by fluorocarbons in the atmosphere," said University Professor of Meteorology John J. Oliverio, Jr. He added that the fluorocarbons, which contain freon, that cause the depletion are used in spray cans, air conditioners, freezer, and foam insulation.

"During the local winter seasons at the poles, there is a long period of darkness. At this time, the freons can build up and cannot be broken down without ultraviolet light given off by the sun. When the sun does appear, the ultraviolet light hits the regions of freon build up and releases molecules of chlorine. The chlorine released causes a chemical reaction which in turn breaks up the ozone in the atmosphere," he said.

Other researchers have proposed that the phenomenon is caused by cyclical atmospheric processes that have no relation to manmade gases. Some climate experts believe a change in the ordinary motions of waves and cyclones in the upper atmosphere might cause the hole.

For example, an upwelling of air over the pole could push aside the layer of the stratosphere with the most ozone, replacing it with low ozone air from lower altitudes.

Still other researchers believe that the hole has come and gone in the past before it could be measured. However, Oliverio said, "You cannot explain this on dynamics — atmospheric motions — or on solar cycles alone." He added that this theory might be true but researchers have not seen anything this dramatic yet.

A final theory implies that volcanic particles that have built up in the polar atmosphere can be heated by the sun and cause the upwelling. "This is an interesting theory that must be looked at carefully," said Oliverio, adding that volcanic can break down the ozone.

"This is one of the most challenging things that we've ever come across in atmospheric chemistry," said the team's leader Susan Solomon of the Aeronomy Laboratory at the Goddard Space Flight Center in Washington, D.C. She added that the source of the hole must be understood because "this is a change in the ozone that's of absolutely unprecedented proportion. We've just never seen anything like what we're experiencing in the Antarctic."

The hole was discovered in March of 1985 by British atmospheric scientists.

Drug may be increasing in popularity

By CHRIS ZEILER
Collegian Staff Writer

Volunteers at a State College drug crisis center are receiving an increase in calls concerning an extremely toxic plant used as an hallucinogenic, which has been called Jimson weed.

On Drugs Inc., a drug and alcohol information and crisis center at 236 1/2 S. Allen St., has received several phone calls asking about the plant, called Jimson weed. Although callers have asked about the plant in the past, this is the first time On Drugs has received this many questions about the poison, said Donna Berrigan, program coordinator at the center.

The weed, which contains a chemical once labeled as a truth serum, is being used primarily by local high school students and University students, said Berrigan, who believes

people are picking it for their own use and selling it in State College. Jimson weed is a common annual weed that grows mostly around farms in limestone and cultivated soils, said Carl S. Keener, associate professor of biology. Because the weed requires a lot of sunlight, he said he doubts the plant would be found in woods.

Extremely high doses may produce convulsions that could lead to coma and death, Keener said.

"Anybody that eats any part of Jimson weed is playing with fire and it means deadly fire. This stuff can kill people," he said.

"Jimson weed is not a hallucinogen in the sense of LSD or mushrooms, or something like that, but it does have hallucinogenic qualities."

A combination of the poisonous alkaloids in Jimson weed, called belladonna, might cause the hallucinations, Berrigan said.

"Belladonna is extremely poisonous and it is very easy to overdose on it. It's very easy to kill someone with belladonna," said Berrigan. "You're poisoning yourself to get high, and there is a real fine line between the hallucinogenic level and the overdose level."

People get high from the drug by smoking the leaves, brewing the weed in tea, grinding the roots into a powder or eating the seeds, which are more potent than any other part of the plant. However, Berrigan said, the high from Jimson weed is usually a "bad trip."

The drug usually begins to take effect within 20 minutes. Initial reactions include nausea, diarrhea, altered mental fever and chills and an extremely dry mouth until the chemicals in the weed leave the body.

If the dose is strong enough, there is a loss of motor coordination, extreme excitation and agitation, nervousness, visual distortion, mental distortions and hallucinations.

The alkaloids in Jimson weed affect the nervous system, Keener said, and while people's reactions vary, Jimson weed is one plant that is dangerous regardless of whether or not people have allergic reactions to it.

One of these alkaloids, scopolamine, achieved semi-notoriety as the truth serum of spy-lore fame, according to an On Drugs pamphlet.

Hallucinations from the weed are more intense than those from LSD and may last up to two days. Visual distortions last even longer, said Berrigan, sometimes up to three days after the hallucinations are gone.

"All parts of the plant are poisonous," Keener said, "particularly the seeds and leaves, which contain alkaloids that are very dangerous, even in small amounts. Anybody drinking less than that, unless done under medical supervision ... is a fool."

FREE EYEGLASSES
FOR PSU EMPLOYEES AND DEPENDENTS

Wise Eyes Optical in STATE COLLEGE, BELLEFONTE, and PHILIPSBURG will accept your benefit coverage as payment in full for the following services:

- COMPLETE EYE EXAMINATION
- SINGLE VISION OR ST BIFOCAL LENSES
- ANY FRAME FROM GROUP 'A' OR 'B'
- 2 YEAR GUARANTEE

And as always, no extra charge for SCRATCH RESISTANT PLASTIC LENSES

WISE EYES

Bellefonte 355-1354 Philipsburg 342-5361 State College 234-1040

TRY SCUBA

Get Wet With A Friend!

Nov. 9th or 16th '86 for 1 Hour of Scuba Diving. Register today or all next week in HUB Basement. Call 23 Heary for more information. Sponsored By Nittany Divers.

Wild Horses and Ponies

Presented By **Dr. Ronald Keiper**

Monday, Nov. 10 8:00 P.M. 8 Mueller

Sponsored By ERM Club

SHOULD YOU BECOME A PRIEST?

Here's an opportunity to find out... A special program of "DISCRIMINATION" for the college student is now being offered by the Catholic Diocese of Pittsburgh...

Weekend of November 7, 8, 9, 1986 Topic - "The Contemporary Church"

Weekend of March 6, 7, 8, 1987 Topic - "The Priesthood"

Call Father Bob Clarke 412-928-5836

GREAT LEGS!

PhD PIZZA

Benefits: The Children's Branch of the Hershey Medical Center

In Cooperation With: BELLEFONTE NATIONAL STORE and KOPEASE PRINTING

Come Watch on Nov. 7th at 7:30 p.m. in the HUB Ballroom

Show your team spirit with a **Nittany Lion Corsage!**

WEEKLY CASH & CARRY SPECIALS

We Deliver!

Across the Street Across the Country

145 S. ALLEN ST. STATE COLLEGE, PA 238-0566

Woodring's floral gardens

BAG LUNCH \$2.50

Choice of: Italian, Turkey, Ham or Roast Beef Hoagies Plus: Potato Chips and Fresh Pasta Salad Penn State

AT THE P.S.U. MOBILE FOOD UNITS

Open: Saturday 9:30 a.m. to 1:30 p.m.

Located at Shields Building and Rensselaer Hall on Curtin Road

FOOTBALL SPECIAL

DOUBLE Your Clothing BUDGET

Oxford Buttondowns Reg. Value \$24.00 Only \$11.99

Identical quality and detailing at less than half the price. Ours only \$11.99

By Shopping at the Oxford Shoppe you can stretch your clothing budget. We offer list quality shirts, sweaters, ties, belts, jeans, blouses, socks and gloves all at Factory Outlet Prices. For a great selection of fine merchandise all at discounted prices shop at the Oxford Shoppe.

113 S. Allen St. Lower Level 234-4541

Daily 9:30-6:00 Thu & F 'til 9:00 Sun. 12-4

PIZZA PIZZAZZ!

we personally deliver in 30 minutes or your pizza is FREE

PhD PIZZA

ahead of its class!

OPEN: Sun-Thurs. 4pm-12am; Fri-Sat. 4pm-3am

CALL 234-4743 Delivery in 30 Minutes or FREE

FRESH INGREDIENTS PREPARED DAILY ON THE PREMISES

\$2.00 OFF any 16" pizza with 3 or more toppings

PhD PIZZA

234-4PhD

Surf Club Menu

TO BEGIN WITH

SURF CLUB CHOWDER ... This, zesty New England Corn Chowder. A perfect blend of spices and baby clams. Prepared daily ... Cup \$1.35 Bowl \$2.00

ALOHU WINGS ... A warm welcome to the Surf Club. Crisp wings tossed with your choice of one-drum or two-drum hot sauce. Served with celery sticks and blue cheese dip to cool your palate ... \$2.95

NOT AN ORDINARY SALAD

SURF CLUB SALAD ... A refreshing combination of mixed greens, olives, onions, sprouts & cheddar cheese. Served with house dressing & sliced bread ... \$2.95

THE MEAT OF THE MENU

SURF CLUB CHAR BURGERS ... 1/2 lb. ... Who says they don't make them like this anymore? Think of a beach bottle - burgers sizzling over an open flame. Our 3 1/2" char-grill burgers are lean, 1/2 lb. burger to your specifications. Served on a fresh kaiser roll with a thick slice of onion, lettuce & tomato ... \$2.95 With wedge fries (of course the side included) ... \$3.49

THE CHEESEBURGER ... Although our burgers don't need a dip, a dip, cheddar or salsa cheese highlights the taste ... \$3.49 With wedge fries ... \$3.95

FRIG-COOLLED HAWAIIAN CHICKEN BREAST ... This succulent is the talk of the islands. Boneless chicken breast fried on the char-grill, basted with a taste tempting teriyaki sauce. Served with a slice of pineapple, kaiser roll & side of our red & white Surf Club slaw ... \$3.95

SMOKIN' TURKEY ... Thick-sliced tender smokes may mean topped with sprouts, cucumber slices & a tangy Russian sauce. Served on a fresh kaiser roll with a side of our red & white Surf Club slaw ... \$3.75

ROAST BEEF SUPREME ... Rare roast beef, sliced, aged & prepared to perfection. Topped with a slice of Swiss chard & a choice of horseradish sauce, mustard or mayo. Served on kaiser roll & side of Surf Club slaw ... \$3.50

SURF CLUB SPECIALTY (DRINKS, COOLERS & SHOOTERS)

SURF CLUB SHOOTERS ... Round up the cheer revolution. Mix & proceed. The finer these blends of liquor & liquors. Enjoy our special taste sensations. Each shooter is served chilled unless ice is requested ... \$1.00

ROOT BEER MELON BALL SHIRAZ

BAR SNACKS ... Maybe there is no such thing as a free lunch. But here, hot, tasty snacks are always on the house.

THE FINISHING TOUCH

CREAMY CHEESECAKE ... By itself ... \$1.45 Topped with fresh fruit ... \$2.10 Topped with slices of dark chocolate ... \$2.10

TO QUENCH YOUR THIRST

iced tea - .40 Soft Drinks - .45 No coffee - .75 With a meal a refill is always on the house

ON THE SIDE

Side of Salad ... \$1.50 Surf Club Slaw ... \$1.50 Wedge Fries ... \$1.90

BEER, WINES & COCKTAILS

Drink Beer & Sucker Beer - Flat White by the Glass White Wine by the Glass • Coolers • Cocktails

SURF CLUB TROPICAL COOLERS ... Maybe the best cooler you will ever experience. This refreshing blend of fruit, vanilla & sparkling water is served in a cooler glass or in the pitcher ... Glass \$1.25 Pitcher \$3.50

SURF CLUB MARGARITAS

ORIGINAL ... A Shiny, Fresco Margarita that needs no further description. The year round taste of summer ... \$2.45

STRAWBERRY ... Berries, berries & more berries. This icy-cold blend will take you back to Margaritaville ... \$2.50

THE BIG HARM ... Formed Holland ham sliced & piled high. Topped with aged Swiss cheese & a choice of spicy Dutch mustard or mayo. Served on a kaiser roll & a side of Surf Club slaw ... \$3.50

TOTALLY PIZZA (After 5 P.M.)

SURF CLUB PIZZA ... You have to try the Surf Club 16" pizza to see it's true. Served simply with slicing cheese or our topping of the day. By the cut99 with toppings ... 1.25 No eating glass ... \$5.95 with toppings ... \$6.95

123 East College Avenue State College, PA • 237-4338

The shoes you have been waiting for are coming now —

THE NITTANY LION SHOES

From The Manufacturer Directly To You.

FAMOUS AMERICAN UNIVERSITY SHOES ANNOUNCES ITS 1ST ANNUAL COMPLIMENTARY SALE!

The sale that is almost impossible! But it is TRUE! We are bringing you these \$60 high quality shoes at only **\$19.95***

* Plus 4.5% ICE licensing fees plus tax (where applicable)

DATE: Nov. 7, 9am-6pm Nov. 8, 8am-5pm

PLACE: Sheraton Penn State 240 S. Pugh Street State College, PA Tel.: 814-238-8454

• Made by name-brand manufacturer

• Recommended for tennis, playing, running or walking

• Money back quality warranty

• Designed for comfort and performance

LIMITED QUANTITY, HURRY!

FOR MAIL ORDER ONLY

Name: _____

Address: _____

School: _____ Size mens: _____

Womens: _____

Please send \$23.95 (handling & tax included) to: C.P.P. Inc., P.O. Box 12446, Overland Park, KS 66212

FREE SHIPMENTS

FREE pair to coaches & sponsors if you order 10 pairs at one time

Customers Comments

"The most wonderful and comfortable sneakers I have ever had at the most unbelievable price." — Lisa Shafer, Columbus OH

"First I thought it was just another sales gimmack but after a year of wearing, I recommend it to all my friends." — John Gordon, Minneapolis, MN

"This is not only the best way to walk tall in school spirit; this is the best shoes money can buy." — Mike Edmund, Madison Wisconsin

"Thank you for the wonderful shoes. I am sending you an order of 23 pairs for everyone in my office." — James Tademan, Wichita, KS

WALK TALL IN NITTANY LION STYLE

STUDENT HELPERS WANTED: \$5/Hour CALL 913-492-3595