

# The Pelican

A Newsletter for the F.I.T. Family

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**GENETIC PROBERS** — Dr. John Hozier, right, and graduate student Jeff Sawyer utilize the university's Cytogenetics Laboratory to pursue work to reveal information about genetic disorders suffered by humans.

## Genetics Lab In Operation

Formal establishment of a Cytogenetics Laboratory within the Department of Biological Sciences has **been** announced.

Dr. John C. Hozier, director of the laboratory, said research work done there is aimed at insights into genetic disorders. The goal is a reduction of human suffering.

Dr. Hozier, assistant professor of **Biological Sciences**, explained that **cytogenetics** deals with the determination of changes in the numbers of chromosomes, or in the structure of chromosomes, that can result in human disorders.

"Usually we're talking about **birth** defects or cancer, both of which have very strong genetic components," Hozier said of the focus of clinical cytogenetics.

Hozier, who previously was associated with the University of Minnesota Medical School's Department of Laboratory Medicine and Pathology, said research under way at F.I.T. currently falls into three areas of **interest**.

In work **being** conducted in association with the University of Minnesota, structural defects in genetic material are being related to particular forms of cancer. Successful correlation of defect and disorder is critical in prognosis and treatment of diseases, Hozier explained.

In another joint effort with Minnesota, F.I.T. researchers are analyzing **chromosomes** from recipients of bone marrow transplants. Such transplants are becoming increasingly important in the treatment of leukemia.

"Potentially, we can use our chromosome studies to monitor the progress of the transplant," Hozier explained.

And in a third study area, an F.I.T. project being conducted in collaboration with the federal Environmental Protection Agency is aimed at providing tests for potentially mutagenic and carcinogenic chemical compounds that man introduces to the environment.

Hozier explained that mutagenic **substances** cause a change in a human's genetic **material**. Carcinogenic **substances** cause a change **w** **in cancer**.

## Driver Honored for Quick Action

Lou Villani was piloting an F.I.T. **bus** in early July, traveling a highway near **Bartow**, when he witnessed an automobile careen off the highway. The car landed upside down in a roadside lake and vanished beneath the water.

Up to that point Villani had **been** responsible only for the safe travel of 30 teachers in his **bus**, participants in a National Science Foundation-sponsored program **staged** by the Science Education **Department**.

Without hesitation, Villani embraced the new responsibility. He pulled the bus to the side of the road, **jumped** out and headed for the lake and the submerged car.

"I started down in the water and I just saw the top of his head coming up," Villani recalls of his effort to aid the auto driver. "I was in the water and ready to go down... It was the only thing you could have done."

Villani helped the young man from the **water** and ascertained he was the **only** occupant of the car, though the victim was disoriented and in shock.

Dr. Robert Fronk, Science Education Department head, was among those impressed with the veteran driver's actions. Villani has been at F.I.T. for five years.

"Mr. Villani used excellent judgment in **this matter**, and **all** of us on the bus were impressed and gratified with his **decisive action**," Fronk said in a memo outlining the incident. "We are pleased he is an F.I.T. employee."

When President Keuper learned of the **incident**, he commended Villani for an "act of heroism."

In a letter of commendation, Dr. Keuper told Villani, "your kind **act** in aiding the driver out of the water was indeed commendable, and all of us at F.I.T. want you to know how very proud we are to have you as a member of our university team."



Lou Villani

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# Campus Notes

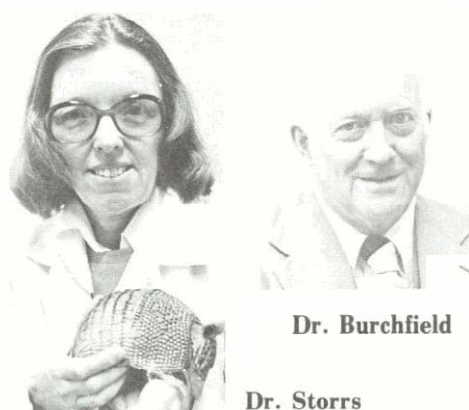
Drs. **Eleanor E. Storrs** and **H. P. Burchfield** of the Medical Research Institute recently completed a one month tour of the Eastern U. S. and Europe to discuss programs involving pesticides, armadillos, and leprosy.

In Washington, D. C. they met with staff members of the Environmental Protection Agency, National Institutes of Health, National Geographic Society, and National Library of Medicine.

After attending the annual meeting of the American Society of Mammalogists at Kingston, Rhode Island, they visited Professor **Ralph Wetzel** of the University of Connecticut at Storrs to examine specimens used in his new classification of the genus "Dasypus."

In Germany, they visited State Museums of Natural History in Bad Cannstatt and Ludwigsberg in search of remnants of the Storr collection of animals, plants and minerals. They are preparing an article for publication in the Journal of History of Medicine on the subject. They continued the search at the University of Tübingen, where the collection was housed until it was purchased by the King of Württemberg in 1819.

In Geneva, they attended the Third Immlep Scientific Group Meeting sponsored by WHO, the World Health Organization, where Dr. Storrs was a member of a committee which prepared protocols on ethical and safety considerations in the use of experimental vaccines for the treatment and prevention of leprosy.



Dr. Burchfield

Dr. Storrs

Between Geneva and the Channel Islands they took a brief vacation in Normandy to visit Crecy and Agincourt where the English archers decimated the chivalry of France during the 100 Years War. They found several old monuments not mentioned in modern histories.

In Guernsey, their host was Dr. David **Jameson** who held a press conference to announce the establishment of a colony of armadillos at the Guernsey Zoo to breed animals for use in leprosy research. To their surprise one of their hostesses was Mrs. Pauline **Shipley**, whose sister, **Julian Wilson** of Melbourne, was scheduled to arrive in Guernsey one hour after Drs. Storrs and Burchfield flew to Jersey to discuss breeding of endangered animal species with staff of the National Wildlife Trust.

In London, they visited Dr. **R. J. W. Rees** of the National Institute of Medical Research

to resolve problems associated with the importation of armadillos into the United Kingdom from Florida. They concluded their trip with a visit to Dr. **Colin McDougall** at Oxford University to discuss details of a paper on drug metabolism by armadillos which they are preparing for publication in Leprosy Review which he edits.

Dr. **Richard L. Turner**, assistant professor of Biological Sciences, and former student Cathy Meyer are the authors of an article appearing in the journal, "Marine Ecology." The article is entitled "Salinity Tolerance of the Brackish Water Echinoderm, 'Ophiophragmus filigraneus.'"

Dr. **William S. Alevizon**, assistant professor of Biological Sciences, together with Drs. **A. W. Ebeling**, **R. J. Larson** and **R. N. Bray** of the University of California, published an article in Volume 78 of the "Fishery Bulletin." The article is entitled, "Annual Variability of Reef-Fish Assemblages in Kelp Forests of Santa Barbara, California."

Mary Elliott a junior in mechanical engineering, has been selected as a recipient of an "American Society of Mechanical Engineers Corporate Travel and Per Diem Grant." The award will allow her to attend the "Century 2 - Emerging Technology Conferences" in San Francisco this month. She is one of 102 ASME student members across the country selected for a grant. A Melbourne resident, she will concentrate on the International Conference on Medical Devices and Sports Equipment.

## Continued From Page One

The object of the study is to create a test system that can identify materials which alter genetic structure. to determine just what alterations of chromosomes can be caused, and to establish the hazards those changes might constitute.

"The test system we are developing appears to have the ability to make those distinctions," Hozier said. A prime use of the test system will be in examinations of new substances proposed for use in our society.

Hozier said the test-development project relies on the use of chromosomes from laboratory animals.

Working in the laboratory with Hozier is researcher Karen Zedler and graduate student Jeff Sawyer. Hozier said both have extensive experience in cytogenetic research.

Published by the  
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Department



Pat Nelson

Patricia Nelson, compositor in F.I.T.'s Graphic Arts Department, died of a heart attack on July 24.

After joining the university on April 1, 1914. Pat played a key part in the preparation of nearly every Pelican edition.

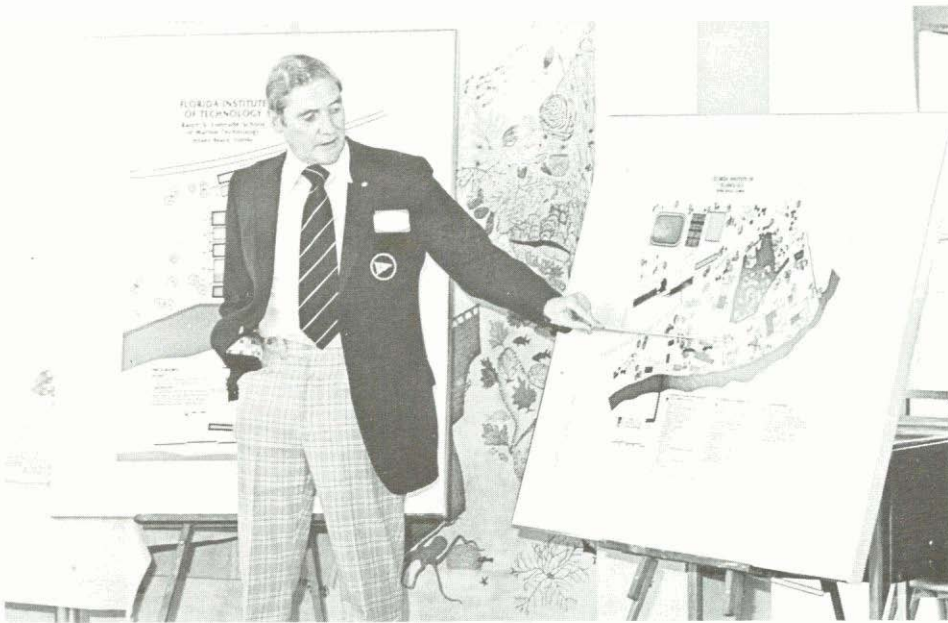
Pat also put into type the words you have read in the quarterly publication called "Topics," those in the student newspaper "Crimson," the flood of words heaped into university catalogs, those in special publications, in advertisements, in invitations, and in nearly all other printed matter emerging from F.I.T.

Pat did more, of course. Much more. She eared. Amid the pressures of deadlines and the frustrations of words scratched onto paper in longhand, she endured until the job was done correctly.

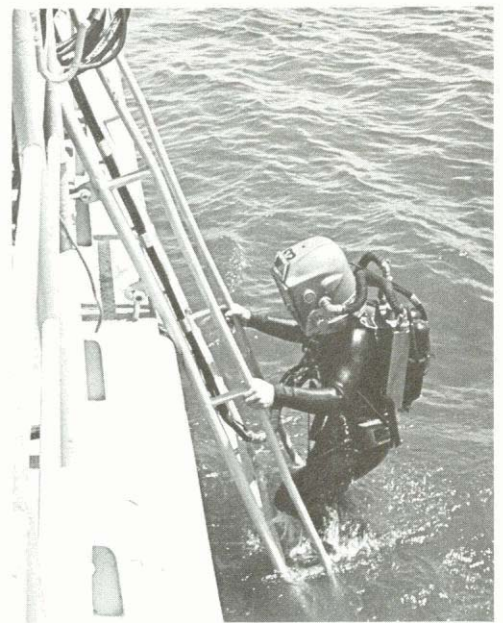
Too often perhaps, Pat was sustained in her work by self-satisfaction when thanks were not offered.

Pat felt an old-fashioned allegiance to the university. She felt a part of it. And she was.





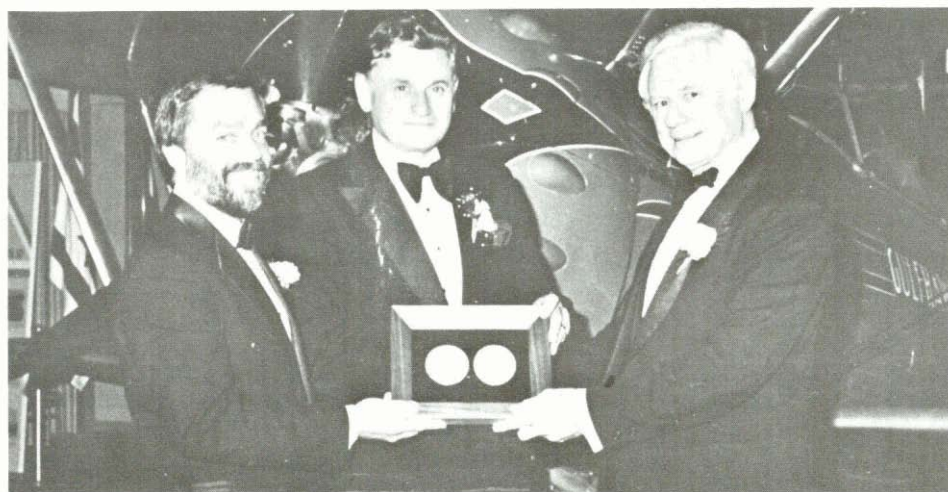
**THE LAYOUT** — Dean E. E. "Tim" Tealey, executive director of the Jensen Beach Campus, offers geographical pointers to visitors from Melbourne at the opening session of "Melbourne Day at the Jensen Beach Campus."



**ALL WET** — Students at the Jensen Beach Campus can have the Atlantic Ocean as their classroom, as does this aspiring diver.



**SCHOOL OF FISH** — Aquaculture, the science of growing marine organisms in manmade environments, proved a Jensen Beach Campus program of keen interest to visitors from F.I.T.'s northern headquarters.



**DOWLING AWARD** — George M. Skurla [center], chairman of the board and chief executive officer for Grumman Aerospace Company and a member of the F.I.T. Board of Trustees, was recently honored as recipient of the 16th Annual Dowling College Distinguished Citizen Award. With him are Dr. Victor F. Meskill [left], Dowling president, and the Hon. Joseph A. Doyle, assistant secretary to the Navy. The college is located at Oakdale, Long Island, New York. Activities surrounding the award drew 1,000 persons.

## Energy Cheeked

Do university buildings waste energy? If so, how much? What can be done about it?

You can ask Dr. Ray Work Jr. for the answers, but right now he may be too busy tracking them down to chat very long with you.

The vice president for administration is tackling the ambitious task of creating energy-use profiles for most F.I.T. buildings on the Melbourne campus.

The work is part of a federally-instigated program aimed at identifying public and educational institution buildings that can benefit from energy conservation measures.

"We have 27 buildings eligible for review under this program," Dr. Work said of the project made possible by the National Energy Conservation Policy Act.

The university sponsored Dr. Work's participation in a special school that qualified him to first conduct "preliminary energy audits" of the buildings. Dr. Work also learned how to perform more detailed energy audits on the buildings, and expects that work to be completed by the beginning of September.

To follow is a "technical assistance program" in which ways to save energy that were suggested by the energy audits are given careful study. The technical advisability of energy-related changes in selected buildings is determined.

Dr. Work explained that the final phase of the energy program entails building alterations that will conserve fossil fuels.

The findings could support a wide range of energy-conservation measures, Dr. Work said, including the possible use of solar energy collection systems to supply hot water for dormitories.

Dr. Work said it is hoped the program, most of which is accomplished with costs shared by F.I.T. and government, can be expanded in the future to include buildings at the Jensen Beach campus.





## Show Time!

Photos by R. Goldberg

The 1980 National Aviation-Space Education Convention was recently staged at F.I.T., providing special opportunities for the university community.

An impressive array of speakers and an exhibit hall provided summer entertainment for the campus, as did an air show based from university turf.

A hot air balloon and an ultralight aircraft were among featured attractions during the air demonstration, but weather conditions minimized activities of large machinery and allowed model airplanes and rockets to steal the show.



Maryann Latunas, Dr. Jim Stoms and Kay Ott assisted conference sponsors.



## Campus Community Supports Partners Visit

By Dr. Art Kimball  
Partners Executive Director

The XV Annual Florida-Columbia Partnership Conference, held on campus July 12, was a great success. It was climaxed with a banquet at which Governor Bob Graham spoke, and introduced U. S. Ambassador Diego Ascencio. The ambassador's remarks, including references to his recent ordeal as a hostage, were inspiring.

Highlighting the entire stay of our 236 guests from Colombia July 7-16 was the helpful assistance of F.I.T. students and administrative personnel. Starting with middle-of-the-night arrivals on July 7 and 10, and throughout the visitors' stay, many people pitched in to help.

The following students deserve appreciative recognition: Julian Aguilar, Jacob Alsaka, Joel Amaya, Steve Brouillette, Guillermo Calderon, Juan Pablo Carreno, Il Un Chung, Alvaro Correa, Adolfo Echenique, Geraldo Figueroa, Jack Haynie, Jaime Hoyos, Iftekhar Jami.

Andres Jimenez, Kathy Joyce, Greg Kupi, John Libre, Charles Martin, Eric Medina, Francisco Moral, Konosuke Nakagawa, Mario Pineda, Fernando Posada, Mauricio

Restrepo, Mauricio Rodriguez, Monica Rudzik, Alicia Saenz, Marcelo Santos, Jeff Skelly, Jorge Villa, and Leopoldo Villa.

Carlos Barba, his wife Esther and daughter Lourdes, Dr. John Evans and his wife Velia, and Miss Joy Dicke, lost sleep while competently serving as tour leaders. So did F.I.T.'s bus drivers, Norman Birch, Louis Villani, Hal Walker and Charles Overlock, assisted by student drivers Wynn

Phillips, Roger Gilmore and Lyle Whyte.

Much credit is due Carmen Read of Partners' office, Karen Adamo of F.I.T. housing, Steve Arndt of P.F.M., and Carlos Barba for managing the logistics and handling any emergencies throughout the 10-day visit.

Janice Tubell and Jackie Illingworth of the Development office, F.I.T.'s Public Relations staff and its Quick Copy Center all contributed effective support.



FLAG WAVING - The presentation of an American flag to Gaston de Bedout, president of the Colombia Partners, by Dr. Keuper was part of ceremonies opening the recent Partners annual conference.