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THE GEORGIA TECH WHISTLE

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File Photo

These students found a calm and quiet place to study during the hustle and bustle of

Tech Research Program Pulls Women, Minority Students Into Graduate Work By Ginger Pinholster "If we're going to pursue s

By Ginger Pinholster Research Communications Office

In the summer of 1989, Troy Hammond was thrown into the frying pan of laboratory research, thanks to a hands-on program here at Tech. Confronted by an alien procedure called laser-induced plasma spectroscopy, Hammond says he reacted with "fear and confusion."

Ten weeks later, however, Hammond knew where he was going: Georgia Tech.

Billed as Research Experience for Undergraduates (REU), the Tech program targets women and minorities at the college level. "If we're going to pursue science as we know it," says Dr. Margaret Graff, professor in the School of Physics, "we must create an environment which is supportive for individuals who do not happen to be white, male scientists and engineers."

A member of the chemical and optical physics group within the School of Physics, Graff is an REU project director with "a strong personal commitment to promoting women and minorities" in the scientific arena.

These populations represent an abundant reservoir of science and

See Research, page 3

Task Force Is Established To Address And Help Prevent Campus Rapes

By Vera L. Dudley

Date rape or acquaintance rape, defined as forced sexual intercourse by an assailant known to the victim, has received a tremendous amount of media coverage within the last year. Most of the publicity has focused primarily on college students because acquaintance rape targets women of dating age (15 to 25 years old). In light of this fact, campus administrators across the country have organized groups to combat the problem.

The Georgia Tech Rape Task
Force was recently established to
help prevent these problems by
educating male and female students
about rape victims, attackers and
the repercussions of committing
such a crime.

"Many of us on the campus were concerned about the issue of date rape on various campuses being in the news, and we know individually, that Tech has had some of the same problems. We felt we needed to provide some sort of support," says Carol Moore, assistant vice president for Student Affairs and head

of the task force. "The establishment of the force is an attempt to make Tech a more hospitable place to all people, in this case women. The President's Office agreed that we needed to proceed with this."

Alarming statistics have resulted from studies performed by various organizations, publications and agencies. Though their numbers vary slightly, all of the studies conclude one thing. The number of reported rapes on college campuses has been on the rise for years and continues to climb, in part, some experts say, because of the messages that are pervasive in our society.

According to Cross & Crescent Magazine, a recent FBI report claims 27.2 percent of all university women have already been raped; 57.8 percent of them by their dates. A recent study by Stanford University revealed that in the past six years, more than 75 documented gang rapes have occurred on college campuses and that 80-90 percent involved fraternities.

See Task Force, page 2

Crecine Appointed To Congressional Research Committee

President John P. Crecine was recently invited to join a committee of seven university presidents that will organize and direct the efforts of a year-long Congressional-University Colloquium.

The colloquium, according to a letter from U.S. Senator Terry Sanford (North Carolina), will examine the nation's policy as it relates to the funding of academic research, especially in research facilities. Sanford and the Association of American Universities are the chairs of the colloquium.

The group has been asked to study the growing tendency in Congress to earmark science and research funds for designated universities without competitive review, according to Sanford. The committee will conduct a critical and searching review of government policies and procedures as they relate to science research facilities.

"We need to consider and examine research and oversight agencies as well as congressional control of funding," Sanford says. "We

should also examine trends in conducting research in our major universities and laboratories, and especially consider the involvement of business and industry in university research."

Sanford adds that the committee's findings should be made in regard to policy changes necessary to ensure national strength in research performance.

"We must review key findings of recent studies and add the views of this colloquium and others," Sanford says. "Then we must discuss these matters publicly in a series of regional colloquia in the context of developing a more cogent national science policy that will better serve the future of the nation."

Senator John Danforth (Missouri), Representative George Brown (California), and Chancellor Joe Wyatt (Vanderbilt University) will be vice chairs of the colloquium. University presidents who have een invited to participate include: Richard C. Atkinson (University of California, San Diego), Rev. Edward A. Malloy (University of Notre Dame), John V. Byrne (Oregon State University), Harold Shapiro (Princeton University), A. Kenneth Pye (Southern Methodist University), and Donna Shalala (University of Wisconsin, Madison).

Cleaning Up Coastal Areas Is Civil Engineering Professor's Specialty

By Jackie Nemeth

Waste along rivers, lakes and coastlines has become a major concern over the past several years with the public, media, and environmentalists.

Here at Tech, Dr. Philip J.W. Roberts, associate professor in the School of Civil Engineering, has performed extensive studies that have led to the cleaning up of coastlines and coastal waters in South Africa, Barbados, Rio de Janiero, San Francisco, Australia, and most recently in the Boston Harbor.

The Boston Harbor clean up involves a nine-mile long outfall tunnel which will discharge treated wastewater far out into Massachusetts Bay, according to Roberts. The outfall terminates in a 6,600-foot long diffuser which efficiently mixes and disperses the waste-water. As a result of a hydraulic model study of the diffuser conducted by Roberts, \$75 million in construction costs were saved and a more effective diffuser was designed. The outfall will begin discharging in 1995, and all of the treatment facilities will be completed in 1999.

"Most coastal cities discharge sewage into the ocean, and our job is to make sure it's done efficiently with minimal damage to the marine environment," Roberts said. "With a diffuser, wastewater is rapidly diluted with seawater and widely dispersed so that contaminant concentrations are reduced to safe levels."

The study of the Boston Harbor outfall was performed at a specialized laboratory of the U.S. Environmental Protection Agency at Research Triangle Park in North Carolina, but as a result of a recent

Gary Meek

Dr. Philip J. W. Roberts, associate professor in the School of Civil Engineering, shares his research experiences with his students. Roberts' studies have led to the clean up of coastal waters and coastlines around the world.

grant from the National Science Foundation, Roberts and his students will now be able to perform similar studies in the hydraulics laboratory in the School of Civil Engineering.

"The grant will enable us to conduct basic research into the fluid mechanics of pollutant mixing and dispersion in various water bodies including estuaries, coastal waters, rivers and lakes. This will enable us to predict environmental impacts much better and lead to improved design of waste disposal systems," Roberts said. "Equipment such as a stratified towing tank, laser doppier anemometer and laser induced fluorescence will be used to study these processes."

"Having this state-of-the-art instrumentation will definitely benefit our students and Georgia Tech," he continued. "Doing this type of work broadcasts Georgia Tech's name nationally and internationally in civil engineering."

In addition to his travels abroad, Roberts serves as co-chairman of the Marine Waste Disposal Specialty Group of the International Association on Water Pollution Research and Control in London. He is also the incoming chairman of the Hydrologic Transport and Dispersion Committee of the American Society of Civil Engineers and associate editor of the Journal of Hydraulic Engineering.

Task Force...

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The task force, made up of 13 male and female students, faculty, staff and administrators, is not intended by its founders to be a counseling group. According to Moore, the group will be a source of education and a body to arm students with enough information to realize the seriousness of the subject. Because the group is only a few months old, their goals are still in the planning stages.

"Date rape is kind of an emerging field. It's been lumped together with stranger rape for so long. We've been in an information gathering mode to get a feel for what the situation is here at Tech," Moore says. "I think by the end of the quarter we'll have some very definitive recommendations."

In addition to the task force's efforts, students have slowly increased their efforts to educate each other about safety and responsible social behavior. Individual organizations and residence hall leaders have invited experts to lead group discussions about the crime.

"I see a strong need for it here at Tech," says Pamela Rosser, an industrial engineering student who



Charles Harmon

State Representative Terry Coleman (L) of Eastman chats with President John P. Crecine following a reception May 3 at the Eastman-Dodge County Chamber of Commerce. Crecine's two-day trip was part of Georgia Tech's "Showcase" program, which is designed not only to acquaint communities throughout the state with the services and opportunities available at and through Georgia Tech, but also to provide Georgia Tech with a better understanding of each area's needs. The Showcase program involved several stops, including Vidalia and Dublin, areas also served by Tech's Regional Office based in Dublin, which is part of the Georgia Tech Research Institute's Industrial Extension Service.

worked part-time at the Rape Crisis Center at Grady Hospital. "The girls take the advice lightly. They just don't think someone they know will do that. Most people think they aren't going to put themselves in that situation."

One of the many misconceptions surrounding rape is that women who have been violated will report the incident in retaliation. Fact is, date rape remains one of the most underreported crimes.

"Victims are reluctant to come forward. They need to view themselves as victims immediately. They will need some counseling or even some medical treatment," Moore says. "We need to get this out into the open and let people understand that the victim did not bring this on herself."

According to Office of Human Relations Director Don Bratcher, who is a member of the task force, rape can be dealt with in several ways. One approach is to focus on men and hold them accountable for their actions.

"We're going to make a big, concerted effort for fraternity men. We are going to have forums directed towards men's concerns about date rape," says Bratcher. "We are concentrating on the ethical image. We're letting them know how devastating it is to recruitment efforts when your fraternity has that reputation.

"We are approaching the fraternity presidents and the rush chairmen so that those people know that their own jobs are affected by these cases," he continues. "We are focusing on rape as a crime. We can't view it any other way."

Note: On May 14, the Interfraternity Council and the Panhellenic Council will be sponsoring a seminar on date rape in the Student Center at 6:30 p.m. Dr. Robert Hatcher, an expert on sexual etiquette from Emory University, is expected to speak.

Briefly...

Catch The Wave! Learn Oracle! -Phyllis Huster will lead a seminar on May 15 at 4 p.m. designed to introduce users to the Oracle/MacIntosh application development product. The seminar is planned to be held in Classroom 2000 and will provide hands-on demonstration of existing Tech applications. This seminar is ideal for those unfamiliar with Oracle/MacIntosh or those strategizing the use of Oracle in their long-term plans. Students must bring their original account name and password to the seminar. To register, call 4-4660.

Write Letters That Get Results - The seminars committee of the Environmental Forum has planned a 45-minute workshop on effective letter-writing. The workshop, to be held on May 22 at 11 a.m. in Student Center Television Lounge, will focus on writing letters to legislators and newspapers. State Senator Hildred W. Shumake and a representative of the Environmental Project will be on hand to advise.

Spring Luncheon - Laura Martin, author and Atlanta Journal/Constitution columnist, will give a presentation on southern wildflowers at the Georgia Tech Faculty Women's Club Spring Luncheon on May 16. The luncheon will be held at Anthony's Restaurant (located on Piedmont Road); cost is \$17. The group will also be presenting the first Tech Faculty Women's Club Scholarship and installing new board members. For more information, call Dianne Enslow at 981-4187.

Karlovitz To Be Remembered May 17

A service of remembrance will be held for former Dean of COSALS Dr. Les Karlovitz on Thursday, May 17 at 11 a.m. in the Tennenbaum Auditorium (located in the Management/ISyE Complex). Refreshments will be served afterwards.

Karlovitz died April 2 in Seattle, Wash. He was 53 years old.

Research...

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engineering students, says Dr. Rolf Sinclair, program director for the National Science Foundation's cross-disciplinary programs in physics.

'We're not getting enough women and minorities into the pipeline," Sinclair adds. "We have to reach out and pull them in."

The NSF sponsors REU programs at universities throughout the U.S., but not all of them target a specific group of students.

Participants in Tech's REU physics program are usually rising seniors at southeastern colleges that do not offer graduate degree opportunities. Graff hopes the summer session allows her students to make an informed decision about graduate school. At the same time, she says, the program provides students with a reasonable summer income-\$2,500 for 10 weeks.

During last year's session, Graff remembers, students experienced the full gamut of emotions common to laboratory researchers. Initially, they were "very buffaloed by the laboratory atmosphere," she says, and most were discouraged by the half-way mark. But positive results at the close of the session made everyone "drunk with power."

"We went through the full cycle, and I hope we can pull that off

again this year," Graff says. "We want them to experience the highs, but it's also important to learn that experimental physics is a tough business and you have to work your way through a lot of problems."

Graff shares responsibility for the REU program with four other Tech faculty members: Drs. Kevin O'Donnell, Jim Gole, Raj Roy, and Turgay Uzer. Each faculty member directs two REU students during the

For the past 10 years, Tech has also provided an REU program in the School of Chemistry, directed by Dr. Kent Barefield. By summer last year, Barefield says, 69 students had participated in the program. Of those, 43 went on to graduate school in chemistry, and 18 of 43 selected Tech, he says.

Often guided by Tech's Office of Minority Educational Development, Tech's minority recruitment efforts have apparently paid off. In 1986, Tech placed fifth (just below four predominantly black institutions) among all U.S. engineering schools for the number of black B.S. graduates. During the 1988-89 school year, minority students represented 11 percent of the total student body in science and engineering programs.

But just what is "laser-induced plasma spectroscopy," anyway? These days, Hammond is prepared to explain.

"It's an analysis technique," he says. "Basically, we're hitting this metallic rod with a laser, and that creates a plasma. Then the plasma is carried along by a gas, and we can perform spectroscopy (a chemical analysis procedure) on the light emitted from the plasma. We learn about molecules that way."

Job Hunting?

If you're looking for employment opportunities, call the Job Line in the personnel office-ext. 4-4592.



School of Physics Professors (L-R) Kevin O'Donnell, Turgay Uzer, Margaret Graff, Jim Gole and Raj Roy review Research Experience for Undergraduates applications

Thomas Tornabene Named Associate Dean Of The College Of Sciences

Dr. Thomas G. Tornabene, professor in the School of Biology, has been named associate dean of the College of Sciences, according to Dean of the College of Sciences Robert A. Pierotti.

Tornabene joined the Tech faculty in 1981 as professor and director in the School of Applied Biology; he has also served as director of the Research Center for Biotechnology.

Before coming to Tech, Tornabene worked at the Solar Energy Research Institute and at Colorado State University's Department of Microbiology.

He received his B.S. in Biology from Saint Edwards University Seminary in 1959, and he also earned a M.S. in immunochemistry (1962) and a Ph.D. in biological chemistry (1967) from the University of Houston.

In addition, he is a member of the American Society for Microbiology, Sigma Xi, the American Society of the Advancement of Science, and the American Oil Chemist Society.

Pierotti said that Tornabene will play a special role during the development of the College of Sciences with its planned increased emphasis on the biosciences.

"His [Tornabene's] knowledge of the undergraduate programs and issues in the various schools and departments of the College of Sciences," Pierotti said. "as well as his particular interest and understanding of the issues associated with interdisciplinary research programs in biology, biochemistry, biophysics and biotechnology will make his role in the dean's office particularly valuable."

Students To Participate In Georgia Intracollegiate Games This Weekend

On Saturday, May 19, college students throughout Georgia will come together to compete in the 1990 Georgia Intracollegiate Games. The public is invited to attend and show their support in bringing the 1996 Summer Olympics to Atlanta.

This event is sponsored by the Atlanta Organizing Committee (AOC) and presented by the Georgia Tech Olympic Coalition (GTOC), a group of faculty, staff, students and alumni working to bring the 1996 Summer Olympics

Opening ceremonies for the daylong event will begin at 9 a.m. According to GTOC Director Michael D. Furman, Olympic gold medalist Antonio McKay is scheduled to sprint into Bobby Dodd Stadium/ Grant Field and light the Intracollegiate Games torch.

Following is a list of events and locations for the 1990 Intracollegiate Games: Track (George C. Griffin Track), 3-on-3 Basketball (Student Athletic Complex, Peter's Parking Deck, West Campus courts), Volleyball (SAC, Heisman Gym), Swimming (SAC).

Other events include: Windsurfing (to be held at Lake Lanier), Ultimate Frisbee (SAC fields, Bobby Dodd Stadium/Grant Field), Racquetball (SAC), Singles Tennis (Bill Moore Tennis Center), Bowling (Student Center), Billiards (Student Center), Weightlifting (SAC), Table Tennis (O'Keefe Gym), and Golf (to be played at Bobby Jones Golf Course).

Over 400 gold, silver and bronze Olympic style medals will be awarded in the various events. Closing ceremonies are scheduled for 7 p.m. at Alexander Memorial Coliseum.

For more information about the 1990 Georgia Intracollegiate Games, call Event Chariman Marc Klein at 873-2862 or Furman at 853-9483.



State Senator Hugh Gillis (R) of Soperton receives a Certificate of Appreciation from President John P. Crecine during the Tech "Showcase" Alumni Dinner on May 3 in Vidalia. Also honored at the event were State Representative Lundsford Moody of Baxley and Representative Transfer of the Company of the Comp Representative Fisher Barfoot of Vidalia.

What's next

ACADEMICS

May 16 - Academic Advisement for Summer/Fall Quarters 1990, through May 18 May 18 - Early registration, Phase I for Summer/Fall Quarter 1990, through

ARTS & ENTERTAINMENT

May 17 - Comedian, Jordan Bray, 7 p.m., Student Center Ballroom
May 18 & 19 - Movie, "Born On The Fourth Of July," 7 p.m., 9:45 p.m., & 12:30 a.m., Architecture Auditorium, \$1

May 21 - TTN, "The Adventures of Baron Munchausen," through May 27, Student Center, 1st floor

LECTURES & SEMINARS

May 17 - Presbyterian Center Series, "Conversation With Kathryn Cartledge," director of Atlanta Interfaith AIDS Network Inc., lower level, 11 a.m., lunch \$2 Structural Mechnics Seminar, Roger Wehage, mechanical engineer, "Fullscale Computer-based Simulation of Military Vehicle Systems," 3:05 p.m., SST #2

May 18 - Institute of Paper Science & Technology Series, Barbara Burns,

"Initial Phase of Wood Pulp Chlorination," 11 a.m., Paper Science Bldg.,

May 21 - Electrical Engineering Series, David Priester, GSPE/TRW, "Engi-

neering Ethics," 3 p.m., Van Leer Bldg., Rm. C241
College of Engineering CIMS Series, Robert E. Osborne, Cybernated Automation Corp., "CIM and Other Dinosaurs," 4 p.m., Instructional Center, Rm. 209
May 21 - Chemical Engineering Series, Jean Louis Lenard, Georgia Tech, "Thermodynamic Properties of Electrolyte Solutions," 3 p.m., Bunger-Henry

GEORGIA TECH CLUBS, CALL 4-2391

May 15 - Knoxville, Bobby Ross May 16 - Kingsport, Bobby Ross

May 17 - All Yellow Jacket Committees, Annual Yellow Jacket Celebration

May 18 - Chicago, Gene Griessman, Rick Roberts

May 23 - Gainesville, Bobby Ross May 24 - Denver, Gene Griessman

Classifieds

For Sale - 1983 Mercury Lynx Station Wagon. CHEAP! Needs some work; 1985 Suzuki GS550E Motorcycle. Also needs work. Even Cheaper! Call Gary at 4-8698 and leave message.

For Sale - 4X4 utility trailer, \$90. Very good condition. Presently rigged for jet ski (easily removed). Call Charles at 4-4010 or 457-4651.

For Sale - Swivel rattan rocker, \$75. Call 634-6142 after 6 p.m.

For Sale - 1975 Honda Motorcycle, CB360T. Excellent condition, only 8,500 miles driven. Always garaged, \$600. Call Ken Hall at 4-5559 or 261-2642.

For Sale - Pedigree Persian cat, spayed and declawed, free to good home. Call Joanna at 4-4511.

For Sale - Pontiac Sunbird GT. 2-door, auto, red, excellent condition. \$5,800. Call Connor at 4-3969.

For Sale - Wilson Profile 2.7 midsized tennis racquet. New strings, 41/2 in. grip., excellent condition, \$125. Call Frank at 4-6789 or

For Sale - Two matching white contemporary love seats w/loose back cushions. 2 pecan end tables w/glass tops. All in excellent condition. Sold separately or as a set. Price negotiable. Call Ms. Pritchett 528-7545 or 424-6852.

Roommate Wanted - Need M/F roommates for 3 BR, 3 BA apt. \$225/mo. plus utilities. 2 tennis courts, 2 pools, jacuzzi & weight

rm., on Franklin Road in Marietta. Call Ken at 4-3295 or 424-5847 to leave message.

Summer Sublet - 2 BR home of faculty member, will be away July-August. Ideal for couple. W/D, A/C, fenced yard, Inman Park. \$490 negotiable. Call Mark at 522-0858 to leave message.

For Rent - 2 BR house w/screened porch, 6 mi. N.W. of campus. Refrigerator & stove, new carpet & paint. \$350/mo. plus utilities. Call Mr. Lilly at 4-3584 or 992-4644.

For Rent - 2 BR, 2 BA condo near Cumberland Mall. Furnished or unfurnished for \$600/mo. Call 4-4126 or 434-4359.

For Sale - 3 BR, 2 BA brick ranch on over 4 acres, 40 mi. from Tech. Over 1500 sq. ft., fireplace insert, den, remodeled baths. Fruit trees, 1.75 acres fenced pasture, large storage bldg. on property. Property zoned agricultural in Bartow County. Asking \$79,900 negotiable. Call 4-8520 or 386-7102.

For Sale - Counter tops & cabinet doors left over from kitchen & bathroom remodeling. Will bring in sample or show you the materials at my home. Also have used sliding glass patio doors w/screen & frame. Call Richard at 4-2682 or 377-0058.

For Sale - Two boys' 10-speed racing bikes, 20-inch wheels, red, good condition, but one needs a new tube, \$30 each; four pairs lined cream-colored heavy damask drapes, fits standard window to floor, \$80 total. Call Edith at 4-8758 or 458-2473 after 8 p.m.

For Sale - DTK PC compatible, turbo XT, 4.7 and 10 MHZ, 20 megabyte hard drive; Panasonic printer model KX-P1180; and EGA color monitor. All equipment is 5 mos, old, still under warranty. All packaging and manuals included. Hard drive is empty except for Word Perfect 5.0 and Wattfor 77 Fortran compiler. \$850 or best offer. Call Henry Strzelecki at work 528-7109 or home 373-1799.

A Reminder About The "Faculty Forum"

Normally, the Whistle staff and its contributing writers are the primary sources for story ideas in this paper. However, the "Faculty Forum," a new feature of the Whistle, depends on our readers' ideas and opinions about campus issues.

The editorial review committee for the "Faculty Forum," consisting of Bud Foote (Language, Communications and Culture), Ruth Hale (Library) and Eugene Comiskey (Management), will select column material. Whistle Managing Editor Jackie Nemeth will adjust the piece to Associated Press Style Book format without changing the content.

A disclaimer box will appear at the end of each "Faculty Forum." The box will list editorial review committee members and topic matter for essays, as well as where to send essays for selection.

The following disclaimed will also be printed in the box: "Opinions expressed on this page (or these pages) do not necessarily reflect the views of the administration of the Georgia Institute of Technology, the Editorial Review Committee, or the Whistle staff."

If you are interested in sharing your thoughts about issues that affect the Tech community, please submit a double-spaced, 500 to 750-word essay to Foote, 326 Skiles, mail code 0165.

Nemeth, Dudley Take On Whistle **Editing Reins**

Jackie Nemeth, who had served as acting managing editor of the Whistle since January, was recently named managing editor of the publication.

"Jackie has done an outstanding job with her new duties, and I know the Tech community will be pleased as she seeks to expand Whistle coverage," says News Bureau Director Charles Harmon.

Nemeth joined the News Bureau staff in the fall of 1988.

Meanwhile, Harmon has announced that Vera L. Dudley is the new contributing editor of the Whistle. Dudley had served as acting contributing editor since the first of the year. She came to Tech in October 1988.

"Vera is a talented team player and is a fine complement to Whistle operations," Harmon says.

People

Economics

Associate Professor Thomas D. Boston's book, Race, Class and Conservatism, was reviewed in the March Journal of Economic Literature as "...an exceptionally useful book for its unabashed and forthright investigation of class differences among black Americans."

Professor W. Carl Biven was recently featured in the Executive Speaker Series of the School of Business at Savannah State College. Biven spoke on the theme of his recent book, Who Killed John Maynard Keynes?.

Professor William A. Schaffer recently delivered the Charles Tiebout Lecture at the Pacific Northwest Regional Economics Conference in Bellingham, Wash.

whistle

News for the Georgia Tech Community

Gary Meek.....Photographer

Publication is every Monday during fall, winter and spring quarters and biweekly summer quarter. Deadline is Friday noon, 10 days before publication. Address: News Bureau, mail code 0181 (Wardlaw Center, 177 North Avenue), 894-2452. Tech PROFS computer users may file news items with the News Bureau by sending electronic mail addressed JLNEMETH. Cost/\$685

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