Health Center director on risks associated with tuberculosis

Dr. Cindy Smith
Director, Georgia Tech Student Health Center

Last week a confirmed case of active tuberculosis (TB) was recorded on the Georgia Tech Atlanta campus. The student was immediately placed under quarantine and is receiving the necessary antibiotic treatment. The student will not be allowed back to campus until it is certain that there is no danger of spreading the organism. While this news will impact a very, very small number of people on campus, it is important that everyone has factual information regarding tuberculosis.

For tuberculosis cases, thoroughness is more important than speed, as TB has a fairly long gestation period. Therefore, the Health Center will work with the student and the Fulton County Health Department to notify everyone who needs to be notified and possibly screened. Fulton County will organize times and locations for Mantoux skin testing of anyone they identify as having possibly been exposed. Georgia Tech has worked with Fulton County in the past regarding cases of active TB on campus.

As for the disease itself, it’s important to understand the difference between active TB and a positive PPD, or skin test for TB. Active TB is characterized by a cough, usually productive of sputum, which may be bloody or blood-speckled. Other symptoms to be aware of are night sweats and weight loss. This is the type that may be contagious and is transmitted through the air. The student will not be allowed back to campus until it is certain that there is no danger of spreading the organism.

In a message from President Clough on campus emergency procedures

G. Wayne Clough

With increasing international tensions and talk of war and terrorism around the world, I want to take this opportunity to update you about Georgia Tech’s emergency planning procedures. While I hope that we will never have to use them, I want to do everything possible to ensure the health and safety of everyone in the Tech community. Even with the recent lowering of the terrorist threat level, awareness and preparation are our best defense.

Georgia Tech’s emergency planning processes have evolved considerably over the last few years. We have always had solid plans in place for health, crime, or natural or man-made emergencies on our campus. But since 9/11, the magnitude of our planning has changed by necessity. We have become keenly aware of the (albeit small) potential for larger scale emergency situations. It is a sad commentary on the society in which we live, but it is a reality that we must deal with nevertheless.

With the potential for war in Iraq and terrorism in the United States and abroad, Georgia Tech is in a higher state of preparedness and awareness. We are in continuous contact with emergency planning officials at the local, state and national levels. Our Housing Department created an extensive emergency preparation process. Our research security is considerably more sophisticated with access control, identification of residents/visitors and control of parking. And I hope that everyone is combining a heightened sense of awareness with a sizeable dose of common sense.

While I want to emphasize that

Predicting the weather for better crop yields in SW Asia

Jane Sanders
Research News

A recently devised method for forecasting monsoon weather in Bangladesh could improve agricultural production in South Asia and equatorial Africa, according to a climate researcher in the School of Earth and Atmospheric Sciences.

The new technique produced 20- to 25-day forecasts of rainfall in the Ganges Valley of Bangladesh during the summer of 2002. The forecast closely mirrored actual precipitation for the season, according to U.S. State Department-funded research led by Professor Peter Webster and his students.

In the future, such forecasts could guide farmers in choosing optimal planting times and making other decisions, such as better water management, that affect crop production, Webster said.

He presented his findings at last month’s annual meeting of the American Association for the Advancement of Science (AAAS).

“Forecasting weather a few days in advance is not particularly useful for agriculture,” Webster said. “What is needed is a 20- to 25-day forecast. We are able to do that with our new method. We could have predicted the month-long break in the monsoon rains that lasted from the end of June to early July and which caused a $6 billion loss in crops in the Ganges Valley. If farmers had this forecast last summer, they could have changed agricultural practices, such as delaying the planting.”

Webster’s forecasting method is applicable to the rainy season of any monsoon region and adjusts for precipitation changes related to temporary climatic events such as El Niño and La Niña. Last year was an El Niño year and, as expected, it resulted in decreased precipitation on the Indian subcontinent.

The method — developed with graduate researcher Carlos Hoyos — is essentially statistical, but depends on a detailed knowledge of the dynamics of the atmosphere and the ocean, which produce monsoon variability on monthly time scales. Many years of theoretical modeling and experimental research in the Indian Ocean have given researchers an understanding of the physical nature of the oscillation. Meanwhile, much of what researchers understand about the nature of the variability comes from a research cruise Webster led in the Bay of Bengal in 1999.

Webster is now intent on making this type of forecast — and a future version for flood prediction — available to agricultural and other stakeholders.
Maple named to national board serving museums and libraries

Sean Selman
Institute Communications
and Public Affairs

Terry Maple, a professor of animal behavior at Georgia Tech and president emeritus of Zoo Atlanta, recently took an oath of office as a member of the National Museum Service Board during a ceremony administered by U.S. Supreme Court Justice David H. Souter.

A researcher in the School of Psychology, Maple was one of 10 new board members nominated by President George W. Bush and confirmed by the U.S. Senate for the museum board. He will continue to raise funds and direct the new Center for Conservation and Behavior, a Georgia Tech research center dedicated to studying animal behavior and how zoos might help endangered species.

In all, there are 15 members of the National Museum Service Board, which advises the director of the Institute of Museum and Library Services (IMLS) and makes recommendations for the National Award for Museum Service, the nation's highest honor for extraordinary public service provided by America's museums.

"The National Museum Services Board takes an active part in championing the role museums play in our society," IMLS Director Robert Martin said. "Together, the board and the Institute have the responsibility to place a national spotlight on the outstanding work that America's museums do, and on the enormous contributions they make serving our communities and sustaining our cultural heritage."

The IMLS is an independent federal agency and a primary source of federal grants for the nation's 15,000 museums and 122,000 libraries. Its grants and leadership help museums care for collections, expand public-education programs, partner with community organizations and use new technology. Congress established the National Museum Services Board in 1976. Members are selected from among citizens recognized for their broad knowledge, expertise or experience in museums or commitment to museums.

Until this past January, Maple was president of Zoo Atlanta, a post he had held since his appointment by then-Atlanta Mayor Andrew Young in 1984. At that time, prior neglect, mismanagement and lack of funds had led to the deaths of several animals, the loss of Zoo Atlanta's accreditation from the American Society of Zoological Parks and Aquariums, and the notoriety of being named one of the 10 worst zoos in the country by the Humane Society of the United States.

During his tenure, Maple helped turn Zoo Atlanta into one of the nation's finest, attracting national awards and an increase in annual visitors. In 1999, the year after two giant pandas arrived, the zoo hit an attendance record of 1 million visitors. It also became one of metro Atlanta's top attractions.

Maple remained on Georgia Tech's faculty during his tenure at the zoo, specializing in animal behavior in the School of Psychology. He will continue to work in that area while heading up the Center for Conservation and Behavior, said Gary Schuster, dean of the College of Sciences.

Maple is the founding editor of the professional journal Zoo Biology and is the author and editor of more than 120 scientific publications. He is an elected Fellow of the American Psychological Association and a former president of the American Association of Zoological Parks and Aquariums.
Women's Awareness Month: a calendar of events

March 18
*The World Through Gilman's Eyes*
An examination of the major influences on the life and writing of foundational feminist Charlotte Perkins Gilman, 3 p.m. in the Student Center Ballroom.

March 20
*The History of Women at Tech* with Marilyn Somers
Director of the Georgia Tech Alumni Association Living History Program, Somers will provide additional insight of the exhibit currently on display, 4 p.m. in the Library.

March 24
Take Back the Night
An evening to raise awareness about sexual violence and assault, followed by a march through the campus and a reception, 8 p.m. at the campanile.

March 27
Molly Ivins
Nationally syndicated columnist and political commentator visits Ivan Allen College as part of its Founder's Day Celebration, at 1 p.m. in the Student Center Ballroom.

March 28
*The Next 50 Years*
This town hall meeting will discuss the possibilities for women of Tech in the next half-century

March 28
50 Years of Women Celebration
A banquet dinner to celebrate the accomplishments and contributions of women over the last 50 years. Limited space. For more information, e-mail gte353n@prism.gatech.edu.

IN BRIEF:

Homeland Security means changes at INS
When President George W. Bush signed the Homeland Security Act of 2002 into law, it marked the largest governmental reorganization in more than 70 years. Among the changes, the Immigration and Naturalization Services (INS) has been reorganized through the Department of Homeland Security (DHS). Effective March 1, the INS no longer exists and is now known as the Bureau of Citizenship and Immigration Services (BCIS).

As a result, the following business practices have been impacted:
- All future check requests are to be made payable to the BCIS (Bureau of Citizenship and Immigration Services).
- Filing fees have changed.
- New web address: www.immigration.gov

For additional information, refer to www.immigration.gov

Illness claims GTRI researcher
On Feb. 7, George McDougal, a research engineer in the Electronic Systems Laboratory (ELSYS) of the Georgia Tech Research Institute, died after an extended illness. He was 52.

McDougal, or Mac, as he was known to his peers, began his career at Tech more than 30 years ago as a co-op trainee while still an undergraduate student. He was a national expert in testing electronic warfare systems and one of the key developers of the Electronic Combat Test Process — the approach adopted by the Air Force to apply scientific methodology to testing electronic combat systems before operational use.

ELSYS Director Bill Rogers said, “Mac had a determined, no-nonsense approach to getting the job done. He was highly efficient and motivated. Mac loved his work and the people he worked with. Mac tried to be gruff, but just couldn’t pull it off after you knew him.”

At various times in his career, McDougal served as a branch head, an associate division chief, an associate lab director, and finally as chief of the Systems Evaluation Division, managing about 100 researchers/students/support staff. Many of his co-ops became full-time GTRI employees after graduation.

McDougal was also active in his community, serving as a coach for little league baseball at Shaw Park, or basketball at J.J. Daniel Middle School and for the Special Olympics. He is survived by his wife, Margaret, and two sons, Chase and Adam.

Those who wish to make contributions in McDougal’s memory may do so to Camp Gilsson, 865 Camp Gilsson Road, Dahlonega, Ga., 30533.

Pi Mile Road Race
On Saturday, April 12, the Alumni Association holds its annual Pi Mile Road Race — a 5-kilometer trek through campus for faculty, staff, students and alumni, as well as a 1-mile fun run. Early registration is before Friday, April 4, but participants may register up to the day of the race.

For more information, refer to www.gtalumni.org/pimile or call 894-7085.