FOCUS

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TRACK FINISHES STRONG

Ashley Kidd placed 10th in the 400-meter dash at the NCAA Outdoor meet and was selected to represent the U.S. in the 4 x 400 meter relay. **Page 16**

A CREATIVE DATE DESTINATION?

Does This Sound Like You?, a collection by local artist and photographer Sarah Hobbs, explores common psychological issues of singles. **Page 11**

Valencia study abroad embarks on initial trip

By Lindsay Deal
Focus Editor

Tech's new study abroad program in Valencia offers Biology and History, Technology and Society courses. Twelve sophomores, juniors and seniors are currently studying overseas as part of the program's inaugural year.

Valencia, Spain's third most populated city, is the capital of the autonomous community and province of Valencia. It is located in the Spanish Levante, on the Mediterranean shore. Students enrolled in the program are out of the country from May 22 to July 28, each receiving six to nine credit hours.

Terry Snell, a Tech professor of biology, is the program organizer and supervisor of undergraduate research. Snell has had a research collaboration with several scientists at the Institute Cavanilles for more than fifteen years.

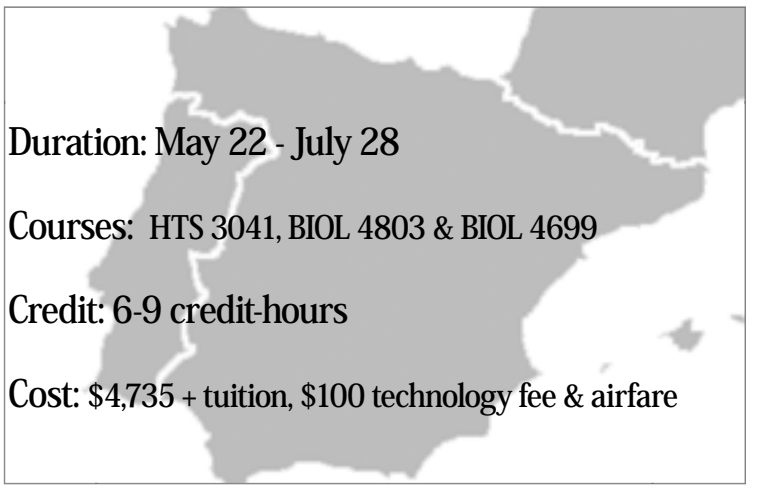
His personal connections and knowledge of the facilities and regional ecosystems formed the launching pad for this program. Snell also teaches Biology 4803, Mediterranean ecology for the program. Six students have opted to do undergraduate research, and twelve are taking Mediterranean ecology and HTS 3041 Modern Spain, taught by John Tone, a History, Technology and Society professor.

"Mediterranean ecology is primarily a field course with several field trips to mountains, rocky coast marshes and rivers where students design and execute short research projects," Snell said.

Some of these include the comparison of maternal and paternal contribution to nestling rearing in birds, the effects of inbreeding on spine asymmetry in rotifers, the genetics of bacterial symbiosis in insect stomachs and the characterization of parasites infecting mediterranean fish.

Photo Courtesy Terry Snell

A group of study abroad tudents stand outside of the entrance to a cathedral during one of their many field trips in Valencia.



Snell said the students are expected to collect and analyze data, and then complete a presentation poster of their findings by the end of the semester.

The Modern Spain course also includes several field trips, such as visits to cathedrals, museums, castles, Roman ruins and sites with Neolithic cave drawings.

Sophia Fisher, a second-year Biology major, said she had originally looked into the Oxford program, but decided it was not the best fit for her major. "My advisor told me about this program, and everything clicked," she said.

Because Valencia is not a true tourist city, according to Fisher, students must really immerse themselves into the Spanish culture. In her free time she has spent a four-day weekend in Seville where she visited the Real Alzacar Sevilla (the royal palace in Seville), viewed the cathedral, and attended Mass.

Fisher said she tries attend mass daily because there she has befriended an older Spanish woman who speaks no English.

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New York Times columnist asks: Is world really flat?

Friedman features Tech's "right stuff" in his latest edition on globalization

By Manu Raghavan
Contributing Writer

You have probably heard the soundbite-sized arguments from politicians about the future of jobs in this country. More than likely you've also spotted the "Made in China" product label stuck on an increasing number of the items you buy. You might have even had a friend or family member experience sudden layoffs, and all the while you are thinking something like that could never happen to you. The point of *New York Times* columnist Thomas Friedman's latest edition of '*The World Is Flat, A Brief History of the Twenty-First Century*' is this: Don't be so sure.

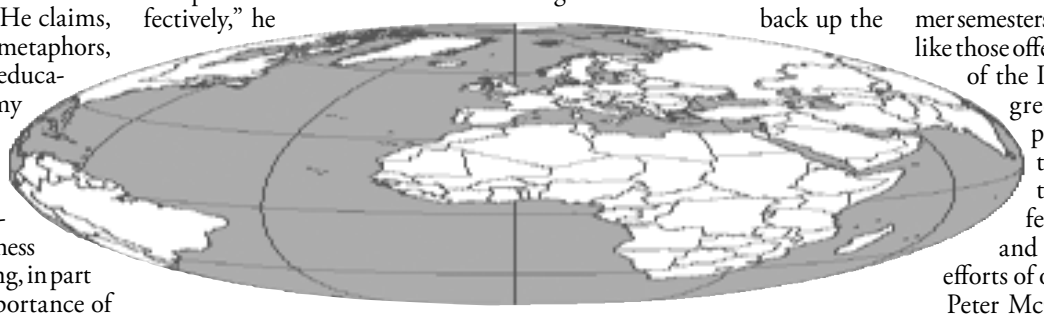
Having earned three Pulitzer Prizes in the past two decades for commentary on such issues as the convoluted politics of the middle-east, terrorism and economics, Friedman, shifts his attention to what he calls "the quiet crisis" of our time – the impact of globalization on American industry. He claims, through anecdotes and metaphors, that having the "right education" in the new economy will be far more valuable than simply earning a degree.

Friedman tries to illuminate many recent business trends, such as outsourcing, in part by highlighting the importance of having good engineering education programs for the health of economies- a notion that is highly relevant to Tech students. Friedman's anecdotal style gains even more relevance as it includes a feature of the Georgia Tech model of engineering education with significant ideas presented by Institute President Wayne Clough and Richard DeMillo, dean of the College of Computing.

"From talking to people who come to hire our students, [we've realized that the graduates] in high-wage countries, like the United States, have to justify what they [earn] to their employers," Clough said.

Clough elaborated that to keep demanding high-wages relative to the rest of the world, workers in the U.S. have to be able to offer more than the traditional, learnt-by-rote engineering skills which can be offered by workers elsewhere for a far cheaper price.

"I want to see a graduate of [Tech] to do more by creatively anticipating, dealing with and maybe even provoking business situations. These situations will require graduates to see the big picture, know how to tie together knowledge from different disciplines and communicate effectively," he said.



In a chapter titled "The Right Stuff", Friedman praises Tech's approach to engineering education as "a thoughtful approach" by identifying what he believes are the necessary prerequisites for providing the "right education" to deal with twenty-first century's challenges. These skills include working across traditional academic areas to form interdisciplinary research groups, offering students creative outlets (such as the music program) and creating opportunities like study abroad programs for students to gain communication and cultural skills.

In particular, Friedman sings the praises of Tech's music program and campus music groups like the symphonic band. He said that these programs, in sync with a rigorous technical education, help develop both sides of a student's brain and contribute to not only a more interesting education, but also a more valuable one.

All said and done, how do we know if any of this stuff works? Clough acknowledged that "some of that is a hypothesis," but did acknowledge some evidence that existed to back up the claim. Thomas Galloway, dean of the College of Architecture, whose office oversees the Music Department, points to evidence of positive effects of the program on student retention and graduation rates.

"You can see the impact [of the Music Program]. We did some studies five or six years ago. The retention rate was significantly higher for students [undertaking music-related activities] than for students who did not. There was a statistically significant difference in the retention rate," he said.

> "I want to see a graduate of [Tech]...see the big picture, know how to tie together knowledge from different disciplines and communicate effectively."
>
> **Wayne Clough**
> Institute President

Tech graduated 11 percent more of its cohort in 2005 than in 1994. Tech is also pushing to create a wide variety of international work/study options, ranging from study abroad in summer semesters to year-long programs like those offered under the auspices of the International Plan degree designation. Such programs are believed to be of much value to students, based on feedback from surveys and from looking at the efforts of other colleges.

Peter McGuire, associate dean of the Ivan Allen College, believes that many other highly regarded engineering programs around the country, like those offered by Stanford and MIT, are also creating space in their degree programs to offer study abroad opportunities.

Clough explains that Tech is ahead of the curve on that metric because it offers major-related engineering courses abroad, and doesn't just ask students to "save up their humanities credits" to be able to take classes abroad.

What's more, Tech alumni feel that they have gained more significant value from study abroad programs at Tech during their time here than any single other initiative they participated in. A recent survey conducted by the Office of Assessment concluded, with large response from Tech graduates five years into their careers, that "study abroad was very helpful in advancing [their] job[s]".

Despite a great deal of emphasis that Friedman places on the competitiveness of graduates of American universities, he only tangentially addresses the competitiveness of the universities themselves.

While much has been written and spoken about the vulnerability of American industry to globaliza-

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tion, little has been discussed about universities as an industry in themselves, using them as a case study for the effects of globalization.

With a significant foreign student population at many American universities, the U.S. higher education system has increasingly come to rely upon their contributions to research as well as to the coffers. Tech, with 17 percent of its overall population and 40 percent of its graduate population composed of foreign students, is no exception.

Foreign student enrollment in American universities has started to drop recently, however, as part of a nationwide trend, while surging in Europe and Asia where tuition costs are heavily state-subsidized. This trend is making the U.S. higher education system just as vulnerable to the demands of globalization as its counterparts in industry.

Friedman quotes a *New York Times* education report written in 2004 that stated a drop in foreign student enrollment in American graduate schools "for the first time in three decades," but does not expand his treatise to discuss the potential vulnerability of these schools themselves in any detail.

What could the U.S. higher education system offer, apart from the promise of higher wages, to entice foreign students? Based on his knowledge of global education systems, Gary Schuster, dean of the College of Sciences, believes it's work in a liberal academic environment that other countries' education systems tend to suppress. "I've traveled extensively in China and India and one of the things that the U.S. higher education [system] currently offers which China and India do not, is a competition of ideas [instead of] a competition of status. That makes students in the U.S. inquisitive and willing to challenge all of the answers . . . [which] may become the foundation for demanding wages that are four or five times higher than those in China and India."

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>
> **Gary Schuster**
> Dean, College of Sciences

The liberal social environment that surrounds exchanges between students and professors, despite hierarchical differences, is what Shyam Seshadri, a fourth-year Electrical Engineering student, believes could be worth the price in American education.

Having studied in Bombay and Atlanta, Shyam recounted his amazement when he compared the average exchange between a professor and a student in India with one typical of the Tech campus.

"I compared an e-mail a friend [from India] wrote to a professor there with an e-mail I wrote recently to my professor here. His message, even if was regarding a trivial request, would start out with 'Dear Sir/Madam' and end with 'Sincerely' and would be apprehensive and formal throughout. I don't feel inhibited by hierarchy and formality anymore in talking with professors," he said.

He also said that it contributed to an open exchange of ideas in his academics.

Valencia

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Photo Courtesy of Terry Snell

John Tone, a professor from the School of HTS, explains the history of the silk exchange to a group of Tech students in Valencia.

Fisher explained that much time is spent simply wandering about the city. "Valencia has this park that used to be a river until they diverted it, and it's gorgeous and fairly clean, so sometimes I walk up and down it," she said.

Though the program is clearly in its infancy, Snell had significant expectations. "My hope is that the students will gain maturity as biological scientists by observing new ecosystems, experimenting with new plant and animal groups, and observing how scientists in another country execute research. I further hope that these students will develop an appreciation for the historical events that have led Spain to its current position in Europe and the world as well as the delights of Spanish food, monuments, music, dance, landscape, beaches, and people," he said.

Tech Up Close

THIS WEEK'S PHOTO:

By Jamie Howell/ STUDENT PUBLICATIONS

CAN YOU FIGURE OUT WHERE ON CAMPUS THIS PICTURE WAS TAKEN?

Email **focus@technique.gatech.edu** if you think you know the answer.

The first correct response will win a free *Technique* T- Shirt.

You know you want one.