Then and Now: MET Computer Science at 30

witnessed by computer science over the last three decades. From mainframes and key punch operators to wireless networks and cyber security, constant transformation has been the name of the game.

Amidst this transformation, however, there has been one constant: MET’s Department of Computer Science has been at the forefront. Officially founded in 1979, it is the first and oldest computer science department at Boston University. To celebrate its thirtieth anniversary, faculty, staff, students, and alumni gathered to reminisce. With the help of Victor Shtern, who began teaching computer science at MET three years before the discipline developed into a whole department, current Chair of Computer Science Lou Chitkushev provided guests with a look at the then and now of an ever-evolving discipline.

Since Shtern accepted a teaching salary of one-thousand dollars in 1976, the Department has grown to include ten full-time and innumerable adjunct faculty whose expertise has garnered teaching awards, competitive grants, and respect from industry leaders. The Department’s one master’s degree and single computer lab have evolved into three master’s degrees, nine graduate certificates, and six laboratories.

Along the way, MET faculty introduced Boston University to C++, object-oriented analysis and design, and an information security curriculum that would earn the University distinction as a Center of Academic Excellence in Information Assurance—a status conferred by the National Security Agency. The Department has also pioneered distance learning, from the early years of

continued on page 6 >

An Interview with the Governor of Virginia

THIS JANUARY, MET ALUMNUS ROBERT MCDONNELL (MET’80) WAS SWORN IN AS GOVERNOR OF VIRGINIA. Governor McDonnell holds a master’s degree in public policy, a law degree, and a master of science in business—the latter from MET, which he earned while stationed with the U.S. Army in Grafenwohr, Germany.

Governor McDonnell’s impressive resume includes time in the private sector, decorated service in the Virginia state legislature (1991–2005), and a distinguished term as Virginia’s Attorney General (2006–09). On the eve of his inauguration, he offered his reflections on his time at MET and the many roles of higher education—in his own career and in the contemporary economic climate.

continued on page 8 >
a message from Dean Halfond

As we navigate our way through this recession, Metropolitan College is in the midst of its best year ever. Our enrollments are strong—two-thirds of our programs are experiencing growth—and we predict a record financial performance. Both on-campus and online enrollments are on the rise.

Recessions test enterprises like ours. Fortunately, our diverse and unique program portfolio, reputation, and academic standards have positioned us well for a much more volatile environment. This past fall, we celebrated the thirtieth anniversary of our computer science department—BU’s first entry into this field, and, I would argue, New England’s most influential site of information technology education. The computer science department has educated members of the workforce that ushered in the information revolution—it is, in other words, one of the institutional leaders in the national epicenter of information technology, and its programs and graduates have contributed substantially to the social transformation of our times. And this is just one of many roles MET has played. We make a difference: we don’t simply replicate what others do. To quote one of our faculty, MET is boldly traditional.

Our responsiveness is exemplified by the courses and programs we offer, where and how we deliver that instruction, and the ways we connect to prospective students. Our computer science department demonstrates our incubation of emerging academic fields. Our commitment to quality online education demonstrates our willingness to experiment with new ways of teaching. And our array of scholarships, corporate partnerships, and global academic relationships demonstrates our outreach to students locally, nationally, and globally.

This issue celebrates some of our milestones: two decades of culinary training, three decades of computer science degrees, new faculty, dynamic students, and accomplished alumni. In the broad sense, nothing is new. We continue to be proud of our people and our achievements—only with new examples to share and stories to tell. MET benefits by, strives to protect, and helps create and extend the reputation of a great university. We are both aspirational and entrepreneurial—striving to be better, engaged, and current in all that we do. The more things change, the more they stay the same.

With our best wishes for a happy new year,

Jay A. Halfond
Dean

METrics

5,000 Approximate number of MET alumni who have earned computer science degrees since the founding of the Department of Computer Science in 1979.

85 Number of students currently earning a B.S. in Biological Laboratory & Clinical Sciences, making it MET’s largest on-campus undergraduate degree program.

1,100 Number of guests who attended The Big Event to celebrate the twentieth anniversary of MET’s culinary programs.

34 Number of different countries represented by BU Global students.

4,203 Total number of students enrolled in MET courses during the 2008–09 school year.

23 Number of MET administrative science students who traveled to India in January, to attend Doing Business in India, a course offered on site at the Infosys training facilities in Bangalore and Mysore.

#1 Ranking Boston University online degree programs recently earned from the Guide to Online Schools.
MET on the Campaign Trail

This fall, MET alumnus Andrew Kenneally (MET’08) and MET graduate student Tomás Gonzalez squared off against each other—and a host of other candidates—in the race to be elected Boston City Councilor at large. Though neither can report victory, both shared their experience on the campaign trail with current students during Politics of Boston: Reflections on the 2009 City of Boston Mayoral and Council Elections, an event organized by MET Assistant Professor of City Planning and Urban Affairs Enrique Silva. The talk marked the completion of a new initiative called The Edge: Urban and Regional Conversations at Boston University, which featured a series of guest speakers and roundtable discussions on contemporary issues in urban affairs.

"Hosting Kenneally and Gonzalez was like holding a homecoming, lecture, professional development session, and program showcase all in one," said Silva.

“Our current students drew inspiration from their candid stories, advice, and the ways they confirmed the relevance of their graduate studies in urban affairs and city planning for their professional pursuits,” said Silva.

Kenneally and Gonzalez commented on the rigors of day-to-day campaigning, on the challenges of running against candidates with established fundraising operations, and on breaking into political circles as fresh faces.

“We are proud of them and will follow their political trajectories closely in the future,” said Silva.

The Dean’s Advisory Board

The Metropolitan College Dean’s Advisory Board gathered this October to discuss strategies for maintaining the vitality of Metropolitan College, including international initiatives and student scholarship opportunities. Pictured here are Advisory Board members who attended the meeting in person.

Front row (l-r) Mr. Arthur G. Allen (MET’95), Mrs. Martine Dulles (MET’73), Dean Jay Halfond, Ms. Linda Eloriento McCutcheon (DGE’75, MET’77), Mr. Steven M. Garfinkle (MET’72), Mrs. Isabel Kathleen Duggan Pisano (MET’87).

Back row (l-r) Mr. Leon E. Wilson (MET’75), Ms. Mary E. Kennard (CGS’74, MET’76), Mr. René Bernard Beil (SHA’97, MET’04), Mr. Frederick Dulles, Mr. S.D. Shibulal (MET’88), Mr. Joseph P. Mercurio (MET’81), Associate Dean Tanya Zlateva, Mr. Gary H. Grossman (MET’75).

Journey to Copenhagen

Rachel Szakmary (MET’10), a graduate student in city planning, traveled to Copenhagen in December to attend the United Nations Climate Change Conference as part of a university-wide group of students and faculty organized by Professor Adil Najam, director of BU’s Frederick S. Pardee Center for the Study of the Longer-Range Future. Szakmary attended presentations by Al Gore, Thomas Friedman, Archbishop Desmond Tutu, Governor Arnold Schwarzenegger, and mayors of major world cities, including Copenhagen, London, Barcelona, and New York.

"The scale of the event was just incredible," said Szakmary. "Though there is a lot of work to do, it was impossible to leave without a tremendous sense of urgency, and a conviction that something will come of all these minds gathering together."
Econophysics and Modeling the Market

Econophysics is a term that has the flair and feel of the exotic. It hasn’t made its way into mainstream vocabularies—academic or otherwise. Assistant Professor Irena Vodenska, however, is one of a few leading minds working to advance econophysics as a new approach to studying financial markets.

As might be expected from its compound title, econophysics takes a hybrid view of the market that borrows perspective and tools from both the social and physical sciences. Vodenska’s work conceptualizes financial markets as a complex system in the same way an economist might theorize consumer spending or a biologist the function of a cell—by understanding individual parts as working together to form a dynamic whole. For Vodenska, the individual parts might include internal market elements, such as regulatory practices, or external shocks to the system, such as the events of September 11. Vodenska applies the methodologies of statistical physics in order to quantify, measure, and even predict market phenomena. The ultimate goal is to express, mathematically, universal rules that govern markets. What Vodenska is after is the market equivalent to, say, the laws of thermodynamics.

Vodenska argues that the market is fundamentally turbulent and volatile on a daily basis—to say nothing of major crises such as the recent mortgage lending scandals. The difference between a major crash and a slightly bear-ish day, she asserts, may be an issue of scale, in which the same interactions that cause common, minor fluctuations are merely amplified under extreme conditions. She studies market anomalies, that is, by contextualizing them within the abundant data of the everyday. Doing so makes extreme market behavior interpretable, and therefore much more manageable, in probabilistic terms.

“It’s not so much that the market begins to function differently in moments of high turbulence,” said Vodenska. “But that the scale of its behavior changes. If this is true, then we can better understand the likely triggers and consequences of high volatility moments, and we can therefore learn how to try to avoid or respond to them.”

Innovation (and Other Corporate Pitfalls)

New products. New services. Streamlined processes. Expansion into new markets. Staying ahead of the competition. This list reads like a corporate survival guide. But innovation, argues Assistant Professor Mehmet Berk Talay, is not always a good thing. In fact, Talay’s work demonstrates that there are times when innovation is contrary to a company’s best interest. There are, that is, innovation dos and don’ts.

The American auto industry is a case in point. Companies such as Ford, Chrysler, and GM currently lag behind competitors, Talay asserts, not because they have failed to innovate, but because they have done so too quickly, or with the wrong emphasis. While Toyota spent decades continuing to brand and refine the Corolla, for example, Ford pulled its Taurus off the market, losing the consumer recognition and trust the company had earned with one of its best-selling models. “Ford focused on building new models, rather than improving existing models,” said Talay. “Why would you withdraw a successful name from your product line? Brand is what companies try to build. It takes time and effort, and to walk away from it when you have it is exactly the wrong thing to do.”

Beyond eroding their consumer base by over-innovating, companies must also incur the costs of developing and manufacturing new products. One new car model, according to Talay, costs upward of one billion dollars in engineering and design processes. Jumping from product to product, then, is a pricey endeavor. “If you abandon a product too quickly,” said Talay, “you do not recover your investment.”

However, the optimal pace and scope of innovation varies from industry to industry. Talay’s research also considers the dynamics of innovation in pharmaceuticals, where the challenges and goals differ greatly from the auto industry. “New pharmaceuticals,” Talay said, “require dramatic innovation. You can make small aesthetic changes to a car, but not to a drug. The biggest challenge to pharmaceutical companies is flexibility. How quickly can you respond to a failed line of research or promising new data?” The need for flexibility leads to creative, and sometimes complicated, collaborations between companies that can blur intellectual property lines, a potential hazard when partnerships are a condition of innovation.

The bottom line of Talay’s work is perhaps a new corporate caveat: innovators beware.
Sandra Bustamante-Lopez, for example, found her way into the program because she couldn’t afford to go to college. Having immigrated with her family to Boston from Colombia in 1999, Bustamante-Lopez attended Chelsea High School and took a job as a supermarket cashier, resigned to the fact that college wasn’t in her future.

Upon a recommendation from a teacher, however, Bustamante-Lopez enrolled in CityLab Academy, a free two-semester laboratory training program available to high school graduates. Offered on BU’s medical campus, CityLab Academy is closely affiliated with the BLCS program, and often serves as a springboard to both laboratory careers and four-year undergraduate science programs. “I never, ever thought about pursuing any kind of science,” said Bustamante. “But I didn’t have other options, so I decided to give it a try.”

Bustamante-Lopez completed CityLab Academy in 2005, and, like many program graduates, went on to a position as a laboratory technician at Boston University School of Medicine. For the last four years she has been working to develop nanoparticles that can efficiently and intelligently deliver vaccines and drug treatments to targeted locations within the body. Along the way, she completed the BLCS program, and is now using her bachelor’s degree and her impressive research resume to apply for graduate programs in biomedical engineering at the likes of MIT, Brown University, and, of course, BU.

“I love everything about this work,” said Bustamante-Lopez. “I love the lab. I love troubleshooting my experiments. And I love the independent thinking that it requires.”

In recent years, MET’s Community College Scholarships have drawn students seeking to build upon the associate’s degrees they earned from Middlesex, Roxbury, and Bunker Hill community colleges. And JoAn Blake is the recipient of the new Scholarship for Parents, which is offered to those who have children enrolled in area public schools.

Like Bustamante-Lopez, the scholarship opportunity brought Blake to MET. Like Bustamante-Lopez, she stayed for the caliber of the program. “It is tough,” said Blake. “You have to want it, you have to be willing to dedicate yourself to it. I was intimidated at first, but I quickly realized that the professors are completely accessible. You’re not in it alone.”

Her interest in clinical research stems from personal experience: at the age of ten, her daughter Shaina was diagnosed with osteosarcoma. Younger than most osteosarcoma patients, and with a more extreme case, Shaina was given just six months to live. So Blake enrolled her in a clinical trial for an extreme treatment usually applied only to adults, and found success.

Shaina went on to study science at Mount Ida College, but was tragically killed by a drunk driver during her sophomore year. At which point Blake decided to carry on her legacy by going back to school herself. “If people didn’t go into this field, I would have been a mother who lost her daughter at ten,” said Blake. “But I got nine more years with her. This is what draws me to clinical research. It’s what makes me get out of bed in the morning.”

With a target graduation date of May 2011, Blake already has plans for a master’s degree in bioethics. “I have my eye on the ethical elements of clinical trials,” she said. “There are a lot of legal and historical issues that go into designing these studies, including how you choose and treat patients, and what constitutes consent.”

Blake perhaps best accounts for the current vitality of MET’s BLCS program: “Science is more than just test tubes and laboratories,” she said.
Steve Akers (MET’94, M.S. Computer Science) was introduced by Professor Anatoly Temkin as a particularly memorable student. “In class, I had the feeling that I could see the neurons in Steve’s brain working,” said Temkin. Akers is founder and chief technical officer of Digital Reef, a platform that automatically indexes, analyzes, classifies, and manages massive amounts of digital information. His previous company, Spring Tide, was purchased by Lucent in 2000.

“It is quite an accomplishment to achieve thirty years of excellence in anything, much less a fast-changing field like ours,” said Akers. “And I think that is only possible when you approach it the way MET does.”

“It became clear to me in Anatoly’s class that MET was not about giving us answers, but teaching us how to think so that we could solve any problem,” said Akers. “That is when I knew I was in the right place, and it is what I have taken with me. My MET degree turned the corner for me professionally. It has enabled me to be shrewd at my job.”

Marcia Nizzari (MET’90, M.S. Computer Science) was described by Associate Dean Tanya Zlateva as “impossible not to notice.” Zlateva recalled that Nizzari “always asked questions about the hardest materials. I was in awe.” Nizzari is director of software development for biomedical applications at Cambridge Research & Instrumentation. Her career has also included high ranking positions at the Broad Institute of MIT and Harvard, Dr. Eric Lander’s Genome Center at the Whitehead Institute, and Thompson Financial Portfolio Solutions. Nizzari has taught courses in computer science at MET as well.

“It’s been an absolutely incredible ride, and MET has had a lot to do with my success,” said Nizzari. “Computing is so cool because there are so many different types of application. I’ve worked on gyroscopes and on financial systems, in manufacturing and in the life sciences.”

“I did not have the opportunity to go to school full time,” said Nizzari. “I was managing a very busy work life, and it took me seven years to complete the eighteen courses of my degree. During that time I worked for four companies. I had four pregnancies. I had a number of different bosses. Throughout it all, I learned to become a lifelong learner. That is the real gift I got from MET.”
Michael Kiklis (MET’88, M.S. Computer Science) is partner at Akin Gump Strauss Hauer & Feld, LLP, where he specializes in intellectual property litigation and patent law. Kiklis also serves on the Metropolitan College Dean’s Advisory Board. Before earning his law degree and moving on to a decorated career that includes a landmark antitrust case against Microsoft, Kiklis utilized his M.S. in Computer Science as a software developer.

“The stakes in my profession are high,” said Kiklis. “But my degree from MET helps me to provide my clients with the best possible guidance. It is rare to have a knowledge of both computer science and the law, and in this respect my MET degree has served me very well. I still keep my textbooks in my office. I’d like to thank MET and the Department of Computer Science for the great education I received, and the many opportunities it brought with it.”

George Haddad (MET’85, M.S. Computer Science) is founder, president, and CEO of Liaison International, Inc., which provides information technology products and services to educational associations, accrediting agencies, and institutions of higher education. For Haddad, BU is a family affair. He met his wife, Elizabeth Haddad (MET’86), in a communication classroom while earning his master’s degree. And his son Karlo, who attends BU Academy, the University’s high school, hopes to enroll at BU this fall.

“This is personally and professionally an important place to me, so this award is very meaningful,” said Haddad. “MET courses were the type of courses that prompted you to go back to work and immediately show off what you had learned.”

“MET is the only school where you sit in a classroom full of teachers, and it was incredibly valuable and special to have instructors who came from industry,” said Haddad. “There is a seamless bridge between MET and industry. Knowledge travels back and forth, and this is something to highlight.”

A toast to the spirit of MET

“There are two things at MET that do not change: the spirit of our students and teachers,” said Associate Dean and former Chair of Computer Science Tanya Zlateva. “Then as now, it requires guts to come back to school when you have a family and a full-time job. It requires confidence to teach computer science in a city that sets the standards of the field. Yet that is what we do, every night, students and teachers. I want to congratulate you, and toast you, and wish that we all keep our courage and our confidence for many years to come.”

Mapping the Arts in Greater Boston

A recent gallery showing in Dean Halfond’s office reflected the collaborative efforts of Arts Administration Lecturer Rose Austin and the members of her summer 2009 course, Art in the Community.

Graduate students worked to identify, research, and recognize arts organizations in the Greater Boston area that are innovating exemplary methods of bringing high-caliber artwork to the general public.

“I wanted to make the city our classroom,” said Austin, who is former executive director of the Massachusetts Cultural Council. “This project asked students to make contact with groups that reach audiences both locally and globally. They evaluated what does, and doesn’t, work. They learned real lessons in finance, marketing, and general strategy that they can take with them as they pursue their own careers.”

The product of the summer’s work is a photographic and descriptive resource that will be archived for future students and faculty to reference.

Pictured here is a photo collage of Villa Victoria Center for the Arts, one of the organizations Austin’s students identified as inspiring public participation in the arts.

All images are courtesy of Villa Victoria Center for the Arts.
An Interview with the Governor of Virginia  continued from page 1 >

What particular challenges did you face pursuing a graduate degree while serving as a platoon leader and supervising a medical clinic in the U.S. Army?

I was very fortunate to have a top quality program like Boston University's overseas master's degree in business while I was in Germany. It fit very well with my military duties to take classes at night. I thought the program was challenging, and kept me focused on enhancing my education. I got my degree in 1980, and the next year it helped me tremendously in landing my first private sector job with a Fortune 500 company, America Medical Supply.

What role has your MET degree played in your career? How will it impact your approach to your responsibilities as governor?

It helped me during the course of this campaign. I used some of those ideas, some of those management skills I learned at BU and in my private sector job after that, to run a very organized campaign. I also think that when the top issue in the campaign became jobs and economic development and management of the budget, being able to show I had a master's degree in business was a very big advantage. I brought up the subject regularly during the course of the campaign.

Additionally, I think that having my degree gave me a lot of credibility in the business community. Instead of just looking at me as a political guy or a lawyer, the fact that I had a business degree and had experience in business was a huge plus. I think it will help me a lot as governor. I will be running multiple state agencies that have thousands of employees at a time when economic development is going to be the biggest challenge that we face. So I'm very grateful for the training thirty years ago at Boston University.

What advice would you give to those individuals currently managing full-time careers alongside their responsibilities as students?

It's definitely worth the sacrifice. There was a period of time, in my case it was three years, when I had to give up a lot of things and didn't get to see my family as much as I would've liked. But that sacrifice at a young age has paid great dividends for me down the road. I'm absolutely convinced that one of the reasons we got so much support from the business community (we got every major endorsement from the business community during this campaign) was because I had a master's degree from a great university and the fact that I actually had business experience. It made a big difference in the campaign. I think people that are balancing both a full-time job and a part-time academic load just need to persevere because it will certainly help down the road.

Do you see a role for higher education in ending the current economic recession?

Absolutely. I look at it more as a long-term investment. I ran on a higher education platform to create 100,000 new degrees over fifteen years, to have more focus on science and engineering and math and technology, and to create more opportunities for young people. I think it's going to be an important part of what I try to get accomplished during the next couple years as governor. And I would certainly encourage young people all over the country to focus on getting the best education they can and achieve the highest level of education they can. Even though it's a short-term financial and time sacrifice, it will help them to pursue the American dream in the future.

Honoring Bob Glovsky (LAW’76, ’79)

Thursday, March 25, 2010, 6–10 p.m.
Seaport Hotel, Boston
Reception and Dinner

MET and the Center for Professional Education will celebrate Bob Glovsky’s more than twenty years of leadership as director for the Boston University Programs in Financial Planning. Under his guidance, the Financial Planning Certificate Programs, offered both on campus and online, have risen to national prominence, and are continually gaining international recognition as well.

Come toast Bob’s accomplishments and wish him well as he embarks on his new duties as chairman of the Certified Financial Planner Board of Standards. Proceeds of the event will go towards the Robert J. Glovsky Scholarship Fund in Financial Planning.

Visit bu.edu/professional for details.
The Big Event!

It lived up to its title. The Big Event, organized by Rebecca Alssid, director of Lifelong Learning and the gastronomy program at MET, was attended by celebrity chefs, celebrity guests, food personalities, and foodies of all stripes. Their purpose? To celebrate twenty years of culinary programs at MET.

Eleven-hundred people gathered on campus to indulge in a dazzling feast of the senses—from food to wine to famous cookbooks. Jacques Pépin, who, with Julia Child, co-founded MET’s Certificate Program in the Culinary Arts, served as the evening’s official host. Guests indulged in offerings from over sixty restaurants, wineries, and breweries, while also participating in a silent auction to benefit two MET scholarship funds: The Jacques Pépin Fund for Scholarships in Food Studies, and The Scholarship Fund for Cancer Patients and Survivors.

Learn more about culinary programs at MET: bu.edu/foodandwine.
Alumni Gatherings

**MET Night at Agganis Arena**

Alumni, faculty, students, and staff gathered for the fifth annual MET Night at Agganis Arena to enjoy hockey, food, and fun before the Thanksgiving holiday. Donning their hockey jerseys and their giant foam fingers, guests participated in a silent auction to benefit the Scholarship Fund for Cancer Patients and Survivors—and cheered on the BU Terriers as they faced off against their rival University of New Hampshire Wildcats.

**Inside Agganis Arena.**

The crowd looks on eagerly during a close game, which ended in a 3-3 tie.

**Gregory Cormier shows support for his dad David’s (MET’05) alma mater.**

**MET Night is a family affair.**

**A Night at the BU Pub**

Current students, alumni, and faculty of the M.S. in Advertising program—offered jointly by MET and the College of Communication—enjoyed an evening at the BU Pub.

Front Row: Jacqueline Varanelli, Tina Pankievich, Jill DaCoste, Liz Watts, Assistant Dean Sonia Parker, Kristin Chebra.

Back Row: Selena Craig (MET’09), Liza Foley (MET’09), Jesse Macomber, Nicole Steenburgh (MET’09), Bill Burgey, Shaina MacKie, Joanna Leonard, Andrew Wilson.
Trounce: A Suspense Thriller
George Beck (MET’07)

In his debut novel, Beck puts his experience as a police officer—and his MET master’s degree in criminal justice—to good use, imagining his way into the criminal behavior of Trounce’s protagonists. Beck provides his characters with the ability to think like, and thereby evade, the police. And he allows readers to sympathize with the book’s villainous heroes by offering insight into their irrational, desperate, and sometimes sordid, actions.

Part gumshoe detective story and part Western, Beck’s novel aspires to the stark violence of Cormac McCarthy’s work and the noir-stylings of Raymond Chandler as it details the adventures and romance of Emilio, an illegal El Salvadorian immigrant seeking to support his ailing mother, and Sara, a beautiful chemist mired in a terrorist plot.

Learn more about Beck’s work at trouncethenovel.com.

Unleashing Nepal: Past, Present, and Future of the Economy
Sujeev Shakya (MET’02)

Inspired by Thomas Friedman’s The World is Flat, Shakya—a Hubert H. Humphrey Fellowship winner, entrepreneur, and alumnus of the BU Global Graduate Certificate Program in International Marketing—attempts to shift conversations in and about the future of Nepal away from politics and toward economics. Unleashing Nepal is, according to Shakya, “a dreamer’s book,” and it optimistically embraces the potential of globalization to catalyze economic growth in Nepal.

Rather than embracing traditional descriptions of the country as geographically landlocked, he argues, the Nepalese should envision themselves as landlinked to two of the world’s largest and most powerful economies—those of China and India. Rather than understanding itself as a country without land, Nepal should think of itself as a nation with a population of thirty million individuals who constitute a significant market for consumer goods, as well as a resource for economic development and innovation.

Learn more about Shakya’s work at unleashingnepal.com.
In the fall of 2009, the B.S. in Biomedical Laboratory & Clinical Sciences (BLCS) became MET’s largest on-campus undergraduate major. With eighty-five students currently enrolled, the program has nearly tripled in size since 2002.

Many factors have contributed to this growth, according to program director Connie Phillips. To start, there is Boston’s emergence as a world headquarters for biotechnology and medical research, which has brought with it a whole range of job opportunities attractive to students.

Then, there is the ever-increasing caliber of the program itself, which features faculty drawn from industry as well as the Boston University School of Medicine. The BU Office of the Provost recently awarded Phillips one of its competitive Grants for Undergraduate Teaching and Scholarship. Phillips is using the money to buy laboratory equipment that will allow students to perform new antigen-antibody tests (that means they will be looking at how the body locates and fends off bacteria and viruses) in one of the program’s newly designed courses: Drug Discovery and Development.

In the course, students will explore the pre-clinical processes of drug discovery, gaining exposure to molecular, genetic, and stem-cell therapies. “Students will become familiar with the laboratory protocols they can expect to find at the highest levels of academic and industrial research,” said Phillips.

And they will put those protocols to practice as well. The program features an externship component, in which students gain hands-on experience in university laboratories, and at companies such as Genzyme and Biogen Idec. In turn, the program is increasingly attracting students from these organizations.

Finally, a number of initiatives have made the BLCS program more financially accessible. Almost one-third of BLCS students are recipients of MET scholarships.

continued on page 5 >