Growing demand prompts effort to build new childcare facility

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The 2003 opening of the R. Kirk Landon Learning Center opened its doors, it has proven to be a tremendously popular facility with the Tech and Home Park communities.

As a result of the transfer of the property, Georgia Tech will assume ownership of Georgia State’s Olympic residence halls.

Growing ovarian cancer may mimic fallopian tube formation

Study may lead to diagnostic and therapeutic techniques

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A new study suggests that ovarian cancer cells form by hijacking a developmental genetic process normally used to form fallopian tubes. Scientists at Georgia Tech and the Ovarian Cancer Institute discovered that the protein, PAX8, is involved in the development of fallopian tubes and is present in ovarian cancer cells, but not in normal ovarian tissue. The discovery not only provides a new target for diagnostic and therapeutic interventions, but also opens new avenues for basic research in ovarian cancer pathology. The research appears in Volume 104, Issue 3 of the journal Gynecologic Oncology.

"Our finding sustains the promise of a molecular genetic understanding of different cancers and emphasizes the importance of describing cancer in the context of normal human development that has gone awry due to genetic and epigenetic alterations," said Nathan Bowen, Georgia Cancer Coalition Distinguished Cancer Scientist at Georgia Tech and the Ovarian Cancer Institute (OCI).

"Using cancerous and non-cancerous tissue straight from the operating room, Bowen and fellow OCI researchers are engaged in investigating the molecular profile of ovarian cancer tissue in order to discover the causes of ovarian cancer, develop a reliable diagnostic blood test and understand the genetic basis of resistance to chemotherapy."

In 2003, a group from Stanford University researching breast cancer discovered that paired box gene 8 is expressed in ovarian cancer tissue, but not in breast cancer. Taking note of the Stanford group’s results, OCI researchers began to investigate the possibility that the gene and its products may be an important biomarker for detecting and researching the causes of ovarian cancer. They began to look for evidence of PAX8, the protein made by paired box gene 8, which was the next step in establishing the gene as a biomarker. Not only did they find PAX8 in the ovarian cancer cells, but they also found it in the cells that form fallopian tubes, the secretory cells. In addition, they discovered that the protein is not expressed in the normal ovarian surface epithelium.

"Bowen proposes that ovarian cancer begins by using PAX8 to direct an adult stem cell population found on the ovarian surface to proliferate and ultimately form ovarian cancer. When this gene is expressed in healthy adult ovarian cells that migrate into the body of the ovary, it leads to the development of ovarian inclusion cysts. Normally, the growth of cysts is kept in check by the cells’
Building Construction to offer online master’s degrees

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Georgia Tech’s Building Construction (BC) program is launching its new online Master of Science graduate degree programs in Integrated Facility and Property Management and Integrated Project Delivery Systems in the fall of 2007.

The Integrated Facility and Property Management degree will be the first of its kind offered online. This unique graduate program is one of only three graduate programs in the world in facility management that has been recognized by the International Facility Management Association (IFMA).

“This initiative is the most significant development in our graduate program since its start in 2000,” said Felix Uhlik, professor and graduate coordinator. “The Distance Learning Program literally extends our potential graduate student base to a global level and allows us the flexibility to offer our curriculum through a partnership with Distance Learning and Professional Education.”

“By taking our courses into the distance learning format, we hope to reach out into the world to bring those interested in graduate facility management study the possibility of earning a degree without moving to Atlanta,” said Kathy Roper, a Building Construction professor who will teach students online next fall. “We expect to find many U.S. students outside metropolitan Atlanta and perhaps expand our reach beyond the United States, where many corporations are beginning to recognize the importance of facility management and research and knowledge in this profession.”

Prospective students will adhere to the same standards and degree requirements as traditional on-campus graduate students. The distance learning program allows students to attend classes via live Web-based classes and recorded videotaped sessions. Interaction with faculty and other students will primarily be through Internet chat rooms, electronic messaging and teleconferencing.

“Currently, most students are working professionals,” said Roper. “Our program offers the flexibility to work and still obtain a master’s degree in this developing field. Many have been out in the workforce for several years and see the need for an advanced degree to make them stand out above the competition. Our full-time students are primarily military personnel on assignment and international students who have come to the United States to gain the facility management expertise we offer and then return to their native countries to share and develop the profession locally.”

The new master’s degree programs will benefit students by allowing them to further their career with the latest knowledge in the industry and providing a chance to network with other professionals within their field.

“I’m looking forward to having ‘virtual’ students in our classes,” said Roper. “I’m sure the increased diversity and breadth of backgrounds will give all the students, and me, better insights into the many changes occurring around the globe.”

Instructor Richard Porter (left) leads his graduate-level course in the College of Architecture’s Building Construction Program.

Smithgall philanthropy recognized with Ivan Allen Jr. Prize

Couch to speak at Founder’s Day

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In 1988, an anonymous, $5 million donation by Charles and Lessie Smithgall helped name a newly established Ivan Allen College of Liberal Arts. Charles Smithgall, now deceased, was a 1933 alumnus of Georgia Tech and friend of classmate Ivan Allen Jr., the former mayor of Atlanta.

This month, the College will honor the Smithgalls with the 2007 Ivan Allen Jr. Prize for Progress and Service.

The Ivan Allen College of Liberal Arts is proud to recognize Charles and Lessie Smithgall for the generous gift made nearly 20 years ago as well as to their commitment to the arts, the environment and educational initiatives in Georgia,” said Sue Rosser, dean of the Ivan Allen College. “In a testament to their friendship, Charles Smithgall wished to keep the gift a secret from his friend and classmate. When Ivan Allen died in 2003, he went to his grave never knowing of the extraordinary act of friendship and generosity that had led to the naming of a college in his honor.”

The Smithgalls have a long history of giving to Georgia Tech, Atlanta and the state. They have contributed more than $20 million in property and money over the course of their lifetimes, which has had a significant impact upon the natural environment and the arts and academic arenas. At Georgia Tech, their philanthropy is responsible for three endowed chairs in the College of Sciences as well as the building that houses the Student Services division and support for student athletic facilities.
feedback mechanisms that turn off cell growth. But in cancer, when these feedback mechanisms are mutated, the cysts grow out of control until they metastasize.

“It’s a way of molecularly characterizing tumors that may lead to designing specific therapies based on the molecular profile,” said Bowen. “Biology is basically an information processing system to generate end products, and there are a lot of decisions that have to be made by the regulatory genes, such as paired box gene 8, before the end products can be made.”

Bowen’s next steps are to find out why paired box gene 8 gets turned on and to discover its targets in order to find out if it turns on another decision-making gene or an endpoint gene. “That’s the daunting task of cancer biologists,” he said. “Now that we’ve sequenced the human genome, we have to make sense out of the thousands of genes that are expressed in cancer at the same time.”

the growing demands of the Georgia Tech community,” said Chuck Dombaugh, chair of the Childcare Subcommittee and associate vice president of Human Resources. “The highly skilled candidates who pursue employment at Georgia Tech have many professional options available to them. Prominent research faculty, in particular, are sought-after both nationally and internationally by academia, industry and government. In order to remain competitive, we must provide a host of attractive benefits that includes high-quality, accessible and convenient childcare. Rich Landon did a wonderful thing for this community a few years back, and we’re hoping there’s another Kirk Landon out there who shares his passion for nurturing our most precious resource: our children.”

The new childcare center is expected to cost $1 million, all of which will come from private philanthropic dollars.

Bellamkonda Named Georgia Cancer Coalition Scholar

Ravi Bellamkonda, a professor in the Department of Biomedical Engineering at Georgia Tech and Emory University, is one of 13 scientists named as a Georgia Cancer Coalition Distinguished Cancer Scholar for 2007. He will receive annual funding for five years to support his research efforts. Bellamkonda’s area of interest is nanotechnology for cancer diagnosis and therapy. As a part of the Brain Tumor Program at the Winship Cancer Center at Emory, he is developing collaborations for researching a patient-specific, targeted anti-tumor therapy.

He is forging a truly interdisciplinary approach to cancer nanotherapeutics and diagnostics,” said Don Giddens, dean of the College of Engineering. “His work to develop nanotechnology-based strategies for early detection of cancer, targeted therapeutics and patient-specific medicines is very promising.”

IN BRIEF:

Best Practices Showcase

Georgia Tech proudly announces its third Best Practices Showcase to be held on March 21, at the Student Center. Jointly sponsored by the Office of the President and the Office of Organizational Development, this year’s Showcase will feature presentations from the six winners of the 2006-2007 Georgia Tech Best Practices Challenge.

With a format similar to conference workshops and presentations, the Showcase will provide an opportunity for all college- and department-level best practices that are already in place in academic and administrative departments across campus. Each best practice presentation demonstrates innovative ways to improve processes or use technology here at Georgia Tech.

Participants will hear directly from the people who created and implemented these great ideas and gain a better understanding of how these ideas are intended to provide ideas for individual business needs and interests. There is no cost to attend.

To view the winners and register to attend sessions, visit www.orgdev.gatech.edu/bp.