

## Georgia Tech Researchers' Work is Covered in the News Media

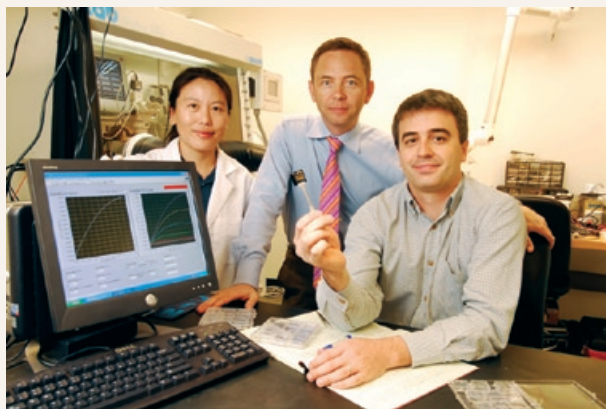
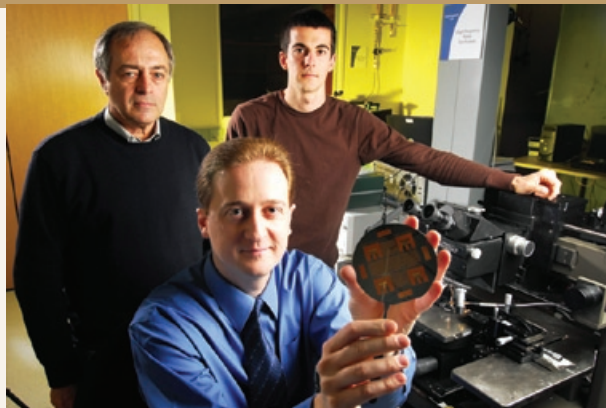
Georgia Tech was one of three universities contributing to a report published in the journal *Proceedings of the National Academy of Sciences* on the connection between climate change and social impacts such as warfare, population decline and famine. Co-authored by Peter Brecke in the Sam Nunn School of International Affairs, the study used a database of 4,500 wars to study the effects of temperature fluctuations during a 500-year period from 1400 to 1900. More than 80 news outlets worldwide published accounts of the report, including ABC News, the *Christian Science Monitor*, LiveScience.com, MSNBC, *New Scientist*, *The New York Times*, *USA Today* and *The Washington Post*. A Reuters news agency report on the study appeared in numerous publications throughout Asia and Australia. (See the article on page 36 of this issue of *Research Horizons*).

Research that could allow very high speed wireless downloads over short distances generated media coverage in more than 60 news outlets around the world. This "multi-gigabit wireless" approach could eliminate the tangle of wires running between computers and such peripherals as external drives, and could facilitate quick downloads of movies from commercial kiosks. An Associated Press article on the work was published by a number of major U.S. newspapers. Reporting on the research were the *Boston Herald*, *BusinessWeek*, *The Chicago Tribune*, CNN, *Forbes*, Fox News, *The Los Angeles Times*, *Network World*, *Newsday*, the *San Francisco Chronicle*, *Technology Review*, *USA Today* and *The Washington Post*. Joy Laskar and Stephane Pinel from the Georgia Electronic Design Center were quoted and pictured in the articles.

(See the article on page 46 of this issue of *Research Horizons*).

An improved technique for creating films of barium titanate nanoparticles in a polymer matrix generated considerable attention for researcher Joseph Perry in the School of Chemistry and Biochemistry and the Center for Organic Photonics and Electronics. The material has been of interest for use in capacitors, but creating uniform films has been a major stumbling block. Development of a technique that addresses that issue was reported in the journal *Advanced Materials*. Media outlets including *EDN*, *Electronic Engineering Times*, *Electronics Weekly*, *The Engineer*, *Science News* and *Power Design* reported on the new technique. The visibility led an Associated Press reporter to contact Perry about a Texas startup firm that plans to create a new generation of capacitors. Perry's comments appeared in more than 50 major media outlets, including *BusinessWeek*, CNN, LiveScience.com, *IEEE Spectrum*, *USA Today* and *Wired*. (See the article on page 43 of this issue of *Research Horizons*).

Two National Institutes of Health grants totaling \$11.5 million for research on delivering the flu vaccine with microneedles generated attention for Georgia Tech and Emory University, which are partnering on the research project. Use of microneedles could make administering the vaccine painless and more convenient. Reporting on the work were CNN, the *Atlanta Business Chronicle*, WMAZ-TV (Macon, Ga.) and several other news outlets. Mark Prausnitz, a professor in the School of Chemical and Biomolecular Engineering, was interviewed. (See the article on page 42 of this issue of *Research Horizons*).



Computer-aided design for MEMS, top photo; carbon 60 transistors, middle photo; microneedles, lower photos.

High-performance field-effect transistors produced with thin films of Carbon 60 attracted attention in major media covering the electronics industry. The work, led by Bernard Kippelen in the School of Electrical and Computer Engineering, represents another step toward the practical application of large-area, low-cost electronic circuits on flexible organic substrates. Two dozen media outlets reported on the work, including *Defense News*, *Electronic Engineering Times*, *Electronics Weekly*, *Semiconductor International*, and *Solid State Technology*. (See the

article on page 24 of this issue of *Research Horizons*).

*IndustryWeek* and *The Atlanta Business Chronicle* reported on a new DARPA-funded research center that will develop computer-aided design techniques for micro-electromechanical and nano-electromechanical systems. The center, which includes both universities and companies, will seek to develop CAD systems that are based on physical models able to predict the behavior of these tiny devices. (See the article on page 45 of this issue of *Research Horizons*).