More than 150 news outlets covered Georgia Tech’s development of a “microfiber nanogenerator” that scavenges mechanical energy from the environment to produce small quantities of electrical current that could power nanometer-scale devices. The foundation for the microfiber nanogenerator consists of nanowires made from zinc oxide grown onto ordinary textile fibers and alternately coated with gold. When the coated fibers rub together — moved by body motion or even the wind — they produce current through the combined piezoelectric and semiconducting properties of the zinc oxide nanowires. Among the outlets covering the research were the Associated Press, BBC, Christian Science Monitor, ComputerWorld, FOX News, MSNBC, National Public Radio, Newsday, Newsweek, PC Magazine, The New York Times, Scientific American, Small Times, Technology Review, Time, USA Today, The Washington Post, and Wired. A research team headed by Zhong Lin Wang in the School of Materials Science and Engineering developed the device, which was detailed in the journal Nature.

Georgia Tech assistance to the Naval Surface Warfare Center in developing a new generation of micro-electromechanical fuzes for weapons produced coverage in Advanced Materials and Processes, Aviation Week & Space Technology, Chemical Engineering Progress, Design News, EDN, Electronic Engineering Times, Photonics Spectra and Small Times, among others. Georgia Tech Research Institute research engineer Jason Nadler developed a technique for consistently producing tiny copper structures that can be incorporated into integrated circuits. Once the circuits are created, the structures are converted to millimeter-diameter explosives.

A “sensor necklace” that can tell when patients or test subjects take a magnetically-tagged pill could help researchers better understand the environmental causes of the breathing distress. The new system, developed by a research team headed by GTRI principal research scientist Charlene Bayer, would be worn in the pockets of a vest. The new “asthma vest” was covered by The Engineer, Journal of Life Sciences, New Scientist, Popular Science, Technology Review, United Press International, The Vancouver Sun, and many other medically-related Web sites.

A low-cost material for capturing carbon dioxide from the smokestacks of coal-fired power plants and other producers of the greenhouse gas received significant media attention. Energy Daily, Environmental Protection, IEEE Spectrum, R&D Magazine and Wired were among the outlets reporting on the work, led by Christopher Jones in the School of Chemical and Biomolecular Engineering.