UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE | OCTOBER 2002

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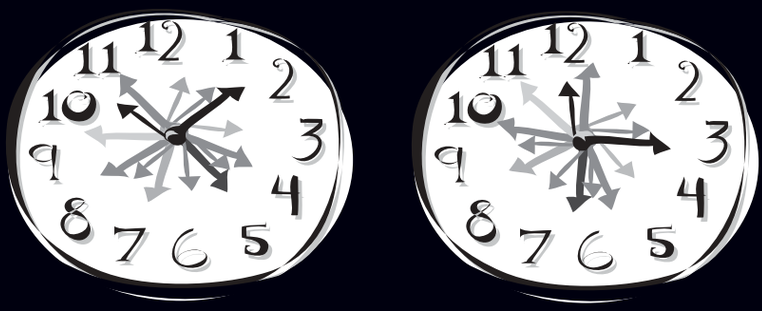

ON THE CLOCK

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LUTENERO

CRAIG THOMPSON

A HEALING CAVE

You stand on a platform the size of a bathroom scale. The floor around the platform is actually a projection screen, as are the walls on either side and directly in front of you, though they may appear to be a supermarket aisle, a tunnel, or even a cliff edge. You might mistake this virtual contraption for an enormous video game, if it weren't in an academic medical center. Even its name is playful: Eye and Ear Institute's Medical Virtual Reality Center faculty call their creation "the cave." Their intentions are serious, however. Pitt doctors hope to use the cave to rehabilitate patients with balance disorders and to answer basic questions about why certain visual environments cause people to lose balance. ***–CS***

Appointments

As the school's new division chief of plastic surgery, **W. P. Andrew Lee** plans to collaborate with Pitt experts in transplantation and tissue engineering. Lee conducts research on transplantation of whole body parts, such as hands and limbs. His goal is to reach a transplantation watershed—to eliminate the need for immunosuppressive agents taken chronically or indefinitely, like cyclosporine. "If that can be achieved, it will really open up the horizon in reconstructive surgery," he says. Lee was previously associate professor of surgery at Harvard Medical School and director of the Hand Surgery Service and Plastic Surgery Research Laboratory at Massachusetts General Hospital.

Lee

Williams

Try telling **John P. Williams**, the new chair of anesthesiology, that something can't be done, and you're guaranteed to have that view challenged. Two years ago, his research helped Pitt professors of surgery and anesthesiology perform the country's first cardiac procedure on an awake patient, something long considered impossible. The switch from general anesthesia to a thoracic epidural reduces postoperative pain and eliminates some risks associated with general anesthesia.

Williams expects researchers in his department to play leading roles in another milestone, discovering the basis of anesthetic mechanisms. "We're very close," he says. "I think we're going to find it at the subcellular level." Williams also plans to encourage the development of new ways to use artificial intelligence systems in the management of anesthesia; he envisions using machines that respond automatically to designated deleterious events during surgery. It's one more way to challenge the status quo. *–CS*

SURE STEPS

A year ago, Amanda Malina (Class of '03) became a certified step aerobics instructor—this, after recovering from a broken hip and being diagnosed with osteoporosis. The 25-year-old former figure skater, dancer, and runner also overcame an eating disorder as a teenager. Malina has been interested in women's health issues for years, and, needless to say, that interest has been more than academic. And now, after observing doctors during her rotations at Magee-Womens Hospital, she has decided ob/gyn is the career path for her.

Malina is a recipient of a 2002 Howard Hughes Fellowship for research training. The national fellowship supports her work with mentor James Roberts, director of the Magee-Womens Research Institute and a vice chair of obstetrics, gynecology, and reproductive sciences at Pitt. The two are investigating the relationship between leptin (a protein that regulates fat) and preeclampsia, a condition from which an estimated 5–10 percent of pregnant women suffer.

Malina and Roberts speculate that leptin is one of the signals increasing fatty acid and amino acid transporter levels between the fetus and placenta. Her work will help determine if high levels of leptin increase nutrient delivery during preeclampsia. ***—KM***