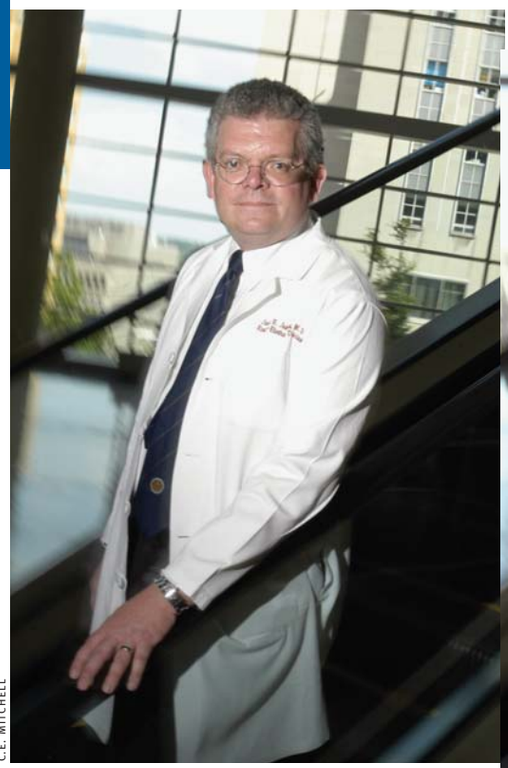


*Devoted to noteworthy happenings at the medical school ... To stay abreast of school news day by day, see www.health.pitt.edu.*

## JOHNSTON IS TOP U.S. TEACHER

***Star Trek*** **slides pop up in the middle of his lectures. He offers towel-wrapped, home-baked loaves of bread to classes. Decades of Pitt med students have given teaching honors to James Johnston (MD '79), professor of medicine, who teaches the second-year renal block and other courses. Now, he has been recognized nationally. The American Medical Student Association has conferred on him the 2004 National Golden Apple for Teaching Excellence Award. Only one teacher is selected for the honor each year. His secret for effective teaching? "You have to be able to look at your audience, grasp whether or not they're understanding. ... I'm constantly working on different ways of presenting information in an understandable fashion to patients, students, residents, fellows. I still think there's a huge amount of room, that I can do a better job. I'm just going to keep listening to my students." —*Dottie Horn***



C.E. MITCHELL



Johnston (left) and South-Paul

## SOUTH-PAUL, TOP MENTOR

**Jeannette South-Paul (MD '79) has a slide of a turtle sitting on a fence. She likes to say, you know, the turtle didn't get there by itself—like all of us, it got some help along the way. Recently, South-Paul, chair of the Department of Family Medicine, was recognized for her accomplishments in mentoring others: The Joy McCann Foundation named her a 2004 McCann Scholar. The national award, given to only three people this year, honors outstanding mentors in medicine, science, and nursing and includes an unrestricted $150,000 grant.**

**For 15 years, first as family medicine chair and, later, as vice president for minority affairs at the Uniformed Services University of the Health Sciences, South-Paul organized monthly potluck dinners for women students, where faculty spoke about everything from leadership to dual-career relationships. After coming to Pitt in 2001, South-Paul helped organize a group for junior minority women faculty in the medical school that has since grown into a larger group for minority women leaders throughout the community.**

**She plans to use her monetary award to start a foundation to educate young people about disadvantaged populations. —*DH***

## FOOTNOTE

**Watch for the following hospital responses to news coming over the AP wire that the chance of finding infectious microbes on a physician's tie is 50/50:**

- **Scrubbable latex ties (clip-on)**
- **Disposable necktie prophylactics**
- **Robots to launder your tie while you wear it**
- **Smug looks from those who've insisted the bow tie never went out of fashion**



CAMI MESA

# A&Q

## with Brian Primack—Media as Mother's Milk

**In total, American kids watch TV for more hours than they are in school, according to Brian Primack, assistant professor of family medicine. "Mass media really is the new mother's milk, nurturing us into who we'll become," he says. In educational sessions at schools and colleges, Primack teaches media literacy—which includes looking at the process by which companies develop ads and target certain demographic groups for their products.**

### On using media literacy with patients

**I just talked ... to a patient, a male, mid-30s, who smoked. I asked what brand he smoked. I said, "Wait, wait, wait, don't tell me—Newport." He said, "How'd you know?" I said, "Well, because you're African American." He said, "What does that have to do with anything?" I said, "Newport specifically targets African Americans, because it was noted years ago that menthol cigarettes worked well marketed in the African American population.**

**"There have been a lot of studies showing that menthol might make [the negative health consequences of smoking] even worse. ... Blacks have 40 percent more lung cancer than Whites, even though they don't smoke more. ... It's certainly never been proven, but—could it be because they smoke more menthols? Eighty percent of Black people [who smoke] smoke menthols; 25 percent of White people [who smoke] smoke menthols."**

**I was able to talk to him about something that really meant something to him. You know? His sense of group pride. His sense of being targeted because of his ethnicity. ... I had seen him multiple times before, and [he] was not interested at all in stopping smoking. ... For the first time, [he] seemed interested.**

### On marketing's influence over physicians

**We all say, "Oh, I'm not affected by the fact that I get pens and free dinners, etc., etc., from [pharmaceutical] companies." But the fact is, it wouldn't be happening if it didn't work. They spend millions on that kind of marketing, so there's no question that it works. Our challenge is to be more aware of the messages we're sent on both a conscious and a subconscious level. Media literacy helps develop this awareness.**

### His question for us

**In what ways are you affected by the mass media that you are not immediately ready to admit?** ***—Interview by Dottie Horn***

**FOR MORE INFORMATION: See Primack's June 1 article in *American Family Physician* or contact him at bprimack@pitt.edu.**

## Faculty Snapshots

This year, six of the 64 physicians invited to join the American Society for Clinical Investigation are from the School of Medicine. ASCI is an honor society of exceptional physician-scientists who must be inducted before they are 45. This year's Pitt invitees: **Yuan Chang**, professor of pathology, who discovered (with Patrick Moore) KSHV, the herpes virus that causes Kaposi's sarcoma; **Raphael Hirsch**, chief of the Division of Pediatric Rheumatology, who studies gene therapy as a tool for preventing and treating juvenile rheumatoid arthritis; **Jay Kolls,** chief of pediatric pulmonology, who is developing a vaccine for the pneumonia common among people with AIDS; **Roberta Ness**, chair of epidemiology in the Graduate School of Public Health and professor of medicine and of obstetrics, gynecology, and reproductive sciences, who researches ovarian cancer and sexually transmitted diseases in women; **Joel Schuman**, chair of ophthalmology, who helped invent optical coherence tomography, an imaging technique used worldwide for diagnosing and managing eye disease; and **Flordeliza Villaneuva**, associate professor of cardiology, who researches the microcirculation of the heart and is developing new ultrasound methods to evaluate blood-vessel function.

The Association of American Physicians, an elite group of some 1,000 of the nation's most accomplished physician-researchers, admitted just 56 new members this year. Three are Pitt faculty members: **Thomas Kleyman**, chief of the renal/electrolyte division, who is best known for his studies of the structure and regulation of ion channels; psychiatry Chair **David Kupfer** who researches long-term treatments for and underlying causes of depression; and **John Mellors**, professor of medicine, who revealed that the amount of HIV in a patient's blood sample correlates with clinical outcome.

*–Melanie Donahoo*



Kleyman



Kupfer



Mellors

# "I Want to!"

**Britney Spears and Christina Aguilera are sick! But Beyoncé, after sharing a meal with them, is fine. As a med student reveals this fictional scenario to a group of seventh-grade Pittsburgh girls, excited chatter fills the room. The girls step into the roles of epidemiologists and microbiologists, searching out the source of the pop stars' illness. Shawnniece Jackson, a student at Milliones Middle School, confides to her classmate that Beyoncé is her favorite of the three.**

**Shawnniece is 13, has a ponytail and big brown eyes, and is one of 220 seventh-grade girls who participated in the Young Women in Science Days program recently held at the University of Pittsburgh School of Medicine. The program hopes to pique interest in science among girls her age. About 75 women faculty and students, most from the medical school, volunteered to teach the girls about topics ranging from DNA to animal models of disease.**

**Eventually, Shawnniece's group, all wearing lime T-shirts, moves to the next station. Each girl dons latex gloves and is allotted one sheep's brain, which is about the size of a tennis ball. As SuJean Choi, assistant professor of psychiatry, points out various brain regions, most girls leave the brains alone, letting them rest on paper plates in front of them. Shawnniece takes the plastic knife on her desk and begins slicing hers into pieces. Then Choi brings out a real human brain. "Who wants to hold it?" she asks. The room is quiet as the girls cringe. Shawnniece breaks the silence: "Me, me, I want to!" Choi places it in her hands; Shawnniece inspects it as though it's a canteloupe she's considering putting into a grocery cart. She asks, "What's this blue thing?" and "Why are there so many wrinkles?" Choi answers her questions. The seventh-grader takes a moment more to check its heft before handing the brain back. "Eww, it's gross," she says, sticking out a sour tongue.**

**Later, Shawnniece reports that she doesn't know what she wants to be when she grows up, but she likes science.** ***–Sonya Kanti Patel***

PATTY NAGLE







**A bevy of seventh-grade girls speculates on conundrums of science like what might ail Britney Spears.**

## WEINBERGER ON LIMITS

Though only 5 feet tall, the 15-year-old girl was captain of her school's basketball team. "Does that tell you something about her motivation?" says Miles Weinberger (MD '65), professor of pediatrics at the University of Iowa and winner of this year's Hench award, given by the Medical Alumni Association.

The girl's doctor diagnosed asthma because she became short of breath when she exercised. Later, as part of a research study, Weinberger had the girl run on a treadmill and measured her oxygen usage and carbon dioxide production. The girl didn't have asthma, he found; she became short of breath when she reached the normal physiologic limits of how hard she could exercise. Asthma is often not at the root of exercise-induced dyspnea (labored breathing), Weinberger recently found. The researcher has published more than 150 articles on asthma since 1974. He established strategies for safely and effectively using the drug theophylline and made it the treatment of choice for asthma for years, says Leslie Hendeles, professor of pharmacy and pediatrics at the University of Florida. Weinberger also originated the therapeutic strategy of preventing asthma symptoms, rather than just treating acute attacks, notes Hendeles. *—DH*



**Weinberger ran away with the Hench award this year. (He's shown here running the Pittsburgh Marathon.)**

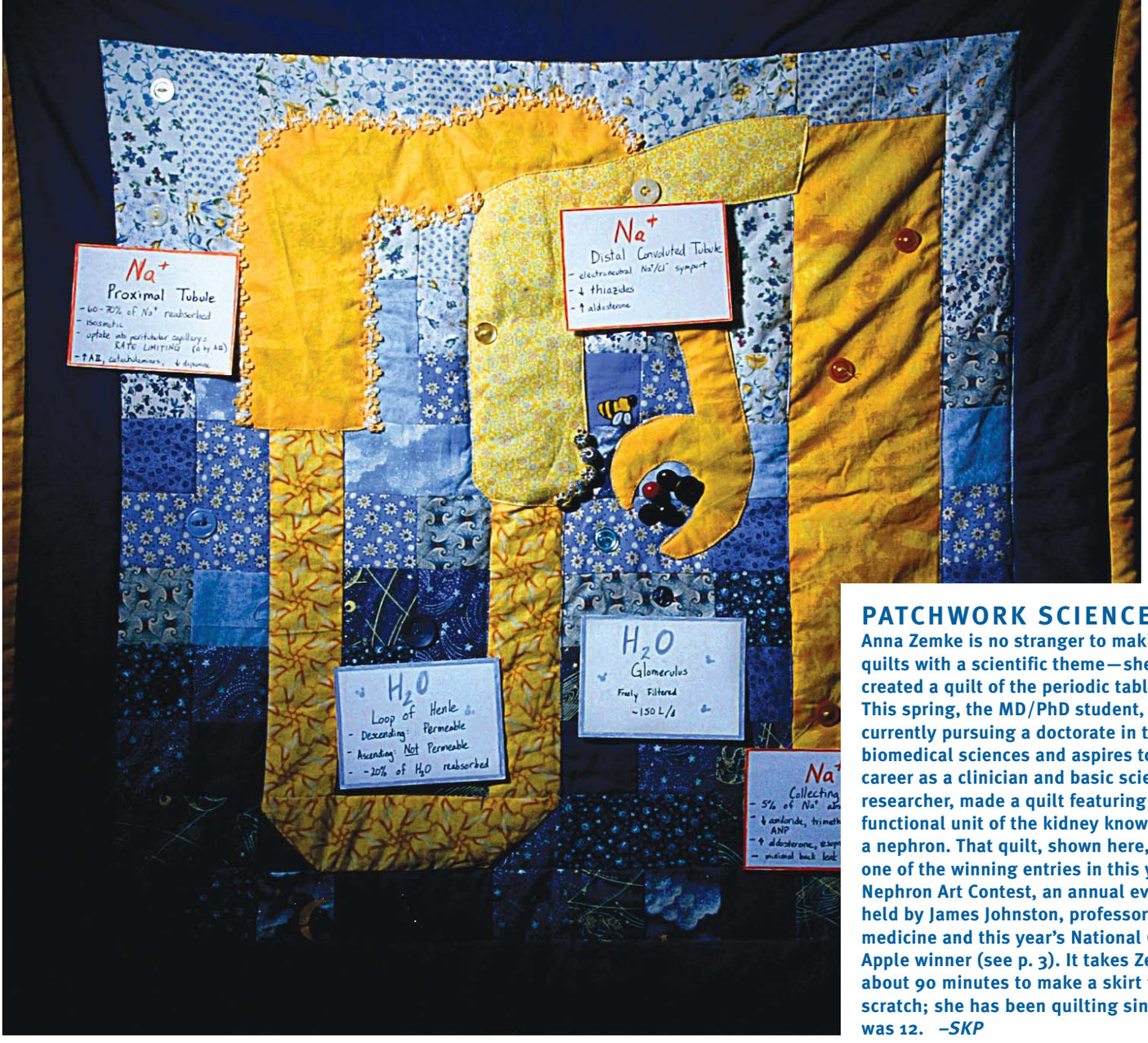
## TWENTY-POINT CHECK WITH MICHAEL FINE

A woman comes into the emergency department with pneumonia. The doctors assess her on 20 different variables—checking, for example, her pulse rate, mental status, blood pressure, and whether a chest x ray shows any fluid in the sac surrounding her lungs. This Pneumonia Severity Index allows doctors to identify low-risk patients who, for the most part, can be safely treated with outpatient therapy. The tool was developed by a team that included Michael Fine (Res '86), professor of medicine at Pitt and winner of this year's McEllroy award. The award is given by the Medical Alumni Association to honor outstanding accomplishments by a doctor who did residency or fellowship training at Pitt but earned an MD elsewhere.

Fine's work has been cited in many medical texts, including the *Cecil Textbook of Medicine*. His clinical research career has focused on the management of community-acquired pneumonia. *–DH*



**Fine won the McEllroy. (He's shown here with his son, Jacob.)**




LISA KYLE

## PATCHWORK SCIENCE

**Anna Zemke is no stranger to making quilts with a scientific theme—she once created a quilt of the periodic table. This spring, the MD/PhD student, who's currently pursuing a doctorate in the biomedical sciences and aspires to a career as a clinician and basic science researcher, made a quilt featuring the functional unit of the kidney known as a nephron. That quilt, shown here, was one of the winning entries in this year's Nephron Art Contest, an annual event held by James Johnston, professor of medicine and this year's National Golden Apple winner (see p. 3). It takes Zemke about 90 minutes to make a skirt from scratch; she has been quilting since she was 12. *–SKP***

# Appointments



Lagasse

In research published in 2000 in *Nature Medicine,* **Eric Lagasse**, a new associate professor of pathology, injected hematopoietic stem cells (the precursors of blood cells) into mice with liver disease. The injected cells not only gave rise to new blood cells, but also led to the diseased liver cells becoming fully functional. This suggested that these stem cells might perpetuate other types of cells and tissue besides those related to the system from which they originated. But further research showed that the hematopoietic cells did not actually turn into new liver cells. In a 2003 *Nature* paper, Lagasse showed that some of the hematopoietic cells had fused with liver cells—and in these fused cells, the liver cell had reprogrammed the hematopoietic cell to behave like a liver cell. At Pitt, Lagasse will continue to develop stem cell therapies for liver diseases. He'll also establish a research program on cancer stem cells. Before coming to Pitt, the PhD directed the stem cell program at StemCells in Palo Alto, Calif.



Niedernhofer

A mouse normally lives two years. Knock out its Ercc1 gene (a DNA repair gene) and it dies of old age at three weeks. **Laura Niedernhofer**, a new assistant professor of molecular genetics and biochemistry, mutated the gene so that it was partially functional, and the mouse's lifespan was six months. She made a less severe mutation, and the mouse lived 18 months. By altering DNA repair in this way, the MD/PhD has a series of mice who age at different rates. Niedernhofer recently finished her postdoc at Erasmus University in the Netherlands. At Pitt, she will continue to explore the link between DNA repair and aging.



Kroboth

**Patricia Kroboth**, a faculty member in the Department of Medicine since 1980, has been named the new dean of the School of Pharmacy. She helped establish the Clinical Pharmaceutical Scientist Program at Pitt and has chaired both the Department of Pharmacy and Therapeutics and the Department of Pharmaceutical Sciences. *—DH*

# SCHOOL OF HARD HABITS

## COUNSELING PATIENTS ON QUITTING TOBACCO

BY HATTIE FLETCHER



Students learn how to light up lives by helping patients quit.

© JOHN SPRINGER COLLECTION/CORBIS. ROSALIND RUSSELL STARS IN *AUNTIE MAME*, C. 1958.

The teenager, dressed in a black T-shirt and baggy pants, slumps in his chair in a room in Scaife Hall, staring at his feet. He tells third-year med student Rob Albrecht that he's been having stomach pains.

Zak's not a real patient, but an actor trained to give feedback. Albrecht has just been to a lecture, where David Eibling, professor of otolaryngology, explained how to counsel patients about tobacco use. "If we don't bring it up," he told the group, "patients assume our lack of concern is approval." Now, Albrecht's ready to try it out for himself; he'll practice with a few different "patients." The lecture and practice opportunities are part of a new tobacco cessation addition to the third-year Ambulatory Care Clerkship.

Standing while facing Zak, Albrecht asks a few patient-history questions, then zeros in. "Do you smoke?" he asks.

"I would never smoke," the bored-looking teen mumbles. "My grandfather just died of lung cancer."

A moment ago Albrecht was all set to counsel Zak; now he looks alarmed. He asks more about Zak's stomach pain, then after five minutes, stops the session to get feedback from the actor.

"Obviously, we were here to talk about quitting smoking…" Albrecht says.

"Hold on. Quitting what?" Zak interrupts.

"Smoking."

Zak sits back with a small smile and folds his arms over his chest.

"It says *tobacco* cessation."

As it turns out, Zak recently began using chew—which can lead to oral cancer, dental disease, nicotine addiction, as well as stomach ulcers. Later, tall, sandy-haired Albrecht shakes his head in frustration. "I will for the rest of my life ask about chewing tobacco," he says glumly.

Albrecht moves on to another case—Laura, a 35-year-old office worker. Her complaint: She quit smoking three weeks ago and has gained a pound a week since then. Albrecht congratulates her on quitting. He learns that Laura's been munching M&Ms in lieu of smoking, and suggests she try nicotine gum.

Afterward, Laura praises him for thoroughly explaining how to use the gum, but says that he didn't sound sincere when congratulating her on quitting: "It sounded like you were just saying the words to me."

"That's what I was doing," Albrecht agrees sheepishly. After leaving Laura's exam room, he notes, "That wasn't easy to hear."

Next is Carl, a 66-year-old man who's smoked for 53 years. Carl has recently cut back on his smoking, but is reluctant to quit.

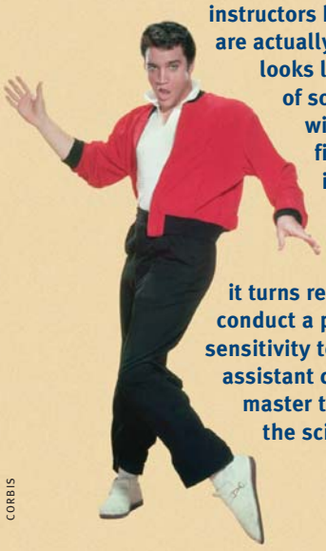
"Quitting smoking's a really difficult thing, and you've made great progress," says Albrecht. "Just because you haven't been able to do it instantly on your own is nothing against you. You're right on the brink, and let's see if we can try out some other ideas." He helps Carl brainstorm about how to change his behavior and explains that even after so many years, quitting has benefits.

Carl gives Albrecht high marks during the feedback. "You made me think very seriously about quitting," he says. ■

## PRODUCTION MODEL NO. 3

**Our medical school just got an electronic pelvis. First thought: Elvis would have been pushing 70 by now. But this is a female pelvis, designed to help medical students develop physical exam skills before working with, gulp, real patients.**

**This latest in Pitt's repertoire of simulator teaching tools is hot off the assembly line—ours is Production Model Number Three. California surgeon Carla Pugh invented the E-pelvis, recognizing that instructors have great difficulty telling what students are actually touching during a pelvic exam. Her invention looks like a supine 60s-era girdle mannequin made of soft rubber instead of hard plastic. It comes with normal anatomical parts and can also be fitted with three common abnormalities, including a fibroid uterus. When the student touches, say, the cervix, the cervix indicator on an attached laptop screen turns green; if the student applies too much pressure, it turns red. By using the mannequin, students learn to conduct a pelvic exam the same way every time, with sensitivity to the patient's comfort, notes John Mahoney, assistant dean for medical education. "It helps students master the art of medicine," he says, "as well as the science." *–Margaret C. McDonald***



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