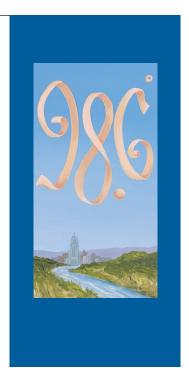
People and programs that keep the school healthy and vibrant





Sylvia Bernassoli with Magee colleague Anthony Wakim, medical director of assisted reproductive technology.

TO HEAL HEARTACHE

NURSE GIVES TO IVF RESEARCH BY JOE MIKSCH

ylvia Bernassoli, a nurse anesthetist for nearly six decades, had just finished preparing five patients for in vitro fertilization (IVF) procedures when she called this writer. She was driving home to McMurray, Pa., from Magee-Womens Hospital of UPMC. "I should have waited to call," she says. "But I really wanted to talk to you about this."

The "this" Bernassoli refers to is a donation to Magee-Womens Research Institute (MWRI), intended to give IVF—first undertaken in the United States in 1981—an even greater likelihood of success. (About 150,000 IVF procedures take place annually in the United States. For women under 35, 40 percent of these procedures result in birth.)

Bernassoli is 79. She works full-time, administering anesthesia to women about to undergo egg-retrieval surgery. She has no children and is not married. And after 57 years in her profession, she finds herself in a position to lend a hand.

She has arranged to donate, over the ensuing years, at least \$500,000 for Pitt/UPMC docs to research infertility and other reproductive health issues. The gift is the largest individual planned gift to Magee in the past decade. The donation will draw from Bernassoli's individual retirement accounts

and a life insurance policy, which names Magee as the beneficiary.

"I see these [couples] so upset that they can't have a baby," she says. "People may say they should adopt, but they want this so much."

Infertility is a real medical problem, she says. "It just doesn't get the attention. Cancer does, other things do, but fertility doesn't."

Yoel Sadovsky, the Elsie Hilliard Hillman Professor of Women's and Infants' Health Research in the Department of Obstetrics, Gynecology, and Reproductive Sciences in the University of Pittsburgh School of Medicine, is also MWRI's director.

Naturally, he's thrilled by the gift. The money, he says, will chiefly be used to advance research in the field of reproductive endocrinology and infertility, promoting translational and clinical research, as well as patient care in the area of female and male fertility. A particular research goal, he says, is to find ways to restore fertility after chemotherapy for cancer and other conditions.

Bernassoli has vague plans to retire. Her contract runs out June 30, 2014, but, she says, she would be more than happy to stick around for a while afterward to help her successor. She'll be 81-and-a-half when that time comes, but "I'm still enjoying this, so why not?" she explains.

Bernassoli's generosity has been featured on *NBC Nightly News* and, locally, on WPXI-TV and in print media. But it's not the attention that drives her.

"I think of these families, and I'm honored to help," she says.



BOOSTER SHOTS

Ibert Lexie is a shining star. The Monessen, Pa., resident has been shining shoes since 1957. In 1982, Lexie, who plies his trade at Children's Hospital of Pittsburgh of UPMC, decided to donate every penny he received in tips to the Free Care Fund at Children's Hospital. As 2013 rolled around, Lexie calculated that he had donated more than \$200,000 to the fund. Even if your brogans don't need a \$5 polish, you can help support "Albert's kids," as he calls them, by visiting www.givetochildrens.org.

To make a gift to the School of Medicine or an associated program, contact Jen Gabler at 412-647-3792 or jag188@pitt.edu.



IMAGINATION UNLEASHED

s traditions go, the University of Pittsburgh School of Medicine's Scholarly Project is relatively new. When it was initiated in 2004, this concept of a mandatory, multiyear, research-driven, limited-only-by-the-bounds-of-the-imagination undertaking was also novel. Fast-forward to today, and scholarly projects are becoming a rite of passage at other med schools, including Harvard's.

That doesn't surprise David Hackam, an MD/PhD, associate dean of medical student research, Watson Family Professor of Surgery, and associate professor of cell biology. He's been overseeing the program since 2010. (To learn about this prof's promising breakthroughs from his other roles as a pediatric surgeon and scientist, see p. 24.) For Hackam, the goal is simple: "We want our students to look beyond textbooks and develop critical-thinking skills and the ability to test hypotheses."

Students choose individual topics that interest them and then, in most cases, begin research over the summer between their first and second years so that they can officially begin their Scholarly Projects by sophomore year. By graduation, Hackam asserts, they become experts in their areas of research and, as a result, are highly sought after for residencies. That fact has not gone unnoticed by aspiring physicians. According to Hackam, "Informal surveys indicate that a significant number of our students are coming here because of the Scholarly Project."

—Compiled and written by

Barbara Klein and Joe Miksch
—Illustrations by Michael Lotenero

The **144** students who marched to the strains of "Pomp and Circumstance" this spring represented just the sixth graduating class to complete Pitt's Scholarly Project course

Among the topics? Students researched the "feasibility of a text-message-based behavioral intervention to reduce sexual risk behaviors in young adults that present to the emergency room," explored the "effects of glucocorticoid receptor neural progenitor cells on cerebral cortex development," and investigated "attitudinal predictors of waterpipe smoking in U.S. college students."

TALKING THE TALK

As if med school weren't time-consuming enough, these grads also played roles in 234 national and international presentations.

WRITES OF PASSAGE

This year's crop of Scholarly
Projects produced **134** published articles—with **43** boasting first authorships. Those journals included Archives of Internal Medicine,
The Journal of the American Medical Association, Hepatology, and Annals of Surgery.

THANK YOU, THANK YOU VERY MUCH

The class of 2013 took home 39 national awards (for example, the CDC Experience Applied Epidemiology and the Doris Duke Clinical Research fellowships), as well as 39 local awards (like Pitt's Clinical Scientist Training Program Research Fellowships).

NEAR AND FAR

Science knows no borders, and a few projects were international in scope (like "the dry season prevalence of Tungiasis in the rural communities of Beira, Mozambique") while others stayed closer to campus ("the development of a health resources guide for older adults in Braddock, Pa."). Others managed to merge global and local ("barriers to health care utilization among newly resettled Bhutanese refugees in Pittsburgh").

OH, O'MALLEYS!

Bert O'Malley (BS '59/MD '63) is one of the University of Pittsburgh School of Medicine's many success stories. His honors include winning the National Medal of Science and membership in the National Academy of Sciences. O'Malley is credited with establishing the field of molecular endocrinology and now chairs the Department of Molecular and Cellular Biology in the Baylor College of Medicine, where he is the Thomas C. Thompson Professor of Cell Biology. In 2010, he

and his wife, Sally (whose '59 degree is in education from Pitt),



Colby Croft found an opportunity to augment Pitt med's curriculum related to the health of lesbian, gay, bisexual, and transgender (LGBT) people. His O'Malley-winning Scholarly Project-under the guidance of Pitt mentor Melanie Gold—resulted in an improved workshop on gender identity and sexual orientation for incoming med students, the creation of a standardized patient case featuring a same-sex couple, and an expanded workshop on human sexuality for the reproductive biology course.

Past life: Croft's interest in curriculum development grew at Pitt. But since high school there was never a time that he did not want to become a physician. During his undergrad years, he volunteered as an emergency department scribe and in triage at a free clinic. "[These experiences] opened my eyes to the exciting challenges and rewards of patient care," he says.

What's next: A continued focus on LGBT issues and curriculum development and a psychiatry residency at the University of California, San Francisco. Afterward, on to a career in academic medicine, working to promote the health of LGBT youth.



Something goes wrong with the colon. It becomes inflamed. At the same time, the bladder shows signs of dysfunction, but there are no obvious signs of disease in that organ. Jocelyn Fitzgerald set out to understand why. Under the guidance of Pitt's Chet de Groat, she implicated the mast cell (an immune cell of the bladder and colon), an enzyme it produces, and the proximity of mast cells to the sensory nerves of these pelvic organs in this disorder, called "pelvic organ cross-sensitization." Her rats with irritated colons had significantly increased bladder activity, and she found that blunting both the mast cell and its downstream targets can reverse the inflammation and calm the overactive bladder.

Past life: Fitzgerald became interested in science and women's health issues in high school. Then she was a double major in biology and women's studies at Penn State's Schreyer Honors College. She combined these interests in her honors thesis, which drew from the Tremin Research Program on Women's Health, an almost 80-year-old generational study of women's health throughout the lifespan.

What's next: A residency in obstetrics and gynecology at Johns Hopkins Hospital and further research into chronic pelvic pain, which she calls "an undertreated and debilitating problem with a significant void in both research and providers."

created the Bert and Sally O'Malley Awards

for Outstanding Medical Student Research to recognize lesserknown success stories. The award, which comes with a \$500 stipend, honors a select few who exceled in their Scholarly Project research while pursuing their MDs at Pitt. We present the 2013 O'Malleys . . .



Some of us use Nintendo's Wii gaming system to lose to our nephews in various Mario Brothers games. **Kellie Middleton** suspected that the gaming system might have a higher calling. Her project found that, as the title states plainly, "Playing the Nintendo Wii improves non-dominant handedness in surgically naive student performance on a virtual-reality surgical simulator." (So a little time with Super Mario Bros. might not be a waste of time for an aspiring surgeon.)

Past life: Crushing softballs. Middleton played varsity ball at Notre Dame and the University of Georgia, and she played professionally with the Akron Racers. While with the Racers, she worked in public policy in Berkeley, Calif., and cofounded a non-profit to provide opportunities for underserved girls through athletics.

What's next: A residency in orthopaedic surgery at UPMC and continued research in orthopaedics, surgical education, and public health.

Traumatic brain injury (TBI) whether suffered on the battlefield or the football field—is a hot topic. Thomas Phelps, in the lab of Pitt's Anthony Kline, used his Scholarly Project to find out whether the antipsychotic drug aripiprazole might be an effective treatment for TBI. (Many antipsychotics currently used to treat TBI impair motor and cognitive recovery.) Aripiprazole, Phelps found, did no harm to his rats' cognitive abilities, and it improved their spatial-learning ability and memory. "If aripiprazole is found to improve spatial learning and memory in humans, it may have further rehabilitative potential to improve cognitive recovery in TBI patients," Phelps says.

Past life: Phelps served in the Army and was deployed to Iraq as an M1A1 tank commander. This experience helped mold his medical interests. "TBI has become a signature injury for the war in Iraq... As a result, many young men and women, while lucky to be alive, must now learn to cope with long-lasting disabilities," he says.

What's next: After his emergency medicine residency at Case Western Reserve University and Cleveland Clinic, Phelps plans to continue his Pennsylvania National Guard service as a medical corps officer.



Rachel Orler Reid recognized that it's not always easy to determine which docs provide the best care in clinic. Over the course of her Scholarly Project, which included work at RAND Corp.—in conjunction with Ateev Mehrota, MD associate professor of medicine - Reid explored the relationship between the information people use to select doctors and clinical quality. The work led her to delve deeper into the relationships between perception, cost, and quality of care while at the U.S. Centers for Medicine & Medicaid Services. A related paper was published in The Journal of the American Medical

Past life: Rowing. Lots of it. She was the assistant captain of Harvard women's lightweight crew. And before college, what was then the Governor's School program in Pitt's School of Medicine helped solidify her career path.

Association in January 2013.

What's next: An internal medicine residency at Brigham and Women's Hospital in Boston and further investigations of how cost and information are related to the choices we have to make about health care.

A SHOUT OUT Mentors, by their very nature, provide support, guidance, and experience, as well as the occasional dose of tough love. Scholarly Project mentors take on a three-year commitment to individual students. For the first time, graduates returned the favor by nominating their mentors for special recognition. And the Excellence in Medical Student Research Mentoring Awards went to Giselle Hamad, an MD and associate professor of surgery; Brian Klatt (MD '97, Res '02), assistant professor of orthopaedic surgery; Ateev Mehrotra, an MD/MPH and associate professor of medicine; and Vu Nguyen, an MD and assistant professor of plastic surgery.