As 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 water-pipe smoking in U.S. college students.”

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.

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”).

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

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).
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), created the Bert and Sally O’Malley Awards for Outstanding Medical Student Research to recognize lesser-known success stories. The award, which comes with a $500 stipend, honors a select few who exceed in their Scholarly Project research while pursuing their MDs at Pitt. We present the 2013 O’Malley’s...

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.

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 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.

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 Association in January 2013.

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.

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.