Pitt med grads at some of the nation’s most prominent residency programs talk about how things are going.
(From left: Adam Frymoyer, Jin Hui Joo, Ryan Madder, Josh Lovelock)
Lying in a hospital bed, Ralph Aaron rasped and wheezed. His nerves were rattled. He struggled to breathe.

What if he stopped breathing? he wondered. Perhaps more oxygen would help.

His wife sat beside him. She listened to his labored inhalations, fearing they would end. Ralph Aaron (not his real name) was in his late 40s. It was only six months ago that doctors had discovered metastasized cancer in his lung.

The Aarons called for the doctor.

Ryan Madder (MD ’04) was on call as an internal medicine resident in the intensive care unit. It was his first week at Washington University in St. Louis.

When he arrived at the bedside, Madder couldn’t give the patient more oxygen—Aaron was already at the limit.
“We don’t have a lot of options,” Madder explained. “I could intubate and put in a breathing tube for the ventilator. I could give you more morphine so you’d be more comfortable.”

Madder knew Aaron was dying and would be more comfortable in a hospice. The intern spoke with a senior resident to see what she thought. The resident assured Madder that he was treating the patient correctly and told him to call if he had more problems.

Returning to his patient’s bedside, the young intern explained that though Aaron hadn’t been sick for long, the illness was serious, and he might want to consider palliative care.

This was the first time Madder told a patient that he wasn’t going to get better. He felt drained and tired. The news shocked the couple. Ralph Aaron, after all, was not yet 50.

Aaron asked for morphine.

Medical schools anticipate many of the challenges their graduates will face in the world of medicine, yet educators can’t prepare students for every situation, no matter how stellar the faculty or the curriculum. No professor truly prepared Madder to peer into a middle-aged patient’s face and tell him that his options were limited. Sure, classes gave Madder a chance to practice, but it wasn’t the real thing. Once Madder worked with patients directly, he says, he “learned a lot about people.”

“I guess you learn how to deal with people at their best and worst extremes of emotion,” he says, reflecting on cases like Aaron’s. “The worst comes a lot more frequently than the best,” he admits.

There are many ways to mark a passing year. Students might divide it by terms and midterms, final papers and final exams. First-year residents mark the time by rotations completed or the number of times they are on call. Or maybe not. Perhaps they are more likely to remember the first night, the first time they have to run a code alone, the first time they realize a patient is completely on their watch. Or to come face-to-face with the reality that sometimes a doctor is helpless, that she has done all she can. These are the impressions that echoed as I talked with several Pitt med graduates about their experiences during the first year of residency at some of the nation’s most prestigious residency programs. (You’ll read some of their stories here.) We talked about how prepared they felt, about venturing into the world after med school. They spoke of a life of great reward, frustration, meaning, and consequence. In other words, they told me how it feels to be a doctor at last.

The pager on Josh Lovelock’s (MD ’04) belt squawked. He was in the hospital on call. A 30-year-old man with leukemia was crashing on the floor. As Lovelock entered the room, he saw the young man lying on a bed. The patient gasped and choked. His blood didn’t have enough oxygen.

It was Lovelock’s first month as an internal medicine intern at the University of Chicago. Everything was new. The resident with whom Lovelock had been working was somewhere else, treating another patient. Lovelock had no choice; he had to stabilize the man. This was his patient.

Okay, he told himself. Give him fluids. Give him oxygen. Give him an EKG. Call for a transfer to the ICU. If fear crept into his thoughts, Lovelock quickly dismissed it. The only thing he allowed himself to think about was that he had to control the situation.

As he worked, in the back of his mind, he recalled his experiences from his Pitt med classes. He had learned how to run codes by working with Pitt’s patient simulator SimMan, which, of course, isn’t a real person, but no student wants SimMan to die. The dummy was real enough for Lovelock to gain some experience handling the unexpected under pressure. One of the other grads interviewed for this article brought up Pitt’s simulator training as well, saying it “gives me an advantage. It seems like a fairly unique thing at Pitt.” (Though many schools have simulators, the size and scope of Pitt’s Peter M. Winter Institute for Simulation Education and Research is such that students get to know SimMan well. And about 4,000 people visit Pitt annually for tours of the center.)

After half an hour, Lovelock stabilized the patient and transferred him to the ICU. Lovelock’s take on the situation was mixed. Sure, he’d helped the patient, but there was still so much to learn.

Lovelock and other grads noted that they knew being an intern would mean more responsibility. Yet, they still found themselves surprised by how accountable they were. Lovelock expected that he would have to order tests, but he didn’t expect he would have to make sure that the patient actually went to get blood drawn or a CAT scan. During medical school, he’d spent a year as a Sarnoff Fellow conducting cardiology research. The experience gave him an advantage, he says, because the lab work he conducted required answerability—he became accustomed to developing internal check systems, which helps him treat patients today.

After about three months of being on call, Adam Frymoyer (MD ’04) was exhausted.

One morning, Frymoyer dragged himself into one of the community clinics at the University of California, San Francisco, dreading the on-call night awaiting him after his day shift.

He walked into the exam room where a young couple and their 8-month-old son sat. Frymoyer had seen the boy several times before.

“Here’s your doctor,” the baby’s mom cooed to her son.

That’s when it hit Frymoyer—he was the only doctor this boy had ever known. At that moment, with the utterance of three simple words, he finally felt like a doctor. The parents trusted and respected Dr. Frymoyer.

He went into his normal routine, trying to make the baby smile and laugh while examining him. Frymoyer, who is upbeat and thoughtful when he speaks, loves playing games with children and connecting with them and their families. He has long days when he tires of being on call—and it’s always tough to deal with sick kids—but he feels like he is part of a team with the parents, looking out for the children’s best interests.

When Frymoyer talks about his days at Pitt, he thinks about the art of the interview. He says that from the moment he stepped into Scaife Hall, professors stressed the importance of the human connections in medicine. He took the basics on interviewing from Pitt and added his own flair—smiling or placing a hand on a patient’s arm. Frymoyer and other graduates say they mastered the basics in Pittsburgh, but they agree that to really excel at interviews and physicals, they have to
actually conduct them.

Yet just when an intern seems to get a handle on things, there's a disease that presents abnormally or patient who isn't forthcoming— like the middle-aged man who'd entered the psychiatry emergency department at the Hospital of the University of Pennsylvania.

He was hearing voices.

He was afraid he would hurt himself.

It was already months into Jin Hui Joo's (MD '04) intern year when this man walked into the ED. She interviewed him, probing for reasons why he might be hearing voices. He hesitated before he spoke; he was holding something back. His answers didn't make sense to Joo.

Joo admitted the man overnight, even though she was wary of his motivations. Could he just be describing symptoms to get a meal and a place to sleep?

She interviewed him again. This time, she asked more questions, digging deeper. She learned he usually used heroin, but for his last fix, he mixed heroin with cocaine. The mix seemed to be causing the hallucinations.

After Joo's first rotation in the hospital's psychiatric ED, she had seen enough to recognize that the man had been hiding something in his first exam. Pitt gave her a foundation for figuring out such mysteries, too: She thinks the problem-based learning sessions at Pitt, where professors presented students with a problem or condition they were instructed to work through on their own, helps her as she probes real cases today.

As a psychiatry resident, Joo treats many patients like this man, who suffers from a variety of problems. Joo must make diagnoses without literally being able to get inside someone's head. The tools she relies on are not lab tests or x rays.

One day, Madder headed to a Washington University clinic. As an internal medicine intern in St. Louis, Madder worked in mostly urban settings, treating poor and uninsured patients.

Walking into the exam room, he saw a 20-something woman sitting on the table. She was losing feeling in her legs. She complained of weakness and lethargy. She'd lost vision in one eye. She also showed the intern her elbow, which was swollen.

Bunched together, these symptoms were atypical. Madder started searching journals online for similar cases. He kept digging, pushing himself to find what was wrong.

After many tests and a lot of research, Madder found the patient had Ewing's sarcoma, a rare bone cancer that generally affects children and young adults. The lump on her elbow, which she'd had for a year, was where the cancer had started. By the time Madder treated her, the cancer had spread to her spine and brain.

She would undergo chemotherapy and radiation, yet the oncologist estimated she would live less than five more years. This was one of many times throughout the past several months when Madder felt overwhelmed with frustration and sadness. If only she'd come in a year earlier when she first noticed the lump, then her prognosis would have been much better. While at Pitt, Madder encountered many patients like this young woman, people who were poor with insufficient or no insurance, who were a little fearful of the hospital and only entered it when the symptoms were severe— when it was too late to turn the disease around.

Pitt's urban hospitals gave Madder experience working with a population somewhat unfamiliar to him. Yet that exposure hasn't helped him accept the inequities between people who have insurance and people who do not. Socioeconomics can be learned, but that doesn't make it easier to swallow the fact that those who end up in his care are often sicker than those who have a regular physician and healthcare plan.

Madder finds it difficult to turn this situation into a learning experience. When he searched for a cause for this woman's problems, his skills as a clinician were tested, and he proved his mettle. Like others who responded to my queries, Madder believes Pitt prepared him to be an outstanding clinician. It's where he honed his research skills, and the residency program— newly minted docs from the medical schools at Stanford University, the University of Pennsylvania, Dartmouth, and other well-respected programs— he often feels that he is better prepared. Pitt encouraged research, helping him realize much sooner that he wanted to be a physician scientist.

Still, when Frymoyer confronts a stack of paperwork that he must fill out for an HMO, he is a bit bewildered. He knew that HMOs turned the art of medicine into a bureaucracy, but he had no idea the amount of time paperwork would consume. “You always hope that medicine isn't going to have as much paperwork or be as bad as people say about insurance, but the reality is there.”

He starts to talk about how he wishes Pitt had taught more medical economics, but then he stops himself. He wanted to spend the time learning about medicine, not paperwork.

Most of the interns I talked with said that if they had to choose a med school again, they'd pick Pitt in a heartbeat. And even after a tough first year, they were all happy to be doctors.

One grad says about her career choice— “I love to learn, I love people, and it is a gift to be entrusted with another person's life.”

W hat's next for this crowd? Years of doctoring, of course. In addition, Joo recently found a research mentor; she plans to study cultural issues in psychiatry, such as why many members of minority groups avoid psychiatric treatment. All of the students I talked with were in various stages of finding research mentors and projects. Some, like Lovelock, have started doing research on days off. Others, who are in longer programs such as neurosurgery, know they want to do research but have years to go before they identify a project.

When Frymoyer considers his peers in his field, he reflects on what's changed since those first days of medical school. "I love to learn, I love people, and it is a gift to be entrusted with another person's life."
Aft er the Class of 2004 walked out of Scaife Hall and into new, freshly pressed, long white coats emblazoned with the names of their residency programs, how did it go? Were they prepared? Yes, they told us resoundingly.

For our feature “One Year into Residency,” writer Meghan Holohan spoke at length to several graduates of the Class of 2004. We wanted to fi nd out how their classmates were doing as well, so we cast a wider net, sending a survey to the entire class. Here are their most informative responses.

All respondents said Pitt provided the necessary tools for residency.

We’ve seen a substantial increase in the number of Pitt med graduates entering the country’s most competitive residencies. Still, the majority of respondents said they felt better prepared than their peers in their programs.

What has the Class of 2004 wielding tongue depressors with such confidence?

It seems Paul Rogers, professor of both critical care medicine and medicine, has something to do with it. Slightly more than half of the respondents listed his Critical Care Medicine course as the most helpful one they took; and again and again they referred to their simulator training with Rogers and associate professor of emergency medicine Susan Dunmire (MD ’85, Res ’88) as among their most salient Pitt memories. What other classes did they deem most helpful? Anatomy, Emergency Medicine, and Third-Year Medicine were among the many favorites.

On respondents’ wish lists?

When we wrote, “If only the School of Medicine had a course in ______,” one grad suggested “Hawaii.” (Not a bad idea.) Some said they would have benefi ted from more exposure to pharmacology and clinical procedures. Where is their crystal ball? Pitt has intensified the fi rst-year pharmacology block, and the second-year organ courses now integrate pharmacology. Likewise, students have even more opportunities for simulator training and working with “standardized patients” (trained actors with whom they practice examinations and history taking). The class also said more on the business, economics, and law of medicine would have been helpful. This is, indeed, a prescient group. The school has put more focus on these areas in the fi rst and second years.

What was most striking to the Class of 2004 about residency experiences?

Some grads talked about the amount of work and knowledge needed—others said the program was easier than they had anticipated. Some noted the regional differences in healthcare needs and practices; others the autonomy of residents. Grads were also moved to mention the fatigue, paperwork, and the number of patients without adequate healthcare coverage.

What memories of learning at Pitt remain?

A mixed bag of responses. “The awesome experience of observing the heart, lungs, and small bowel in vivo during surgery/anesthesia.” “Dr. Jamie Johnston’s grace dealing with the announce ment of 9/11 during renal lab.” “Dr. Shaver rapping/humming/singing heart murmurs.” (We’d like to hear that, too.) Grads also recognized those who may be their fi nest lifelong teachers—“interesting patients.”

—Erin Lawley & Erica Lloyd