



**I**n a small room softly lit, a man lay dying in the white sheets of a narrow bed centered along one wall. At the sides of the bed sat Ron and Jen Romero, each with one of the man's hands nestled in theirs. At times, the man's breathing would stop, then resume; he seemed unaware of everything around him. When after awhile it seemed to the Romeros that there was little they were doing to comfort the man, they rose to leave.

Immediately, the man opened his eyes and looked directly at them. "You're not leaving, are you?" he asked.

"No," they said to him, reclaiming their seats at his sides. "We're staying right here."

BY RICK KRUPINSKI  
PHOTOS BY SCOTT SODERBERG



Lindsay Brown



nd of life is a different sphere of medicine,” Ron Romero says. “It’s a time when barriers come down, a time of honesty; the science fades. People have different attitudes about death. Some find the fact of death excruciatingly painful. Others are ready to go, and even make light of it.”

“There was a 99-year-old woman,” says Ron’s wife, Jen, “who said, ‘I’m ready! I was ready five years ago! It’s been downhill since 94!’”

For the summer break between their first and second years of medical school, the Romeros wanted to delve deeper into the patient experience. They arranged end-of-life internships with Ann Arbor Hospice and the VA Ann Arbor Healthcare System. They took an elective course in Maine on integra-

clinical arena for them. It was also a solid segue into their second year, when the science they learned in the first took on a deeper clinical orientation.

One way of looking at the difference between medical school’s first and second years is that students learn during year 1 how the body works; in year 2, they learn how it all can go wrong. For example, the first year’s comprehensive study of the cardiovascular system translates, in part, into cardiology in the second year, replete with hypertension, heart attacks, heart failure and more.

Still organized according to body system, “what we learned for each disease remained the same,” says Lindsay Brown, “regardless of the part of body it affected: epidemiology, pathophysiology, clinical presentation, diagnosis, treatment, side effects and prevention measures. As a result,

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tive medicine and spent a week at the Betty Ford Center in Palm Springs, California, where Ron was embedded with the family program. “Families of addicts must cope too,” he says, “and learn what they can do to be happier themselves. It was fascinating because it was another situation of pure honesty, being open about weakness.”

Romero says that integrative medicine made them more aware that medicine is not only about curing and treating, but about quality of life as well. “While there might not be a lot of scientific evidence behind massage, acupuncture or other alternatives,” he says, “these things can make people feel better even if they aren’t curative — especially for people with conditions like chronic pain. Even something like a harpist playing music for a patient can make that person feel better. The harp itself becomes alternative medicine.”

Their summer experiences, the Romeros say, were life-changing. After the heavy science emphasis of their first year of medical study, connecting further with patients and the patient experience was an important foray into the

my approach to studying remained constant over the year, unlike the more varied approaches I felt were necessary to learn the more varied content covered in our first year.”

The clinical application of medical knowledge isn’t new to second-year students; the Family-Centered Experience, shadowing physicians, the core Clinical Foundations in Medicine course and longitudinal case studies introduce first-year students to a variety of aspects of clinical medicine. But as an unrelenting focus of second-year learning, students build skills not just in recognizing and responding to diseases and disorders, but in patient-focused activities like history-taking, physical examination, diagnosis and treatment, patient interaction, cultural and lifestyle awareness.

“We love the patients,” Ron Romero says, “and even though we work with standardized patients at this point, it’s more interactive than the first year — I think it gets better with each year you get deeper into it. It makes all we’ve learned relevant.”

Jen Romero, who officially changed her name from Price last year, cites the Comprehensive Clinical Assessment — a



Jen and Ron Romero

three-hour test of their history-taking and examination skills — as one of their better learning experiences so far. “I remember the first time I attempted a patient exam,” she says. “I quickly came to a point where I wondered, what do I do next? By the time of the CCA, I could really feel the learning trajectory.”

Physician-shadowing experiences — those which are part of the core curriculum and others students seek out themselves — have more dimension in year 2, as clini-

cal knowledge grows. “It’s gratifying to be with someone assessing and making a diagnosis,” Ron Romero says. “If I make the same diagnosis, it’s a good feeling — it’s learning in evidence.”

Students happily cite another difference over year 1: tests occur biweekly instead of weekly. While the lecture load is as heavy or more so, watching lectures online continues to be the primary mode of “attendance,” freeing time for pursuits as diverse as the students themselves.

“Flexibility,” Shaun Patel says, “is still my favorite part of the Michigan curriculum, by far.”

Patel spent his summer on a research project that continued his first-year work on predictors of post-transplant outcomes. Working with Assistant Professor of Surgery Mike Englesbe, M.D. (Residency 2004), and others, the team studied the relationship between central sarcopenia (core body muscle loss) and post-transplant survival, using the area of the psoas muscle as a proxy measure. Based upon data from patients who underwent liver transplant, they found that the smaller a person’s psoas muscle, the poorer the outcomes following liver transplantation. This predictor is much stronger than any predictors of post-transplant mortality currently utilized. Patel and colleagues presented related projects at medical organization meetings around the country.

With his second-year flexibility, widened further by his marathon approach to watching online lectures on test

weekends, Patel became even more involved in professional and volunteer organizations, and with research projects. The medical student representative on the National Resident Matching Program Board of Directors, Patel also is active with the American College of Surgeons, the American Society of Transplant Surgeons, the Academic Surgical Congress and the American Medical Association, to name only some, which involved trips to Chicago, Houston, San Antonio, Fort Lauderdale and Washington, D.C. — to name only several. “I was still able to fulfill all the aspects of the Michigan curriculum, which is the first priority, but Michigan realizes that these other experiences also are important in educational development,” Patel says.

Both Patel and Lindsay Brown have served the Medical School’s Admissions Committee, interviewing applicants for future classes of Michigan physicians. Quips Patel, “As if selecting candidates who will be taking care of future patients isn’t motivation enough, I’m aware that these people

also will be my future colleagues so I had better do a good job!” Each of them interviews up to six candidates on scheduled days, including a thorough review of files averaging 40-50 pages.

Brown, whose own summer was spent researching how closely physician preferences align with those of their patients with respect to post-surgery quality of life, has also continued her work with the Michigan chapter of the American Medical Women’s Association and the medical school’s Oncology Interest Group. Missing her creative side, which had more opportunity to flourish in undergraduate school, Brown also enrolled in a painting class at the Ann Arbor Art Center. She says it helps ground and relax her, and feel more complete as an individual.

Fasika Abera, who serves as vice president of the Medical School’s Black Medical Association, preceded her second year with an experience shadowing a




Shaun Patel

community hospital's lone physician in her native Ethiopia. The hospital is run by the Missionaries of Charity, established by Mother Teresa. "My connection to the hospital goes back to my high school years of volunteering, which was one of my earliest exposures to caring for the most needy," Aberra says. "The hospital has not changed much from the time I left."

Each morning before rounding with the physician, who cared for everything from infant ear infections to the many

also gain more background with which to make informed specialty decisions.

Course work was completed in late March, and students then had five weeks during which to study and prepare for Step 1. They can remain in Ann Arbor, take the opportunity to be with family, or study anywhere, in any environment they choose. It may sound like a break to some, but these are five weeks of, in most cases, 12-15 hours of study nearly every day.



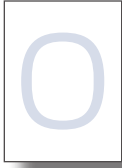
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HIV patients' opportunistic infections, Aberra visited the mentally challenged children. "Feeding and cleaning them made me count my own blessings as well as develop my comfort level with those who might be considered difficult to care for.

"Empathy and gracefulness in the face of adversity were the greatest lessons I got out of my experience," she says. "However, I also got the opportunity to learn more physical exam techniques that aren't frequently used here."

For each of the students, their varied experiences and intensive studies worked to prepare them for the second year's main event ...

## THE BOARDS



Officially known as Step 1 of the U.S. Medical Licensing Exam, it is widely regarded as the most important and most difficult exam medical students will face. U-M's second year is shorter than most medical schools', and as a result Michigan students take the Step 1 exam earlier than many others. This adds to the second-year workload, but affords students in their third year the opportunity for extra clinical rotations prior to the time of residency applications. U-M medical students are not only more competitive as a result, but they

"No matter how you slice it, studying for the boards is a daunting experience," Brown admits. "But in the weeks before the study period began, professors from our first and second years came out of the woodwork to teach review sessions on high-yield material. These sessions were taped and made available to us online to use when we got to the particular topic during our preparation."

Aside from the sheer amount of material, Brown found challenge in facing full days of 12 or more hours of studying from the same book, 35 days in a row. No longer did lectures, labs and patient encounters mix up her day. To counter the monotony, Brown paired with best friend and fellow medical student Raina Vachhani, who would call her at 8 a.m. to coax her out of bed to start the day. "We switched things up by studying at her house in Owosso, Michigan, for a few days, by exploring new libraries and coffee shops around campus, and sprinkling in a few days off. Despite our best attempts, however, there were times when the most exciting part of my day was opening a new pack of highlighters."

Consisting of seven blocks of 48 questions each, for a total of 336 multiple choice questions, the exam allows students an hour to complete each section, with short breaks between sections. Administered at standardized testing sites in Ann Arbor and elsewhere, location and timing are about the only choices involved; students select their test day

during a prescribed period of time. Schedules are rigid and security is tight; in addition to multiple forms of identification, fingerprinting, and storage of all personal items in lockers, exam-takers have to reverse every pocket in their clothing each time they access the room. Cameras closely monitor the testing room.


Aberra chose the last optional date to take her boards, to afford herself as much time as possible to prepare. “The study period is given to us to recall and learn to integrate information and start thinking more like a clinician,” she says. “Pushing it to the last day made sure I had enough time for my final review.”

Most students study from a 400-page book, *First Aid*, provided to each student at the beginning of their second year by the Medical Center Alumni Society. Brown says, “It really helped boost my confidence to remind myself that as a Michigan medical student I had become accustomed to being tested on 500 pages of new material a

truly matters: It’s the one residency programs use to stratify applicants. Some specialties have higher cutoffs than others, and a low score can limit a student’s residency options. No wonder the stress can soar. And with grading replacing pass/fail in year 3, suddenly medical school has become a more competitive venture.

Each of the students found his or her way of coping. The Romeros tried to view Step 1 as just one more test along the way, and the study period as an “incredible opportunity to hang out together and consolidate all the information we had learned during the first two years,” Ron says. Like Aberra, they chose a test date toward the end of the study period, and made sure to take off every Sunday and almost always got eight or nine hours of sleep.

Aberra admits to times of frustration and stress during the study period, but made the best of the limited time she had and reassured herself that she had prepared to the best of her ability. “It was challenging to integrate all the basic



NUMERICAL SCORES ADD IMPORT AND DIMENSION TO A STUDENT’S PERFORMANCE ON THE STEP 1 EXAM. ONE OF THOSE SCORES IS THE ONE THAT TRULY MATTERS: IT’S THE ONE RESIDENCY PROGRAMS USE TO STRATIFY APPLICANTS.

week. Of course, I would tell myself, I can learn 400 pages in five weeks!”

But what most helped Brown keep her confidence going was advice Professor of Pathology Andrew Flint, M.D., gave them. “Every day as I studied,” she says, “I could hear his voice in my mind: ‘I can promise that not one of you will come back to your 25-year reunion and say, if only I had gotten a few more points on my boards. You will look around the room and think how proud you are of your classmates, how much you love your family, and how grateful you are that you ended up in your field and practice.’”

Still, in the moment and at the time, the Step 1 stakes are high. While it’s true that Michigan medical students, among the best and brightest in the country, typically score well and passing isn’t usually an issue, numerical scores in addition to passing or failing add import and dimension to a student’s performance. One of those scores is the one that

science information from different sequences into clinical scenarios. But after a few practice tests, I realized that most of the scenarios were familiar because they’ve been taught to us in the last two years.”

Patel looked at the boards as just one more hurdle he had to jump in pursuit of his career objectives. Unlike most of his classmates, he decided “to use zero books” and just use practice questions as his main foundation, finding that doing questions forced him to engage in the material, critically think about the topic, and reason through the answer choices. “The question banks that I used do a very good job of explaining the question, the correct answer, and just as valuable, why the other choices are incorrect. If these explanations were insufficient or if I wanted more information about something, I just went online and looked it up.”

As did the Romeros, Patel took a half-length practice exam at his testing center; his main goal was to get a sense



Fasika Aberra

of the logistics — driving route, testing environment, what the assigned locker would accommodate, where the bathrooms were, what the temperature was like. “Getting rid of all those small details that could cause unnecessary problems come test day is a good thing,” he says.

And, so, what was it like?

“It’s one of the most challenging exams I have taken so far,” Aberra says, “mentally, physically and emotionally. Regardless of how many questions I felt like I answered correctly, coming out of that exam was a great relief!” The students agree that despite Herculean preparation, the exam was a bit of a surprise — “more conceptual and less fact-based than we thought it would be,” Ron Romero says, “but we left the test knowing that we had done the best we could.”

Patel agrees: “A fair number of questions were more challenging than a lot of us were expecting based on practice exams.” A complicating factor is the presence of numerous,

randomly-placed “experimental” questions that don’t count toward a student’s score, but are used to gather pilot data by test writers for potential use in future exams. “A lot of us are convincing ourselves that everything we didn’t know were experimental questions!” jokes Patel.

After just a few free days, year 3 orientation and clinical rotations got underway on May 5.

Aberra sums it up succinctly: “M2 year was a short but vivid experience.”

The Romeros are amazed at how quickly medical school is going. “At first,” says Jen, “we thought about the years involved, how old we’d be when we finished, but now, it’s just going so quickly! I’m so proud of us!” [M]

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