





A HYBRID Medical Education

Pioneering Columbia-Bassett Students
Try a Different Glove on for Size

With a sheaf of acceptances to medical schools in hand, David Chapel'15 thought he would probably turn down his offer from the Columbia-Bassett program, which places 10 P&S students at the Bassett Healthcare System campus in the quaint and historic upstate New York village of Cooperstown – best known as the home of the Baseball Hall of Fame – for the second half of their undergraduate medical education.

Having grown up on a farm in Michigan, Mr. Chapel says that his roots instilled in him a passion for rural medicine, so the Bassett track intrigued him when it came up in a Google search of medical school programs offering options in that field. In November of 2010 he drove from Ann Arbor, Mich., where he was finishing his undergraduate studies at the University of Michigan, and interviewed in Cooperstown. The next day, he came to Columbia's northern Manhattan campus for a second interview.

“By Christmastime, I was notified that I had been accepted into the program,” he says. “But by that point I had also been accepted at several other schools, including Washington University, the University of Chicago, and the University of Michigan. Those three were the most tempting geographically and financially, and Bassett was still so new that there wasn't much information about it.”

But Walter Franck'64, Columbia's senior associate dean at Bassett, was persistent. He spoke with Mr. Chapel a few times on the phone throughout that spring and, finally, Mr. Chapel decided he needed to visit Cooperstown again to make a final decision. “I got back in the car and did a marathon drive back,” he says.

Illustration by Mark Steele

Education Highlights

The Class of 2012. During the course of their time at P&S, 35 percent of the Class of 2012's graduates took an extra year for research and 24 percent spent time abroad. In this year's residency match, 22 percent of the Class of 2012 matched to a residency program at Columbia, part of the 42 percent staying in New York state for residencies. Members of the Class of 2012 also had busy lives beyond medical school: 19 students got married, 17 babies were born, and 35 triathlons and marathons were completed.



New Master's Degree in Biomedical Informatics.

A new master's degree program in biomedical informatics is available at P&S for health care professionals and medical center students. The Office of the National Coordinator for Health Information Technology within the Department of Health and Human Services, which oversees several programs to train health IT workers, provides tuition assistance for eligible students in the program, which can be completed in as little as 12 months.

Summer Public Health Scholars Program

Funded by CDC. The Summer Public Health Scholars program, a partnership among P&S, the Mailman School of Public Health, the College of Dental Medicine, and the School of Nursing, aims to foster an interest in public health and biomedical science among minority undergraduates. The program received five-year startup funding from the Centers for Disease Control and Prevention for an intensive 10-week program that includes three days a week of fieldwork in public health alongside professional mentors. The program will recruit and train 50 students a year who are undecided about their career choices.

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"I got to talk in more detail about whether or not the fundamental clinical model of the program, the longitudinal clinical year, had been verified in other realms, which it had. I made sure that the Columbia administration was fully supportive of the program. And I saw how happy the students were and how warm the work environment was."

Just a month before, Mr. Chapel had been fairly certain that he would stay at Michigan for medical school. But within 10 days after his second trip to Cooperstown, he knew that he would accept Columbia-Bassett's offer.

In August 2011, he and his fellow Columbia-Bassett students, just the second class of medical students to be accepted into the program, spent a week in Cooperstown to get to know the campus and the faculty before heading to Washington Heights to spend the first 18 months of medical school with the rest of the Class of 2015. In January 2013, they will return to Cooperstown for the remainder of their medical education.

Heavy Competition for Few Positions

With just two classes of students accepted so far, the Columbia-Bassett program has already proved to be extraordinarily popular and competitive. Dr. Franck and Henry Weil'86, assistant dean for medical education at Bassett, recently completed reviewing applications for the Columbia-Bassett class of 2016 (the program has an application process separate from the other P&S admission process).

"We had 758 applicants for 10 positions the first year, 698 the second year, and this year, we received 971 applications," Dr. Franck says. "We believe we have a higher ratio of applicants to spots available than any other program in the country. We interview 100, and we only have to accept 14 of those to retain 10. Last year, we actually only had one student offered a place turn us down."

Columbia-Bassett draws applicants from across the country, including a distribution of colleges and regions that have not traditionally sent applicants to P&S. "Our first class has students from South Dakota and Arizona, and we receive applicants from states like Nebraska and Wyoming as well," Dr. Franck notes. "We get applications from many small liberal arts colleges."

What do these students find so compelling? Besides the focus on rural medicine, many of them are drawn to the longitudinal integrated curriculum, that unique aspect of the program that Mr. Chapel wanted to make sure had been vetted.

During the 40-week longitudinal integrated block, Columbia-Bassett students follow their own panel of patients, getting to know them and their families as people and seeing their medical situation as a process, not simply a snapshot of one point in time.

That's certainly what attracted Katherine Schwartz'14, a member of the inaugural Columbia-Bassett class, who started her clinical block in Cooperstown in January 2012. A graduate of the State University of New York at Geneseo who decided on medical school relatively late – during her junior year of college – Ms. Schwartz fell in love with the idea of Columbia-Bassett the minute Drs. Weil and Franck made a presentation at her school.

"The thing that first caught me was the longitudinal curriculum for patient care, and Bassett's focus on good interpersonal relationships in medicine," she says. "I think relationships among patients, doctors, medical students, and other health care professionals are the key to good medicine, and I just couldn't be happier here."

At the beginning of their time in Cooperstown, students launch their Major Clinical Year in a 10-week series of "rapid inpatient blocks," which Dr. Weil says incorporate rotations that are very similar to what a regular P&S student does in Manhattan, only much shorter. "The long inpatient blocks [in Manhattan] that total up to 52 weeks in the disciplines of medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, primary care, and neurology, we do in 10 weeks. Students are assigned to two disciplines for two weeks at a time, with the exception of pediatrics and neurology, which are one week each."

Ms. Schwartz says she enjoyed the rapid inpatient blocks, even though the long hours and frequent changes were stressful. "Being on the OB rotation and getting to deliver babies was the

coolest thing that has happened to me ever!” she says. “And we had responsibility for our own patients. We really did get immersed in that specialty, even if just for a week, and then we’ll go back throughout the year and see these things over and over again.”

The unique opportunities afforded by such a small program stood out to Ms. Schwartz during her two-week surgical rotation. “There’s not that large a volume of students and residents here, so in surgery, there were occasions where we’d go in on surgical cases and it would just be the surgeon, the scrub team, and the medical student,” she says. “There just aren’t the same kind of barriers between medical students and attendings that there are in other programs.”

While working with the same surgeon and resident team for three consecutive inguinal hernia repairs, Ms. Schwartz was afforded an exciting educational opportunity. “The first time, the attending was quizzing me and the resident,” she says. “And for the second two, which were very straightforward cases, the attending just stood back and let the resident do the surgery and teach me. That was a phenomenal, powerful experience.”

In late March, Columbia-Bassett students rejoined their counterparts in Manhattan to participate in Mechanisms & Practice weeks, three one-week rotations. “Then,” Dr. Weil says, “they started the meat and potatoes of the Major Clinical Year at Bassett, the longitudinal program, which is different from every medical school in the country except for a small group of students at the University of California-San Francisco and another small group at Harvard.”

Two Threads

The longitudinal curriculum has two major threads. The first is a series of clinics within the rapid inpatient blocks disciplines, spread throughout the year with consistent preceptors. “This allows for long and authentic relationships with preceptors, allowing the students to develop a better sense of what they want to do in medicine as a career. It’s a huge challenge to pick from all the career opportunities in medicine in a fairly short time,” notes Dr. Weil.

The second thread is the patient panel. When a student meets a patient who might be interesting for any number of reasons – the nature of the patient’s disease, family situation, or personality – the student asks if the patient is willing to be added to the student’s panel. “Our patients virtually always say yes,” says Dr. Weil.

By the end of March 2012, just two months into her Major Clinical Year, Ms. Schwartz had a panel of 10 patients she would follow throughout the coming year. She met the first patient on her panel on her first day in the hospital. “I was working with a woman who was awaiting a kidney transplant, writing notes on her, and reporting to my team, and we formed a very good bond,” she says. “I asked if I could follow her throughout the year, and she was agreeable. I ended up seeing her as an inpatient, and then went with her to an outpatient appointment, and in February I was invited to go up to Rochester to observe her kidney transplant! It was a remarkable experience and a very early example for me of how well this longitudinal curriculum can work.”

Each day, students review a computer summary of their patient panels using a specially created computer program (temporarily called Portfolio) to see if any of their patients is scheduled to visit Bassett. “Say you have a general medicine clinic in the morning, but your panel view shows that Mr. Jones is getting a cardiac catheterization at that time,” says Dr. Weil. “It’s very important to your relationship with Mr. Jones, and to your learning, that you be there. So you let your preceptor know that you’ll be skipping that clinic to go to the cardiac catheterization, be with your patient, and see how the procedure is done.”

Ms. Schwartz learned about the value of that versatility almost immediately. “We started our outpatient curriculum on a Tuesday. I was in a clinic in the morning, and in the afternoon, one of my clinics was rescheduled. So drawing on the relationship I had already established with one of the ob-gyn attendings, I went to the birthing center and got to see more patients and attend another delivery.”

While learning about typical medical school staples such as differential diagnoses and surgical procedures, Dr. Weil says, Columbia-Bassett students also are learning “...what it means to be a



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— Katherine Schwartz’14

Education Highlights

Neuroscience Outreach Program Reaches

Record. Columbia's Neuroscience Outreach program reached a milestone in 2011, contacting more than 1,000 New York City students at schools in Manhattan, Brooklyn, and the Bronx to engage them with classroom presentations involving hands-on activities designed to spark their interest in neuroscience. Launched in 2006 by Kelley Remole '11 Ph.D., the program sends up to three dozen graduate student volunteers into the classroom. "We make the brain fun and accessible rather than mysterious and distant," says Cate Jensen, a Ph.D. student in neuroscience. The program also partnered with the Dana Foundation, a non-profit that promotes brain research and education, to prepare New York City high school students for the International Brain Bee.



Kelley Remole '11

JORG MEYER

Academic Careers in Neurology, Neurosurgery

Popular Choice. Columbia's medical school produces more academic neurologists and neurosurgeons than any other medical school in the United States, reported two studies from a group of physicians from other universities. The studies counted 79 P&S graduates working as academic neurologists and another 40 as academic neurosurgeons. Columbia's residency programs in neurology and neurosurgery also produce high numbers of academics. The neurology residency program ranks No. 1, with 134 alumni working in academia; the neurosurgery residency program ranks third, with 31 graduates following careers in academia. Faculty credit the strong clerkships in neurology and neurosurgery that all P&S students take and the research component in both residency programs.

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human being passing through a complex, scary health system. If your patient has heart failure, you learn what heart failure looks like not just in a moment such as a surgical procedure, but as an ongoing process in a patient's life."

Most students will accumulate some 200 patients in their panels, although they will follow only about 50 with great regularity. "The software program that we've created for them allows them to look at their P&S course objectives every day, see which ones they've satisfied and which ones they haven't," Dr. Weil explains. "As they see a patient that manifests that course objective, the computer asks them questions that help them feel confident that they have achieved those objectives."

The course objectives – which include the course objectives for all P&S students – must be completed by the end of the 52 weeks that make up the Major Clinical Year. "At the end of this very important year, we will have a good sense of what are the strengths and areas of opportunity for each student," says Dr. Weil.

Real-World Problems

The longitudinal curriculum is the centerpiece of the Columbia-Bassett program, but it is not the program's only unique feature. Columbia-Bassett weaves its students into life in Cooperstown from the start of medical school in a way that goes beyond what even the most community-oriented medical schools achieve.

On the first day of a one-week orientation in Cooperstown in August before the academic year starts in New York City, students go in pairs to businesses in the Cooperstown community. "Their whole first day is with people," says Dr. Weil. "We want them to understand that of first and foremost importance is the human being before you. We want them to see the complexity of the lives of these people."

This year, two students spent time with an organic dairy farmer, two with a carpenter building a barn, two at a health food store, two at a restaurant, and two at a leather goods company.

"In the leather goods place, two of the students ended up talking to a worker there who's in her 50s. She can't afford health insurance, even with the 40 percent of the expenses that are paid by her employer," Dr. Weil says. "She explained to them that she fell down in the kitchen a couple of weeks previously, lacerated her forehead, and had to sew it up herself."

The students also heard from the owners of the company, who struggle each year to continue paying that 40 percent of their employees' health insurance premiums. "Every year, the costs are going up 12 to 14 percent and it's eating into their profits," says Dr. Weil. "They told the students that they feel morally obligated to offer it, but that they constantly pray that their employees will marry someone with a better health plan or just feel that they can't afford the 60 percent of the premiums so they'll drop the coverage. It's destroying their sustainability. The students got to see this microcosm of American commerce."

At the organic dairy, two students met a farmer with a wife and two small children who are barely scraping by. They cannot afford health insurance and never go to the doctor unless they have to. "If he gets hurt, his whole family suffers," says Dr. Weil. He believes that these deeply personal experiences will inform the kind of doctors that Columbia-Bassett graduates become. "You can give someone a bunch of prescriptions, but if you haven't found out what their situation really is, you're not helping. We're bringing the future managers of health care in touch with the realities of medicine that our profession has to begin improving."

And that's just the first day. On their second day, the new Columbia-Bassett students meet with Columbia professors of health and business to get acquainted with another unique aspect of the program: the "SLIM" – Systems Leadership Integration and Management – curriculum, which focuses on concepts of ethics, evidence-based medicine, systems, leadership, integration, and management.

"SLIM goes across the entirety of a student's medical education," Dr. Weil says. "It takes up a total of 5 percent or less of their time, but it's meant to address the great irony of medical education: that although health care is the largest industry in the world, and physicians are managers

of health care, they get almost no training in management. We know, for example, that between 20 and 25 percent of Medicare overspending is due to overtreatment and overutilization, but almost nowhere are physicians being trained to improve this.”

Over the course of their medical education, Columbia-Bassett students attend “SLIM lunches” introducing the real-world situations of stakeholders ranging from individuals who cannot afford health insurance, to employers, to insurers, to politicians, to public health officials. They participate in a monthly Journal Club focused on the spectrum of American health care compared with other systems around the world, the disparity in expenses, and the impact of cost on people, companies, taxes, governments, and outcomes.

They also participate in Bassett Functional Teams, working with management and leadership to observe how the health system addresses non-clinical challenges, everything from how to effectuate better hand hygiene, to how to organize a revenue cycle, to how to systematize risk/quality/safety.

“One week, two teachers from the business school and the school of public health talked with our students about the famous Dana-Farber case,” says Dr. Weil, referring to the 1994 case in which one patient died and another suffered irreversible heart damage when they were accidentally prescribed four times their normal chemotherapy dosage. “How did a problem like that happen and what did they do? They discussed how it led to a host of systems management and performance improvement practices. A week later, Robert Kocher, former special assistant to President Obama for health care, talked to our students about the policy process.”

When they complete their Major Clinical Year, just like their counterparts at the P&S campus, Columbia-Bassett students will take eight weeks to study for their boards before beginning their scholarly projects. Most of their projects will likely focus on some element of the SLIM curriculum.

Mr. Chapel is already preparing for that. “Even though we’re not required to visit Cooperstown between orientation and next January, I spent my spring break up there doing a research project and will be living up there this summer doing clinical research,” he says.

He is working on two projects. One is an investigation of health outcomes in aging farmers, a longitudinal study that is part of the broader health census done in the Bassett network catchment area. “The data we’re working with were first collected in 1989, the year I was born,” he says. “The survey was readministered in 1999 and 2009, so now we’re analyzing data to compare occupation with outcomes in people with significant agricultural exposure. It’s a good embodiment of the things I find most appealing about the program: It emphasizes community responsibility, along with the rural and agricultural environment I find important.”

The second research project is a smaller, but perhaps more complex, survey in the SLIM wheelhouse: an effort to gauge physician awareness of and response to different reimbursement models. “Substantial research indicates that our current fee-for-service model increases health care costs,” Mr. Chapel says. “We’re trying to survey physicians to assess how they respond to other approaches to reimbursement.”

At the conclusion of their medical school years, Columbia-Bassett students will be burdened with less debt than the average medical student: Each one receives \$30,000 in annual grant funding. That will, Dr. Weil says, enable them to begin their residencies with less debt. “That allows those students interested in health policy or primary care or rural medicine, which are typically less lucrative, to make their choice without undue pressure from economic factors.”

Dr. Weil says that he thinks some of the program’s graduates may choose ultimately to practice in Cooperstown. Ms. Schwartz could well be one of them. “It’s a very different type of atmosphere. Just within the first 10 weeks, we already knew so many of the doctors and nurses and had established great relationships,” she says. “We get so much more hands-on experience and so much more personal attention. This has been driven home when we talked to our classmates back at the main campus. Overall, people are happy, but it’s the typical medical school complaints: all the work and the hierarchical environment. The environment here at Bassett is so universally welcoming, and everyone is so enthusiastic about teaching us. It’s like the ideal for medical education and health care that doesn’t always show up in practice.” ❖

“You learn what heart failure looks like not just in a moment such as a surgical procedure, but as an ongoing process in a patient’s life.”

— Henry Weil’86



P&S Dean Lee Goldman, center, during a July 2012 visit to Cooperstown, photographed with Bassett deans Henry Weil, left, and Walter Franck, right, members of the inaugural Columbia-Bassett class, and one member of the second class. Students from left are Andrew Gomez, David Chapel (a member of the second Columbia-Bassett class), Freda Ready, Krista Suojanen, Daewoong Lee, Mark Harris, Haley Masterson, and Katherine Schwartz. Class of 2014 Columbia-Bassett students not shown: Blake Alberts, Allan Guiney, and Monika Laszkowska.