



ABOVE: Paper Doll
Dance, 1944
RIGHT:
Pennsylvania
Hall, 1944



QUICK ON THEIR FEET

HOW A WAR HELPED MAKE
DOCTORS OUT OF MDS
BY EDWIN KIESTER JR.

At first, nothing changed very much. True, the Pitt medical students who trudged uphill to Pennsylvania Hall, lugging microscopes and copies of *Gray's Anatomy*, were now officially members of the US Army or Navy, having raised their right hands short days after the Japanese attack on Pearl Harbor plunged the nation into World War II. But Frank Schwartz,

BOTH IMAGES: THE OWL, 1944



Davenport Hooker
1936

HIPPOCRATEAN, 1936

technically Navy Ensign Schwartz, continued to live in a rooming house on Darragh Street. Bill Donaldson, another ensign, still wore the same old civilian clothes. Ross Musgrave went on waiting tables and operating an elevator nights and weekends, struggling to meet tuition payments that came from his pocket, not Uncle Sam's.

In 1945, however, after three hurry-up years of Pitt medical education and an internship, Schwartz found himself a battalion surgeon in a field hospital just behind the First Marine Division invasion force on Okinawa. There, he put into practice what he had learned in surgery classes as he nursed a shrapnel wound in his left arm. Donaldson was at Okinawa, too, a ship's doctor aboard a destroyer escort, dealing with wound treat-

ments and patient evacuation procedures that he had never seen in a medical textbook. Musgrave missed actual hostilities. But just after the Japanese surrender, he was north of Tokyo in a "boony hospital right out of MASH," setting leg fractures and performing orthopaedic surgery on 11th Airborne Division paratroopers. He was 25 years old and had roughly nine months' background in orthopaedics.

For those men, now mostly retired from practice, those wartime years in the School of Medicine were signal, seismic-shift events that transformed their lives and their professional careers. Depression-era youngsters who had scrambled for an education, they had hoped for little more than an ordinary Western Pennsylvania practice of flu and fractures, rather than one of emergency amputations, dengue fever, and dysentery.

In the dark days of December 1941, recalls Macy Levine, MD '43, most Pitt medical students, like millions of other patriotic young men, wanted to sign up to fight. They were dissuaded by the redoubtable Dr. Davenport Hooker, the legendary anatomy

professor Levine describes, with a respectful shake of his head, as "a little bit of a guy with a booming voice.

"He told us in no uncertain terms that our duty was to stay in school," Levine says. "He said we could do a lot more for the country by becoming doctors than by getting killed in the infantry."

Hooker's words were being echoed in medical schools across the country. The American Medical Association estimated that 50 percent of the nation's 140,000 physicians would be needed to treat battlefield casualties, and it was important to keep the pipeline flowing. (In the end, 40 percent of American doctors served, according to Dale Smith, professor of medical history at the Uniformed Services University of the Health Sciences, with many "golden-agers" emerging from retirement to fill civilian needs.)

Medical students were draft-deferred, then quickly sworn in and placed on inactive status until they received their degrees and finished internship. In the years 1942 to '45, Pitt graduated more than 300 MDs, almost all of whom, with the exception of a few

THE OWL, 1944



Company C, the army's medical school division, was founded in 1943.

women and those with medical deferments, wound up in uniform.

The students, of course, were not the only medical-school personnel who went off to war. Within a year, more than half the teaching faculty was gone, too. "The anatomy and pharmacology faculty was down to four," Campbell Moses noted afterward. "In normal times, there would have been three times that number."

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Pitt's medical military contribution actually preceded the war's outbreak. In 1941, at the behest of the US Surgeon General, Pitt faculty and graduates reconstituted Base Hospital 27, originally set up in World War I. Some 156 medical officers, including 100 nurses, formed the 27th General Hospital, under command of J. R. Watson, a noted Pittsburgh surgeon and faculty member. Among the many Pitt faculty who served in the unit were

Major Charles Altman, a urologist, Major John Donaldson, an orthopaedic surgeon, and Captain Leonard Monheim, an anesthesiologist. In July 1944, the unit established a 2,250-bed general hospital in Hollandia, New Guinea, in an area of malarial swamp that had been quickly cleared out of the surrounding jungle. The 27th was the nearest hospital to the island-hopping offensive that would eventually win the Pacific war and

admitted 21,054 casualties from battles from Guadalcanal to Luzon. It was the site of the first blood bank in the Pacific theater, and its personnel were many times decorated.

The "inactive" young men back in Pittsburgh faced other issues, remembers Ross Musgrave, who retired from practice and is now executive director of the Medical Alumni Association. "We would ride the streetcar or walk down the streets in

Oakland, and people would stare at us young, presumably able-bodied guys with a look that said, 'Why aren't you in uniform? Don't you know there's a war on? Are you draft dodgers!'"

In fact, Musgrave says, the students were studying harder than they ever had in their lives. The chidings of Hooker and accounts of the war they'd heard made waiting for their turn overseas easier: "It was made clear to us that anyone who flunked out would go right into the military," Musgrave says. "Knowing that failure made you cannon fodder was the surest form of encouragement to work hard."

Before the war, the medical school operated on a standard academic calendar—nine months of classes and a three-month summer vacation. In July 1942, at the US Surgeon General's request, Pitt and other schools switched to a speeded-up "nine/nine/nine" schedule—three nine-month terms with a week off between. Pitt thus graduated three classes of 70 to 80 physicians a year; new students were admitted twice annually. Graduation was followed by a nine-month internship, after which the interns were com-



Albert Corcoran, 1944

missioned as first lieutenants (lieutenants, junior grade, in the navy) and assigned to active duty. Thus Musgrave, for example, received his diploma and lieu-

tenant's bars in December 1943, a full year earlier than the Westminster College grad had expected when he enrolled at Pitt in 1940.

Although medical graduates would be confronted by problems far different from those they might have faced in a civilian practice—from shrapnel wounds and incendiary-bomb burns to malaria and trench foot—the medical school curriculum actually changed very little. As part of a medical ROTC program, the school in 1940 had instituted a course in “military medicine” and made it mandatory for all students of draft age. “Military medicine,” as Musgrave remembers it, consisted mainly of map reading, sanitation, first aid, and combat tactics. Only a few students progressed to an advanced course in military medicine. “We didn’t take military medicine that seriously,” says Al Corcoran, who graduated in 1944. “We concentrated on courses that we considered more important and more difficult, like anatomy, that we absolutely had to master.”

Building on Alexander Fleming’s 1929 discovery, physiologist Howard Florey and his colleagues at Oxford University had further investigated penicillin’s great healing potential in 1940, although it didn’t go into mass production in the United States until 1942. Selman Waksman at Rutgers University had developed streptomycin in 1943. These antibiotics, and sulfonamide, were to play critically important roles in treatment of battlefield and civilian casualties. One medical historian contends that penicillin, not the atomic bomb, was the “secret weapon” that ensured allied victory. But none of these agents were mentioned in class, as nearly as the graduates can recall today. Musgrave’s first experience with penicillin came in 1944. He was an intern at what

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is now UPMC Presbyterian and called upon to administer injections of the stringently rationed drug every three hours to a VIP for whom a small amount of the precious stuff had been obtained.

It was not until the war was nearly 18 months old that the students were officially mobilized. In May 1943, the military instituted the Army Specialized Training Program (ASTP) and the Navy College Training Program, known as V-12, which sent young men to college to study engineering, dentistry, psychology, foreign languages, and other subjects expected to have military application. More than 500 ASTP privates attended Pitt, living in barracks fashioned on several floors of the Cathedral, marching in formation to classes, and springing to attention when a sometimes-startled civilian professor entered the classroom. The medical students were subsumed into the program, wearing olive drab under their lab coats now that their tuition was paid by Uncle Sam.

As medical students, they were freed from some of the more onerous military requirements. Musgrave and Levine, for instance, were junior interns at the US Marine Hospital (now the Arsenal Medical Center), Donaldson was at Homestead Hospital, and Corcoran was at Ohio Valley Hospital. They slept at the hospitals, receiving room and board but no wages for their duties.

At other times they were subjected to military spit-and-polish. They stood in assembly four afternoons a week; forma-

tion and inspection were on Saturday—when they were examined for haircuts (“no hair touching the collar”), clean shaves, pressed uniforms, and shoe shines.

“The constant effort of the men to keep their shoes shined has resulted in the almost complete loss of the fine art of apple polishing,” joked the September 1943 *Pitt Anatomy Snooze*, a mimeographed bulletin that went to all med-school graduates in the military. Wednesday was given over to “athletics.” “They marched us from the hill to the old Shady Side Academy (where Winchester-Thurston School now stands), or sometimes Panther Hollow in Schenley Park,” Corcoran remembers. “Then we’d have to run around the lake and run back to Pennsylvania Hall. Anyone who fell out had to wash windows.”

Any former student’s reminiscences about wartime classes always seem to come down to Dr. Hooker and his anatomy lab. Students found him both inspiring and intimidating and still speak of him with awe. George Wright, MD ’49, who served as a

BELOW: Macy Levine (right) and Ross Musgrave, Tokyo 1946



battalion surgeon in Korea, continued as a first-year medical student to play in the university band. Hooker called him to his office. "He didn't look up from his desk," Wright recalls, "just growled, 'Wright! Do you want to be a doctor or a trombone player?' I quit the band that day."

Hooker always lectured from an elevated dais, Donaldson recalls. "Because of his voice and his personality, I thought he must be six feet tall. When I visited the campus after my discharge, I was astounded to find he was only about five feet two."

The *Anatomy Snooze* was Hooker's idea. Issued "now and then," and consisting of two or three pages, its original purpose was to keep graduates abreast of School of Medicine doings. It quickly turned into a kind of round-robin letter. Far-flung readers updated their classmates on their whereabouts and experiences. Others asked for guidance on medical questions or suggested topics for instruction. Some recommended more student training in psychology, to enable them to identify cases of combat fatigue. Those in the South Pacific asked for slides of intestinal parasites and of malarial or filarial agents. Not surprisingly, some of the correspondence, which was later collected into a book, was given over to griping. "For a year and a half," complained one young doctor, who had been assigned to a recruiting station, "my medical career has consisted of saying, 'Open your mouth. Say, 'Ah.' Turn your head so I can examine your ears. Now the other ear. Next.'"

The young men were also handling cases they had never dreamed of back in medical school. Wright, serving in the first grisly days of the Korean War, found himself swamped with cases of balanitis in uncircumcised men who had been unable to shower or undress during six continuous weeks of combat. Schwartz, who was to practice ophthalmology after discharge, was assigned at war's end to Tientsin, China, where each morning and evening he administered Atabrine for malaria. Correspondents from the Philippines reported treating—or attempting to treat—elephantia-



The Owl, 1943

sis, schistosomiasis, dengue fever, and leprosy.

Donaldson was in more than 100 air raids. While his destroyer-escort, the *USS Barber*, was on picket duty off Okinawa, steaming north through heavy Pacific seas, it received a message from a sister ship. A sailor had developed acute appendicitis. The ship's doctor, a recent young graduate like Donaldson, had never performed an appendectomy, nor even incised the body cavity. The other ship requested that a more experienced doctor be transferred aboard. They wanted Donaldson. At 25, Donaldson had assisted in the operating room as a junior intern and later had "a little training" at the Philadelphia Naval Hospital.

The two ships were roped together so that a breeches buoy could be used as a conveyance. Donaldson was to be seated in the breeches buoy and hauled across the angry waters to the other vessel. First, however, it was decided to send films and texts across the gap. Halfway across, books and films fell into the sea.

"That does it," the *Barber's* captain told

Donaldson. "If we can't get a book across, I'm not going to risk my doctor." Donaldson stayed aboard the *Barber* and the other vessel turned back to San Diego.

"I haven't thought about that in 50 years," says Donaldson, who has retired from a long career as a surgeon and as medical director of Children's Hospital of Pittsburgh. Although some memories have faded, alumni agree that the war shaped their lives in important, if subtle, ways. That time, indeed, often determined their post-war residencies or specialties.

"It was amazing, the responsibility given to us so young," says Musgrave, who at 24 was officially chief of orthopaedic surgery at his 172nd Station Hospital.

"I think the greatest thing about our accelerated education and our service wasn't what we learned medically," says Musgrave. "It was the maturation process. That's what stood us in such good stead when we returned home. And has for more than 50 years." ■