

What it's like to specialize in hematology: Shadowing Dr. Lee

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Staff News Writer

As a medical student, do you ever wonder what it's like to specialize in hematology? Meet Alfred Lee, MD, PhD, a benign hematologist, internist, and a featured physician in the AMA "Shadow Me" Specialty Series, which offers advice directly from physicians about life in their specialties. Check out his insights to help determine whether a career in hematology might be a good fit for you.

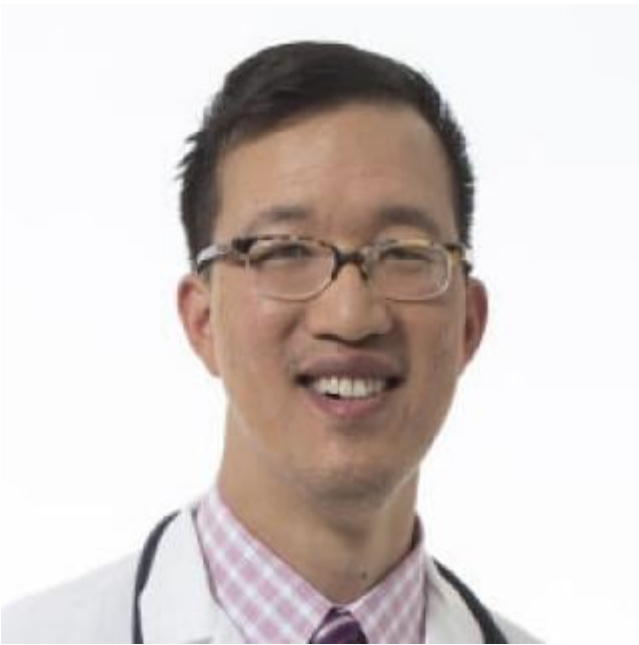
"Shadowing" Dr. Lee

Specialty: Benign hematology (adult) and internal medicine.

Practice setting: University-based hospital setting.

Employment type: Hospital.

Years in practice: 7.5.



A typical day and week in my practice: I usually get up very early in the morning and spend the first few hours of my day working on the computer, catching up on clinical documentation, editing or reviewing manuscripts, preparing talks, etc.

On days that I have clinic, I'll start seeing patients at 7:45 a.m. and usually will keep going until after 6 p.m. On days when I'm attending on the hematology consult service, I'll meet up with my team of fellows, residents and medical students at 8 a.m., round, see patients, and teach until the late morning. Then meet up with them again in the afternoon and see more patients and teach until sometime in the evening.

I give lots of talks and participate in a number of teaching conferences for students, residents and fellows, and for an entire month every fall, I spend several days a week teaching hematology to the first-year medical students at Yale, which is always one of the highlights of my year. I also mentor students and trainees in various research projects in benign hematology and medical education, so a lot of my time is dedicated to mentoring and advising students, residents and fellows.

I work on average about 70–80 hours a week. Some days and weeks are busier than others—for example, when I have clinic or am attending on the hematology service.

The most challenging and rewarding aspects of hematology: Hematology is a very interesting and complex field that crosses all disciplines. A lot of patients come to see a hematologist either because they have an unusual constellation of symptoms without a diagnosis and are seeking answers, or because they have a rare disease that is unfamiliar to other providers.

In order for me to do my job effectively as a hematologist, I need to constantly think creatively, have a solid understanding of medical topics not only within but also outside of my own specialty, and feel comfortable navigating in areas where not a lot of research has been done, while at the same time being comfortable admitting when I don't know the answers to things.

Hematology as a field is also changing rapidly, thanks to an explosion of new research that is shattering a lot of the paradigms we've historically been taught—which is tremendously exciting, yet also incredibly daunting, as it means that I constantly have to do my part to stay on top of the literature and remain “in the know” for the sake of my patients. I've been involved in a number of cases where patients are acutely bleeding or clotting or have a series of complications due to an unknown ailment, and in a last-ditch effort, I'm asked to try to help guide their care.

The stakes are incredibly high—with high risk and the potential for high reward—yet in many instances there isn't a lot of data to guide the decision-making process, and sometimes bad outcomes happen. It took me years to get to the point where I felt like I truly had a handle on all the many nuances of hematology and was able to provide patients and other providers with the services they need.

Because of the nature of the diseases that I see, I end up forming wonderful lifelong relationships both with patients and with other providers. Also, since I work in a university-based hospital setting, I am constantly interacting with lots of medical students and trainees, so teaching and mentoring is a large part of the core of my profession.

Three adjectives to describe the typical hematologist: Thoughtful, inquisitive and empathic.

How my lifestyle matches, or differs from, what I had envisioned: Being a physician in any field of medicine these days is hard work, no matter what one's specialty is. In hematology, the intensity of the work and the rarity of a lot of the diagnoses exponentially augment the bond that patients, and their providers, share with their hematologist, which makes for very fulfilling work but also for long work days. Work-life balance therefore has the potential to be challenging at times, but I've been able to achieve such balance through a couple of ways.

For one, I've learned to embrace the interpersonal interactions that occur during each patient-doctor encounter. As students of medicine, we're taught to derive cerebral satisfaction in the intellectual complexities of our patients' medical diagnoses, but one of my life mentors, the renowned

hematologist and master clinician Thomas Duffy, MD, advised me of the importance of also approaching each patient-doctor visit as a unique opportunity to spend one-on-one time with another human being.

During clinic visits, I therefore spend time getting to know my patients, understanding their life stories, what makes them tick outside of the exam room, etc., so each clinic visit becomes not only a medical encounter but also a chance to break bread with another person through a shared humanity.

Another key to achieving a good work-life balance as a hematologist has been recognition that life experiences and humanistic endeavors make all of us better people and better physicians. Because of this, I embrace my life outside of work as much as I embrace my work itself.

Skills every physician in training should have for hematology but won't be tested for on the board exam: Being a hematologist requires a lot of detective work and a scientific approach to puzzles and predicaments. Hematologists tend to be very patient, methodical, self-directed learners, who enjoy sharing the learning process with other learners.

One question physicians in training should ask themselves before pursuing hematology: "Do I enjoy medical mysteries, rare diseases, and being both a patient's primary provider and a doctor's doctor?"

Jon C. Aster, MD, PhD, and H. Franklin Bunn, MD, *Pathophysiology of Blood Disorders*. This is a textbook on hematology that was written specifically for medical students by two legendary figures in hematology and hematopathology at Harvard Medical School. Dr. Bunn was one of my mentors when I was an intern and resident at Brigham & Women's Hospital 15 years ago, and he is every bit as kind and accessible as he is brilliant, which shines through in this book.

Keith Wailoo, PhD, *Drawing Blood: Technology and Disease Identity in Twentieth-Century America*. This narrative describes some of the major developments in the history of hematology and links scientific discoveries in the field with social perspectives from the time. The author, a medical historian and chair of the history department at Princeton, was the recipient of the Arthur J. Viseltear Prize from the American Public Health Association for his work on this book.

Siddhartha Mukherjee, MD, DPhil, *The Emperor of All Maladies*. This Pulitzer Prize-winning book traces the origins of solid and hematologic cancers, from their first descriptions in antiquity to the modern era. It's a must-read even for everyone in medicine, even those who do primarily non-malignant hematology (like myself), because so much of what we do in modern medicine centers on cancer and its biological, personal, and societal sequela.

The online resource students interested in hematology should follow: The American Society of Hematology (ASH) is the major professional organization for hematologists in the U.S. and across the

globe. ASH has a fantastic Twitter account containing the latest updates in hematology. Also, the ASH website contains great educational resources as well as information about research and funding opportunities for students, trainees and young hematologists.

Quick insights I would give students who are considering hematology: Hematology has always had a special role at the epicenter of medicine, and the field right now has become incredibly exciting thanks to all the molecular advances that are rapidly changing our understanding of disease. Inherited diseases like sickle cell anemia, thalassemia and hemophilia, long-viewed as chronic, life-altering conditions, are becoming curable with the promise of gene editing.

Rare diseases like porphyrias, histiocytic disorders, and thrombotic microangiopathies are being given new treatment modalities aimed at specific molecular targets. At the same time, classical paradigms of thrombosis, hemostasis, inflammation, and complement are finding new, shared relationships with infinite therapeutic possibilities.

The link between the benchtop and the bedside has never been stronger. If you're interested in becoming part of all of this, the best thing to do would be to find a hematologist at your school or institution and join them in their clinic or in their lab, and get involved in ASH to become part of our larger international community.

Mantra or song to describe life in hematology: "Climb Every Mountain."

More about your specialty options

FREIDA™, the AMA Residency & Fellowship Database®, offers the Specialty Guide, designed to simplify medical students' specialty selection process, highlight major specialties, detail training information, and provide access to related association information.

Be sure to avoid these five common mistakes students make when choosing a specialty.