

[From the Scope archives: Learning how to learn medicine](#)

A few weekends ago, I saw a patient with bloated shins at our school's free clinic, and I marked in my notes that she exhibited "peripheral edema," an esoteric phrase that means little to those outside of the medical community. That experience only highlighted the tendency in medicine to inflate common bodily functions into opaque medical jargon. Its use can be frustrating for patients who are trying to understand their illness – and at times even for the uninformed medical student who is trying to learn about his patient.

It doesn't help that the list of jargon is endless. Itchiness becomes pruritus. Listening to the body's internal noises condenses into auscultation. When you urinate, you're really micturating, and if you have trouble doing so, you also have dysuria. Having a rash turns into having erythema. An abnormally large liver translates to hepatomegaly. An unhealthy level of cholesterol is labeled as hyperlipidemia. Chest pain is referred to as angina. Even the simple act of sweating is termed hidrosis. For vast majority of the first two years of medical school, we spend our time learning this vast and complex language that seems to have a word or phrase for every single bodily event – health and unhealthy, normal and abnormal.

But that is what medical training and much of medicine are – making observations of the human body and noting them with memorized jargon. And once we have acknowledged all the relevant observations, we connect the dots to form a story. If we're astute and lucky enough, that story will end with the name of the disease along with its possible treatments and cures.

One would think that in order to provide adequate treatment to our patients, our education would possess more depth into the mechanisms behind drugs and diseases. But we only graze their physiological and molecular basis. It isn't a reflection on our lack of curiosity. Rather, unfortunately, medicine is still limited by our dearth of knowledge.

Despite the trillions of dollars poured into research, our advances in human genomics, and the fancy gadgetry, the human body remains a stubborn black box. Most of the time, all we can do is look at the inputs and outputs. Take aspirin, for example. Cardiologists recommend patients with a history of cardiovascular disease to take a baby aspirin every day to reduce their chances of a heart attack. But how this drug – first discovered by the ancient Egyptians – leads to decreased risk of death still remains a mystery.

These days, patients can sequence their entire genomes at a speed and price that was unimaginable a decade ago. They can scan their entire bodies to produce images with unprecedented detail. But in an unexpected twist, in order to confirm a diagnosis, physicians may still resort to the primitive practice of taking a gross piece of tissue from the patient and viewing it under a

compound microscope, a contraption invented nearly half a century ago. Our expensive technology has been only able to expand our ability to observe and has done little peel back the veil covering the underlying mechanisms of human diseases.

But that is not to say that we should lose faith in medicine and underestimate the importance of labeling our observations. For the patient, putting a name on an abnormality, even if there may be no treatment available, can be comforting and give hope for recovery. For the caretaker, being able to identify an important physical finding can point to a set of suspect diseases. For my patient, leg swelling strongly suggested that he might be suffering from congestive heart failure.

As medical students, we must feel as if we're training to become glorified breathing-and-walking medical dictionaries. Make no mistake – we are. We're learning to make observations, note them down, and make sense of them down the road. And we shouldn't underestimate the power of this process. It is at the core of the scientific process, and it'll be how we ultimately serve our patients.

Stanford Medicine Unplugged is a forum for students to chronicle their experiences in medical school. The student-penned entries appear on Scope once a week during the academic year; the entire blog series can be found in the Stanford Medicine Unplugged [category](#).

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