What interested you about becoming a Fellow of the College?

The privilege of enjoying the company of kindred spirits who see medicine as the inseparable combination of art and science. As Osler put it, “[Science and humanities are] twin berries on one stem, grievous damage has been done to both in regarding [them]... in any other light than complemental.”

In recent years you have given several talks at the College, including your most recent lecture to a packed house in Mitchell Hall: Bugs & People: When Epidemics Change History. Why do think the plagues that bring civilizations to their knees still hold such a fascination for people?

It’s a good question. I think that being a mortal species, like all other living beings on the planet, we have acquired a fascination with death—a thanatophilia (and not in the sense of wishing to have sex with cadavers...) This applies, of course, to our own demise, but also to large scale losses. And what makes epidemics so tantalizing is that they are the great equalizer: the multibillionaire in the penthouse...
and the homeless in the street are both utterly powerless against bugs.

And that is a refreshing thought.

**Do you feel like your passion for history makes you a better physician and a better teacher?**

Yes. Which brings us to the big question: what is a physician? What are those ingredients that go into that unique cocktail that makes a well-rounded healer rather than a mere technician? If we look back at how medicine was before Flexner changed it, we had a time-honored tradition of producing multifaceted and very colorful individuals. Physicians were politicians (Rudolf Virchow); activists (Bernie Lown); humanitarians (Albert Schweitzer); and even revolutionaries (Che Guevara). All these traits pertain to the care of the other that goes beyond the mere use of stethoscopes or scalpels. Yet physicians were also able to care for themselves. They were painters (Charles Bell); musicians (Aleksandr Borodin); playwrights (Anthon Chekhov); poets (John Keats); and travelers (David Livingstone). Physicians were even filmmakers. Dino Risi was one of the inventors of Italian Comedy, which is actually tragedy camouflaged by laughter, in the sense of George Bernard Shaw’s famous quip that “if you have to tell people the Truth, you’d better have them laugh otherwise they will kill you.” Yet, Risi was also a physician. He had studied medicine in Milan and Geneva before eventually training in psychiatry. He did not practice for long. As he put it years later, “I soon grew tired of treating people I couldn’t cure and so I turned to movies.” And then he added, “I couldn’t make them better, so I decided to at least make them laugh.” Curiously, another creator of Italian Comedy, Mario Monicelli, had also studied medicine before eventually majoring in philosophy. During his long career Risi received three Oscar nominations, one for the original version of “Scent of a Woman”. His last wish was to die in Waterloo, since “would have looked a lot better on the tombstone.” Instead he died in Rome at 91.

Recently I asked my students who knew who Albert Schweitzer was. Only two students raised their hands. But they all knew who Lady Gaga is.

I resent that.

I’m saying all of this to elicit discussion and introspection, with the premise that being a physician ought to be something larger than being a mere technician.

If my premise is accepted, then the next step would be to identify those personal traits that made those archetypes possible, so that we can start recruiting for them and then encourage them during training. Rekindling the humanities, a fledgling but growing movement in medical schools, will hopefully help to do so.

If my premise is instead rejected, this may still serve as a reminder to the younger generation of the kind of men and women that medicine was able to produce. This might already serve as an inspiring intervention. After all, without past there is no future.

**You are an outspoken proponent of returning the humanities to their rightful place in medical education. At Jefferson, you offer students a chance to participate in reflective writing, art observation, and even theater performances. What skills are you looking to build in future physicians and how would you characterize the results of your efforts?**

I want students who before taking care of the other can first take care of themselves. And I’m saying this since we are the profession with the highest suicide rate, a burnout rate greater than 50%, rampant depression, dwindling empathy, a negative view by the public, and a disturbing tendency for physicians to quit. And to avoid all of the above students need the humanities. We recently conducted a survey of five medical schools (Tulane, OHSU, Brown, Jefferson and Rowan) to see if students who were more engaged in the humanities scored higher in those personal traits whose absence we lament in medicine. They did: they had greater empathy, visual-spatial-thinking, tolerance for ambiguity, emotional resilience and the capacity not to burn out. They were also wiser, and that to me is a very important finding, since medicine is awash in knowledge but seriously lacking in wisdom, or at least in the teaching thereof (we teach guidelines, but that’s not the same thing. Probably the opposite)

In fact, much of medical training is uniquely designed to curb creativity. This applies to schooling in general, since formal education’s major goal is to kill curiosity and foster conformity. I recently wrote a paper on arguably the most creative person ever produced by our species: Leonardo da Vinci, and Leonardo had very little if any formal education. In fact, four of the most creative people in history had very little if any formal education: Mozart, Benjamin Franklin, Thom-
as Edison, and of course Leonardo all had very little schooling.
That is a very sobering fact.
You ask me how I would characterize my efforts at Jefferson? I would say that thirty percent of our students love our programs and without them would probably wither away; thirty percent become intrigued; and thirty percent think the humanities are utterly irrelevant.
And I hope that 30% goes into radiology.

*In a recent interview, you very beautifully stated that medicine, even when it doesn’t have the power to cure, always has the power to comfort and relieve. Do you believe that a focus on the patient rather than the results of an intervention is the key to preventing physician burnout?*
Yes. Many students tell me that one of the reasons why they burn out is the painful realization that medicine can’t cure. I usually get a chuckle out of that, and I tell them, sure we can’t cure all the times, but we can comfort and relieve. Yet for that goal you need skills that are neither taught in medical school nor are prerequisites for admission: you need the humanities.

*Tell us about one of your favorite items in the College’s Library or the Mütter Museum.*

**Vesalius’s first edition of the Fabrica.** And the reason is because Vesalius was the first person in medicine who had the guts to say the magic word of science: ‘Bullshit!’
He challenged the conventional wisdom of Galen, which had frozen medicine for 1400 years. He ultimately paid a price for that, but he still serves as a reminder that science is based on skepticism. In fact, thinking independently is fundamental to the human condition. This is especially important in our times of ubiquitous social media when if you go against the herd not only you get ‘unfriended’ and ostracized - even worse, you get burnt at the stake as evil.
Recently 15 Academics from Princeton, Yale and Harvard sent an open letter to their students urging them to avoid groupthink and start instead to think for themselves. They are absolutely right. Byron put it simply, “be among them but not of them”, and Oscar Wilde quipped, “be yourself, everybody else is already taken”.

But we are a societal species for whom acceptance is key. Hence it takes tremendous courage to go against the group. Especially when you are young and want to belong, and especially in our times of social media fostering stifling party lines.

It’s very, very scary and it has happened so quickly.
Still, independent thinking and going against the herd (or dogma) is the undercurrent of scientific pursuit. Hence, one more reason to remind students to think independently and out of the box.

So, kudos to Vesalius, and hail the Fabrica!