‘I Thought Microscopy was Dead!’

It was not the first time I heard someone say this to me—and it probably won’t be the last. The first time was in 1985. I had just transferred from one university to another, and this was the first time I had been introduced to polarizing microscopes. My previous engineering courses didn’t have any PLMs, nor did the chemistry department (gasp), and this new forensic science department didn’t own more than one, so they had to do what many others did: borrow the mineralogy department’s instruments. They were about the only ones on campus that were expected to possess enough capable microscopes complete with polarizers, analyzers and rotating, circular stages.

I remember having to relocate to a remote location to measure refractive indices and birefringence on all of the known manmade fibers of the time. As we entered the lab, a classmate blurted out, “I thought microscopy was dead!” I think he wound up doing DNA analyses and retiring of boredom 20 years later. In subsequent courses, we were fortunate enough to have as our neighbors the McCrone Research Institute (McRI), which loaned its microscopes to us in the criminalistics laboratory. These were the good old Nikon SKe, which was Dr. McCrone’s favorite ‘scope at the time.

Anyway, the next time I heard of the “death of microscopy” was in conversation with Dr. McCrone himself. I had already been teaching PLM courses for him for years and one of my students at the time exclaimed: “I thought microscopy was dead!” Well, I was perturbed and certain that there was no way this could be the case. We were receiving a thousand or more enrollments each year, and everyone came to us for one reason only: The microscope was alive and well at McCrone Research Institute in Chicago.

So I asked Dr. McCrone if he had ever heard such a thing as the death of microscopy? His reply to me was a bit of a surprise: “Yes, in 1944.” He went on to tell me the story that he often repeated to his students:

While pursuing his postdoc at Cornell, he wrote to several dozen companies and universities suggesting they hire him as “chemical microscopist.” He received only two replies, both asking, “What is a chemical microscopist?” This was the first time that he suspected a possible demise of microscopy and couldn’t imagine how “the world” could think that microscopy was dead. McCrone explained this to his prospective employers as well as he could and finally got an offer from Armour Research Foundation at IIT (now IIT Research Institute) for $350 a month. He came to Armour to work as research scientist, reported to work for his first day on September 4, 1944, and knocked on the door at 501 W. 32nd Street (an address that is now in the middle of the IIT campus). After what seemed like a very long time, a custodian came to the door and said, “What do you want?” McCrone said, “I’m supposed to start work here today.” The custodian replied, “There’s no one here today but me. It’s Labor Day, go home.”

That’s the first time McCrone realized that “the world” didn’t work on holidays. Not fearing that microscopy was truly dead, he returned to work the following day—and on every holiday thereafter. The rest, as they say, is history.

So, here we are 67 years later, and a nice old friend of Dr. McCrone’s from the 1950s called me on the telephone recently. After bringing him up to date on all that has happened during the 25 years that I’ve been with McRI, he said: “I thought microscopy was dead.” I admonished him that this certainly wasn’t the case and told him that I’m looking forward to showing him around when he visits our lab.

Long live microscopy!

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