## medicine and the arts

s a medical scientist in training, I cannot help but compare my own professional path with that of Martin Arrowsmith, who struggled to integrate both science and medicine into a satisfying, unified career. Indeed, it was with feelings of both excitement and trepidation that I recently completed my graduate work and left the laboratory bench for the hospital ward. Having spent the last three years doing nothing but basic science research, I had come to view patients as rather dubious entities, collections of uncontrolled and uncontrollable variables. Like Arrowsmith, I was setting aside the comfortable "search for fundamental laws" to immerse myself in the "chaos of dissimilar and contradictory symptoms." Though idealistic, I was terrified that my unfledged clinical skills had abandoned me entirely. Surely my deficiencies would be apparent. How would patients respond to my "amateurish fumblings?" How would my humble fund of knowledge and callow technique be received by seasoned clinicians who could discern the infinitely subtle signs of disease in patients who seemed to me the picture of health?

I was leaving behind a world where a *p* value had nothing to do with urinalysis, where an "empiric trial" would be grounds for disciplinary action. How could I be expected to report that some aspect of a patient's physical exam was "within normal limits" when my sample size of past experience was so small? How could I be so bold and dismissive as to declare "noncontributory" some detail in a patient's history?

In the laboratory, there was some satisfaction in knowing that a particular question, however trivial, might be answered through the day's experiments. It took some adjusting to switch to the mindset of the medical clinic, where not every patient will go home with a diagnosis that perfectly encapsulates his or her complaints. More startling was my realization that a definitive diagnosis may not even be the goal in every case. How unusual seemed this world in which "outcome" took priority over "mechanism."

Overall, though, my transition to clinical medicine has been surprisingly smooth. I have been able to dust off my stethoscope, and the tympanic membrane is becoming much less elusive. I have found that the attrition of my medical knowledge was more than compensated for by a gain in maturity. The presence of real people has served to humanize the didactic material and make it meaningful, and new information seems easier to assimilate now, perhaps because it seems more immediately related to patient care. For example, I had previously studied the features of chronic obstructive pulmonary disease but had never talked about management options with a patient struggling for breath. On the other hand, I have found that the classic signs of disease, emblazoned in ominous bold type in the preclinical textbooks, may in fact be approached conservatively. For example, it is apparent that a person with a single blood pressure measurement of, say, 160/92 mm Hg does not necessarily require immediate management. A slender, otherwise healthy person with a pulsatile abdominal mass does not necessarily need emergency surgery. A person complaining of occasional "night sweats" may not warrant a police escort to the nearest branch of the Centers for Disease Con-

Still, while I (unlike Arrowsmith) don't demand the use of "controls" from my supervising residents and attending physicians, I do continue to wonder why some pathophysiologic states occur, or why some treatments seem to work in the absence of definitive mechanistic explanations. Perhaps this is why I find appealing the trend of evidence-based medicine, which seeks to integrate individual clinical expertise with the results of systematic research. I hope to incorporate research into my eventual career, and perhaps I will also have the chance to contribute to the effort to make medicine more scientific. Of course, there is a limit to this goal. Medicine must always remain a personal practice relying on subjective impressions as well as objective data. Arrowsmith's mentor disregards this precaution, being "so devoted to Pure Science, to art for art's sake, that he would rather have people die by the right therapy than be cured by the wrong. Having built a shrine for humanity, he wanted to kick out of it all mere human beings." Such rigid application would seem contrary to both science and medicine.

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