

that such therapy will be available to every patient, not just a select few.

The observation by Shapiro et al. that patients with even a small amount of residual islet function, as evidenced by a persistent level of C peptide, have a marked decrease in episodes of diabetic hypoglycemia is provocative. Does such a low level of insulin prevent this complication? And, if so, why? Do the immunosuppressive medications have an effect on intermediary metabolism? Is there engraftment of stem cells? Has the immunosuppression allowed for regrowth of endogenous pancreatic stem cells and islets? These important questions — many of which are the subjects of ongoing investigations — deserve more scrutiny.

Islet transplantation is at a crossroads. It is clear that poor long-term results, high costs, and the relatively high incidence of major and minor serious adverse events make it difficult to argue for expansion of islet transplantation to the general population. Nonetheless, the dramatic discoveries and successful dissemination of information in a relatively short period encourage us to believe these advances will continue apace. Additional research investments are likely to be high yield and to have a positive effect on many patients in the not-too-distant future.

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From the Mount Sinai School of Medicine, New York.

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A Good Teacher

Jeffrey M. Drazen, M.D.

Earlier this year, I learned that my high school chemistry teacher had died. This was not surprising, since he had been my teacher in 1961. What was rather astounding was the outpouring of appreciation from his former students that followed. All of us mourned the passing of a man who had motivated us in a way that no previous instructor had been able to do, but each of us had thought that we alone had been so imprinted. This self-described “simple Kansas farmer” somehow knew how to leave a mark on his students for the rest of their lives.

I was fortunate to have such motivating teachers not only in high school but also in college and medical school. In college, the inspiring figure

was a professor of electrical engineering, who taught me to use my reasoning ability to solve problems and how to use the solutions to improve our understanding of physical processes. I learned that if I did not really understand the problem, I could not find a true solution to it. In medical school, I was lucky enough to study with a professor of physiology who taught me that the search for truth meant accumulating an understanding that would let one reason from observations to root causes. All these teachers were nurturing in that they demanded the best from us and would not settle for less; they had the gift to motivate their students.

In this issue of the *Journal*, we introduce a

series of articles on medical education. In the various articles that will be published in the months to come, Drs. Malcolm Cox and David Irby, who were responsible for identifying the topic areas and authors, provide a snapshot of the issues that confront medical educators today. The problems are important, varied, and complex and range from the teaching of the elusive quality of professionalism, to training in surgical skills, to the evaluation of student performance.¹

Although each of these considerations is important in clarifying and assessing how we teach medical students, in my heart I wonder whether what is really needed is a way to identify people with the gift for teaching and then to give them free rein. In the coming months, you can evaluate the issues and decide for yourselves.

1. Cox M, Irby DM. A new series on medical education. *N Engl J Med* 2006;355:1375-6.

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A New Series on Medical Education

Malcolm Cox, M.D., and David M. Irby, Ph.D.

Providing the “right” physician for the health care of the future will require substantial changes in the way doctors are educated. This view was voiced in a report from the Institute of Medicine’s Committee on the Roles of Academic Health Centers in the 21st Century¹: “Among all of the academic health center roles, education will require the greatest changes in the coming decade. We regard education as one of the primary mechanisms for initiating a cultural shift toward an emphasis on the needs of patients and populations and a focus on improving health, using the best of science and the best of caring.” Although there exists a reasonable consensus on the need for change and considerable agreement regarding the main directions of change, there is much less understanding of the optimal mechanisms for moving the educational process forward. This lack of clarity is due, in part, to the complexity of the current health care environment and to a clinical learning environment in which education must compete for resources with clinical and research missions in academic health centers. Another important factor, however, may be that physicians are unaware of new and emerging information about medical education that could help provide a solid foundation for reform.

In this issue of the *Journal*, we begin a new series on medical education that we hope will promote introspection across the levels of medical education. The series will highlight some of the important issues and opportunities facing medical educators today and is designed to bring

some of the current ferment in the field out from relative obscurity in education specialty journals and into the wider visibility of physicians generally. The articles that will appear during the coming months are meant to engage the general readership of the *Journal* in a dialogue on the state of the art of medical education today.

If the “tattered social contract between medicine and society is to be repaired,”² we believe it is incumbent on the profession to develop and field test new models of medical education. In this spirit, the *Journal* welcomes letters addressing the important and sometimes controversial issues to be raised in the forthcoming articles. The reform of medical education will surely benefit from broad-based debate.

In the long run, however, substantive reform will be possible only if there is a strong willingness to support the educational mission. Visionary leadership will be needed to change the prevailing culture, along with demonstration projects that include assessments of long-term outcomes, which are necessary to convince skeptics and policymakers alike. At the same time, serious re-examination of the financing of medical education³ and medical education research⁴ will be essential in order to set in motion and sustain reform. Only when we have solid educational research will we be able to convince an increasingly skeptical public that our graduates are equipped with “the best of science and the best of caring”¹ to improve the health of the public.

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