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**T**his issue of *US Hematology* reflects the magnificently exciting scope of this field, which was so impressively rolled out during the 50th anniversary of the American Society of Hematology at its national meeting in San Francisco in December 2008.

The enduring allure of hematology that drew many of us into this specialty is its unsurpassed track record of continually being able to bridge the arenas of biomedical research and clinical practice. Hematology epitomizes the concept of ‘translational research’—the truly bidirectional transfer of knowledge between clinical medicine and the laboratory. Repeatedly over the past century, perceptive and thoughtful practitioners of hematology have made astute observations about their patients that took them and their colleagues into the research laboratory to elucidate basic mechanisms of disease. Conversely, an extraordinary cadre of hematologist physician-investigators has been successful in translating basic science discoveries into tangible improvements in human health and clinical practice.

Translational research in hematology has not only advanced the field itself, but has also had an enormously far-reaching impact on many other areas of medicine. It has been the rich tradition of hematology research to not only continually create break-throughs that have diffused into many other fields, but to actually spawn entire new disciplines and specialties of medicine, such as transfusion medicine, immunology, and vascular medicine. Examples of this breadth of impact are on full display in *US Hematology*. For example, it was the discoveries of DNA diagnosis of hemoglobinopathies that broke open the entire contemporary field of molecular genetics, the decoding of the human genome, and, ultimately, the dawn of personalized medicine. It was identification of the hematopoietic stem cell and its successful transfer from donor to patient in clinical practice that created the fields of stem cell biology and transplantation, which are blossoming today in virtually every field of medicine. Furthermore, it was the finding of the remarkable plasticity of the hematopoietic stem cell that has given rise to the field of regenerative medicine. It was the understanding of the basic mechanisms of hemostasis and thrombosis, primarily by hematologists, that transformed cardiovascular therapeutics and led to major advances in dramatically improving the prognosis for patients with coronary artery and cerebrovascular disease. It was the successful treatment of hematological malignancies that catalyzed today’s major advances in cancer therapeutics in general; for example, the discovery of the BCR-ABL tyrosine kinase inhibitors for the effective and relatively safe treatment of chronic myelogenous leukemia sparked the current groundswell of research into molecularly targeted therapies for other forms of cancer.

There is considerable concern today that ‘benign’ hematology as a specialty of clinical practice has begun to disappear. Paradoxically, hematology research is more vibrant now than it has ever been in the past, as evidenced by the explosive growth of attendance at the scientific sessions of the American Society of Hematology and the quantity and quality of hematology research papers published in the literature. Perhaps this paradox just reflects the continued proud tradition of hematology research in creating novel lines of scientific inquiry; these, in turn, give rise to new subspecialties of clinical practice that become annexed and absorbed by other established specialties. So, as a small but precious field that has the property of continuous self-renewal while at the same time proliferating and differentiating into multiple other fields, perhaps hematology is the immortal and treasured stem cell of medicine. ■