The interaction between humans and disease-causing pathogens in nature is constant, with one or the other winning at all times. In 1936, Hans Zinser, a historian and bacteriologist, wrote, “However secure and well regulated civilized life may become, bacteria, protozoa, viruses, infected fleas, lice, ticks, mosquitoes and bedbugs will always lurk in the shadows ready to pounce when neglect, poverty, famine, or war let down the defenses. And even in normal times they prey on the weak, the very young and the very old, living along with us, in mysterious obscurity waiting for opportunities.”

In this issue of the *Infectious Disease Clinics of North America*, we have assembled a series of reviews focusing on the “weak,” the “very old,” and the “opportunities.” By convention, immunocompromised states are defined as specific alterations or consequences of therapies leading to measurable immune defects of various kinds. The host populations discussed in this issue have lifelong underlying illnesses—metabolic, anatomic, functional or otherwise; age-related immunosenescence; loss of barrier functions (skin or mucosal); long-term prosthetic devices; or environmental interactions, such as long-term living in nursing homes or short-term living in enclosed spaces. The last article reviews the special pharmacologic considerations for antibiotic use in high-risk populations.

In the past many of these underlying illnesses led to a shortened life span. With increasing life span, the likelihood and opportunities for infectious complications have increased significantly. Philosophically, one could see this as a price for progress. Scientifically, these host populations have created a fertile ground for studying and understanding basic mechanisms of
underlying host–pathogen interactions. One of the most significant contributions has been in the area of infection, immunity, and endocrine interactions. On the one hand, various hormones affect the host–pathogen interaction. On the other hand, host–pathogen interactions produce chemical messengers that function like hormones. Ketoconazole might have become less useful as an antifungal but remains a very effective way of treating acute hypercortisolemic states. We might expect more treatment overlaps in the future.

At this point in time, anti-infective agents clearly outnumber hormone-based therapies. However, the spectrum of hormone-based therapies exploiting endocrine, autocrine, and paracrine functions of hormones/cytokines is fast approaching that of therapies targeting pathogenic microbes. This has finally given some balance to the dinner table and couch conversations in our household.

We would like to express our sincere thanks to all the authors who made contributions to this issue of the *Infectious Disease Clinics of North America*. Most of all, we hope this issue provides readers across many specialties in medicine with a tool to manage their patients and materials for intellectual stimulation.

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