Witnesses

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In this issue, Dr Morris Goldner summarizes a series of structured interviews with three colleagues in infectious diseases and microbiology. The three individuals span about 70 years of professional activity in the field, and come from backgrounds that encompass basic laboratory research, clinical microbiology and infectious diseases practice. The interviewees are European – two from England and one from France. While most of us in Canada look to the United States as our larger North American community, the European experience in microbiology antedated any activity in North America and, over the last several decades, has generally paralleled the experience here.

The three scientists initiated their professional careers at three distinctly different moments in the development of the clinical and laboratory sciences of infectious diseases and microbiology. Professor Lacey describes the experience of managing patients with infectious diseases before the availability of antimicrobial agents – nothing could be done and available treatments such as serum therapy were themselves dangerous and contributed to morbidity and mortality. He was also active through the exciting time when new agents of unheard of efficacy for treatment of infections were first discovered and applied in clinical practice. Common, previously untreatable infections could be treated. There were heady expectations of “conquering” infectious diseases.

Professor Dublanchet began his career at a point of high optimism, when there was a belief that human history would be fundamentally altered through the development of antimicrobial agents effective for most infections. In the halcyon days of the early 1960s, before the inevitable progression of antimicrobial resistance was fully appreciated, it was assumed that infectious diseases would soon be a footnote in medicine. This was not, in retrospect, a good thing for academic infectious disease specialists. Schools of medicine questioned the need for infectious disease expertise, as this field was presumed to be a disappearing clinical problem. Dr Petersdorf, in Seattle, famously claimed we were arriving at the point where all there would be for infectious disease physicians to do would be to swab each other's throats (1). Professor Dublanchet saw the evolution from high optimism to today's more realistic appreciation of the interdependence of microorganisms and humans, including the inevitable emergence of microorganisms not just resistant to available therapy, but also new organisms not previously recognized as human pathogens. The adaptive genius of microorganisms together with technological achievements in health care practice have ensured a sus-

tained, even expanding, need for expertise in infectious diseases and microbiology.

Professor Pallen, who has initiated a scientific career relatively recently, begins from a perspective of resistance as an immediate and future concern, and with an appreciation of the impact of structural issues in science and health care. These realities limit the translation of scientific advances in infectious diseases to practical applications for control and management. Science is ahead of our sociopolitical capabilities. But as someone who trained in the recent exciting environment of the genetic revolution, he still enthusiastically embraces a future where important residual issues will be addressed through further technological advances.

We are all, of course, witnesses to the development and progression of infectious diseases and medical microbiology throughout our own careers. Early in our career the view tends to be forward, and as we become more senior we tend to look backward. All of us have a unique start point – for me, it was the late 1970s, as infectious diseases as a clinical subspecialty, only introduced into Canada within the previous 10 years, coalesced through standardization of training programs and development of the professional society.

The challenge of infectious diseases and microbiology is not a struggle, but an exploration. On reading Dr Goldner's interviews and considering our personal experiences, the evolution in infectious diseases and microbiology through the latter half of the twentieth century is astonishing. Previously unthought of therapeutic advances and treatment success are now the accepted norm. Optimistic predictions of the demise of infections and pessimistic predictions for the future of our specialty have both repeatedly proved false. Today, none of us want for work! Clinical activity in infectious diseases continues to expand – HIV, severe acute respiratory syndrome, West Nile encephalitis, Nipah virus, hantavirus, and extended-spectrum beta-lactamase producing organisms only begin to describe the recent past. New infections and new technology applied to diagnostic methods expand both our needs for and capabilities in microbiology. The interviews not only entertain us with personal observations from these colleagues, but also provide a background to the larger canvas of success, failure, and, above all, change, in infectious diseases and microbiology.

REFERENCE

1. Petersdorf RG. The doctor's dilemma. *N Engl J Med* 1978;299:628-34.

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