To celebrate the 40th anniversary of the discovery of Natural Killer (NK) cells, this volume focuses on the recent advances in our understanding of NK cell development and differentiation and their acquisition of functional properties, as well as the latest models for NK-cell analysis in mice and applications in clinical medicine. NK cells have travelled a circuitous path from their initial description as `spontaneous killers (for some simply an experimental artifact) to being a bona fide subset of innate lymphoid cells with a complementary mode of action in immune defense and an important mediator of immune reactivity in health and disease. Together, these reviews provide a timely and concise picture of the evolution of NK cells as essential agents in immunity and as potent weapons against disease. This book offers an appealing and insightful resource for scientists and clinicians.