As Canada enters the twenty-first century, it faces several major challenges. One is the consolidation of its national system of innovation (NSI) – that is, the system composed of its innovating firms, universities, and public laboratories, together with the institutions (public and private) that finance innovation. This system developed slowly after Confederation and during the first four decades of the twentieth century, and it has experienced rapid growth in the last sixty years. It may suffer from several gaps and inefficiencies, including overlapping of governmental jurisdictions, duplication of some corporate efforts, missing elements, and some lack of coordination. Nevertheless, it has been a major contributor to Canada’s prosperity in the postwar period and may become the most decisive factor of its prosperity in the future. It is now challenged by governments’ budgetary priorities.

This book is a tentative portrait of the state of the system of innovation in the mid-1990s. Its first goal is to identify its major strengths and weaknesses and its core elements. Its second, theoretical goal is to develop, refine, and apply the concept of NSI, which seems key to the understanding of present and future trends in economic development. I try to link the concept with theories of endogenous growth, competence perspectives, and evolutionary economics. Chapter 1 is thus devoted to theory about NSIs. In part I, chapter 2 traces the origins and evolution of Canada’s NSI, and chapters 3–5 study its domestic system of research and development (R&D). In part II, chapters 6–8 analyse the internationalization of Canadian R&D and inquire into the possible eventual development of a North American
supranational system of innovation. Chapter 9 draws the main lessons from the past and suggests possible future paths.

This book is partially the result of my own work, and partially the outcome of research collaboration. In 1992–93, I conducted a massive study on R&D laboratories across Canada with the help of Dr André Manseau, at that time my PhD student in business administration at the Université du Québec à Montréal, and now working with the National Research Council. Several chapters (3–5) of this book summarize the main results of that study and are co-authored. This national study was made possible by the collaboration of Professors Barry Bozeman (director, School of Public Policy, Georgia Institute of Technology, Atlanta) and Michael Crow (professor, Department of International Studies, Columbia University, New York), who kindly shared with me their research methods in laboratories’ management. I wish here to acknowledge my gratitude for their generous help. In 1995–96, I conducted a survey of Canadian laboratories abroad, with the help of Professor Benoit Godin, of the Institut national de la recherche scientifique in Montreal. Chapter 8 is the result of that survey. Both the domestic and the international studies were supported by the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Fonds FCAR (Quebec). The international study was also supported by the Fulbright Program, of which I was a fellow in 1995–96, during my sabbatical year at Stanford University as a visiting scholar. I also wish to acknowledge my debt to these institutions for their help during these research projects. Finally, the two anonymous readers of the manuscript made many useful and generous comments, which helped me to improve the book.