

Preface

The Fountain of Knowledge is the story of the role of the university in the changing world, and in particular its role in economic development. It is not a book about technology transfer or a book about organizational change. It is not a book about the biotechnology industry. It is also not the story of Yale and Cambridge (or Cambridge and Yale—making sure no one gets insulted). All of the above are important parts that allow me to tell a story. But it is a different story.

Early in my academic career, I studied the localization of the biotechnology industry in Massachusetts. I asked, why does the biotechnology industry in Massachusetts cluster in Cambridge rather than in Boston or any other town? What I found was that it all was connected to MIT and Harvard. I was intrigued, and that is what led me to ask the next question, why universities?

For most of us, universities are needed for getting an education, getting a good job, and maybe moving up the professional ladder. We see universities as something we need to have. But do we? A growing number of policy makers, university presidents, and evidence in the form of economic growth say we do. Since the early nineteenth century there has been a growing pressure on universities to be participating citizens and contribute to society. But with the high-tech boom and the success of many university-related firms, such as HP, Google, and Yahoo, policy makers have started to view universities as the pathway to a region becoming a successful part of a global economy.

When we examine some of the most economically successful regions in the world, when we try to understand what is behind their success, we find a university. A university—really?

Regions that are trying to change and improve their economic base look to Cambridge, Massachusetts; Cambridge in the United Kingdom; and Helsinki and Turku in Finland, and what do they find? Many small to medium-size enterprises. Many of these were spun out or have some relationship with the local university or universities. Should universities, which were created to support the unbounded world of ideas, focus on applied research? *The Fountain of Knowledge* is a book about universities and their role in today's global economy: how (and why) they are contributing to their local economies.

Why did I choose to study Yale University and the University of Cambridge? The answer is simple. Both are world-renowned research universities that made an effort to change and make an economic contribution to their local regions. I was in the right place at the right time—I was at each of these institutions immediately after they began the process toward change, and during the process. This is a rare opportunity, and I took advantage of it. I conducted many interviews with faculty, researchers, companies, members of the business community, and local government representatives, all dealing with the question of how to maximize revenues (though to each person I interviewed, “revenues” meant something else).

My choice to study biotechnology was also simple. Biotech is a relatively new technology that, unlike many others, requires a close relationship with a research laboratory, in many cases within universities, hospitals, or research institutes. It is fairly easy to map the relationships of firms to their origin universities. Many executives of biotechnology firms are former PhD students who had a keen interest in my work and were willing to be interviewed. Without them this book would not exist.

I believe that universities should be an invaluable factor for any economic development studies. Hence, in this book I analyze universities in a wide scope, including the history and environment of the region in which universities operate. I draw much from organizational studies, but I view technology commercialization and knowledge transfer as more important in shedding light on how and why these changes occur and which worked best. Hence, I analyze the focus on technology commercialization in lieu of its impact on the local economy. Last, while conducting this research, and unlike previous researchers, I did not choose cases by their success. Instead, I followed two universities over time and evaluated the impact of their efforts to improve technology commercialization on the local economy.