IX. CONCLUSIONS

The objective of this report has been to introduce the reader to the Canadian and Spanish economies and give an overview of biotechnology present trends and commercial applications. These are the major findings of this document:

- 1. Two of the ten largest economies in the world, Canada and Spain, have insignificant levels of trade and investment.
- Biotechnology, known as the third technological revolution of the century, forms part, in both countries, of the strategic technologies fostered to promote productivity and competitivity.
- 3. The success of a biotech venture requires not only an unique technology, but a high R & D level based on well qualified scientists and engineers. In addition, financing and tax incentives, government funding of fundamental and applied research, and personnel availability and training-are major components in the commercial success of a biotech company.
- 4. In Spain, biotechnology R & D are developed along five areas of maximum priority. These are: Applications Research; Agriculture and Nutrition; Biodegradation and Pollution Control, Human and Animal Health; and Industrial Applications.
- 5. The level of funding of Spanish research and innovation, either through national or European programs, is excellent, and only limitations in the availability of scientific personnel makes funding lower. The major sources of Spanish industrial R & D financing come from CDTI and CSIC (in Spain), and the biotechnology programs of the EC Eureka, Bridge, Flair and Eclair.
- 6. The scientific and technical level of Spanish human resources in biotechnology is comparable to those of France, Germany or U.K., but there is an important lag between the amount of R & D done by the private sector of those countries and that of Spain. Training of scientific personnel is one of the major needs of Spanish biotechnology.
- 7. The industrial sectors of greater impact in Spain's economy and hence sectors of strategic relevance are: Agrifood; Pharmaceuticals and Diagnostics; and Environment
- 8. The Canadian government considers the following seven areas of maximum priority in the development of biotechnology: Aquaculture;