

318a The Impact of Science Entrepreneurship in a University on Economic Development in the Region

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The role of entrepreneurship in economic development involves more than just increasing per capita output and income; it involves initiating and constituting change in the structure of business and society. This change is accompanied by growth and increased output, which allows more wealth to be divided by the various participants. What is an area facilitates the needed change and development? One theory of economic growth depicts science and innovation as the keys, not only in developing new products (or services) for the market but also in stimulating investment interest in the new ventures being created. This new investment works on both the demand and the supply sides of the growth equation; the new capital created expands the capacity for growth (supply side), and the resultant new spending utilizes the new capacity and output (demand side). The innovation involved can, of course, be of varying degrees of uniqueness. Most innovations introduced to the market are ordinary innovations, that is, with little uniqueness or technology. As expected, there are fewer technological innovations and breakthrough innovations, with the number of actual innovations decreasing as the technology involved increases. Regardless of its level of uniqueness or technology, each innovation (particularly the latter two types) evolves into and develops toward commercialization through one of three mechanisms: the government, intrapreneurship, or entrepreneurship. While the government and intrapreneurship are methods for bridging the gap between science and the marketplace, the best method is through entrepreneurship. Many entrepreneurs and scientists have a difficult time bridging this gap and creating new ventures. They may lack managerial skills, marketing capability, or financial resources. Their inventions are often unrealistic, requiring significant modification to be marketable. In addition, entrepreneurs frequently do not know how to interface with all the necessary entities, such as banks, suppliers, customers, venture capitalists, distributors, and advertising agencies. Yet, in spite of all these difficulties, entrepreneurship is presently the most effective method for bridging the gap between science and marketplace, creating new enterprises, and bridging new products and services to the market. These entrepreneurial activities significantly affect the economy of an area by building the economic base and providing jobs. In some areas, entrepreneurship accounts for the majority of new products and net new employment. Entrepreneurship has assisted in revitalizing areas of the inner city. Individuals in inner city areas can relate to the concept and see it as a possibility for changing their present situation. One model project in New York City changed a depressed area into one having many small entrepreneurial companies. This bridging the gap and recognizing market opportunities is one of the aspects of science entrepreneurship programs at universities. These programs provide training and real world experience to students with backgrounds in scientific disciplines and a vision for new and growing ventures. Empowering scientists to become entrepreneurs with the skills to start and grow new high-tech ventures can radically impact the economy of the region, the focus of this paper.