



Jacques Loeb Centre
for the History and Philosophy
of the Life Sciences
Prof. Ute Deichmann, Director

Ben-Gurion University of the Negev
P.O. Box 653, Beer-Sheva, 8410501, Israel
Building 39, Room -114 | Phone: +972-8-6472258
Email: jloebcentre@post.bgu.ac.il | Web:
in.bgu.ac.il/en/loeb

From the Laboratory to the Market (and Back?)

Historical and Critical Explorations of the Interchange between Academia and Industry

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The current trend of the commercialization of science has touched many research institutions around the world. It has gained tremendous traction, causing ongoing changes to the practice of science and its institutions. But this is not a new phenomenon. The early commercialization of science was mostly related to chemistry, mainly in Germany. Today it affects mostly the biological sciences and engineering. Following the end of the Cold War, military financing of American academia dropped significantly. Also, the passing of the 1980 U.S. Bay-Dole Act is often cited as a turning point in the commercialization of scientific knowledge in America. This legislation determined that patents based on knowledge developed in universities belonged to the academic institutions themselves, even when funding for the research came from public sources. Along with other developments, this led to a significant acceleration in the collaboration between science and industry and to a dramatic increase in the commercialization of scientific knowledge. Other countries quickly adopted similar models for commercializing science.

One of the core developments in this trend is the growing dominance of private corporations and of market needs and practices in the generation, distribution, collection, and transfer of knowledge in general, and technical and scientific knowledge in particular. The meteoric rise of the high-tech industry in recent decades transforms not only national economies, but actually re-shapes the global research field. The increasing commercialization of academic knowledge is deeply entwined with the private research carried out by the high-tech industry. More and more universities feed and are fed by this kind of research.

This workshop will examine the phenomenon of the commercialization of science from critical and historical perspectives and will explore the effects of its present acceleration on scientific research. Also, using selected cases, we will analyze how commercialization

has impacted on basic science and on the university in general, including the humanities.

Israel is a particularly interesting case because commercialization of scientific knowledge started long before the introduction of the previously-mentioned American legislation in the 1980s. Unlike the American model, which can be largely characterized as a Top-Down model (i.e. federal legislation that trickled down and affected the behavior of universities), in Israel it was a Bottom-Up process. The Israeli science institutions initiated commercialization of science through the establishment of technology transfer offices of their own. The Weizmann Institute was the pioneer in this field, establishing YEDA ("Knowledge" in Hebrew) – the first academic technology transfer office in the world(!) - already in 1959. Next was The Hebrew University that established "YISUM" ("Application" in Hebrew) in 1964. The other Israeli universities adopted the Weizmann Institute's model. By the end of the 1970s six out of seven universities in Israel had established technology transfer offices. In 2006 the Weizmann Institute was ranked first in the world in revenue from the transfer of technology. This quick and extensive commercialization has also given rise to concerns regarding the fate of basic research in the country.

In light of the growing cooperation in recent years between Ben-Gurion University and industry – described by the university's president as "the next step in the development of our great University"- the workshop also reviews these processes here in our home university.