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Having your cake and eating it too; effective engagement in start-ups from an academic seat CHAD MIRKIN, Northwestern University

In order for scientific advances to have a positive impact on society, they must be successfully transitioned from conceptually fundamental endeavors in academic research laboratories to valuable enabling technologies at start-up companies. Nanosphere, NanoInk, and AuraSense are three start-up companies that have been spun out of Northwestern based on research initiated in my laboratory. These companies are focused on commercializing nanotechnology-based applications in the life science and semiconductor industries and have turned discoveries from my lab into viable commercial products. For example, several of the systems developed at these start-ups are in the clinical trial phase, with one already approved by the FDA, and they are poised to have a positive world-wide impact. Herein, I discuss the challenges associated with identifying commercial value in academic research projects, securing intellectual property, forming a company as a legal entity, and locating sources of start-up funds. Further, I will discuss the rewards of venturing into such enterprises and the ways of ensuring a start-up company's long-term success, while juggling the numerous responsibilities of an academic seat. I argue that these two activities are done not in competition, but rather are integral for driving the type of high-level, synergistic scientific research that is being done today.