



AUTM Position Statement Allowing Inventors Free Agency Privilege to Develop Technologies

While each university is unique, the technology transfer professionals they employ—the people who manage the transfer of discoveries resulting from academic research—share a common trait: technology transfer professionals are dedicated to ensuring that important scientific discoveries go beyond laboratories and campus boundaries and become products and services that benefit everyone.

The Association of University Technology Managers (AUTM) is a nonprofit organization with more than 3,000 members from more than 300 universities, research institutions and teaching hospitals as well as numerous businesses and government organizations. As the leader in education and benchmarking data and statistics for the technology transfer profession, AUTM is informed and well positioned to advise on matters of public policy affecting the profession. AUTM strongly opposes “free agency,” a concept which would allow university faculty to shop discoveries to any third party for licensing—regardless of where the research was conducted.

AUTM appreciates the interest in improving the effectiveness of technology transfer in the United States, and the association works hard to provide its practicing members in academia and industry with professional development opportunities, benchmarking, and myriad proven methods to improve the technology transfer process. However, the free agency concept suffers from a fundamental error in assumptions about academic research and technology transfer. Without substantial and verifiable data, this concept assumes that: 1) more research would be commercialized under free agency; 2) innovations that are commercialized currently do not reach the marketplace fast enough; 3) technology licensing offices (TLOs) are ineffective and therefore a bottleneck for this process; and 4) only faculty inventors are capable of making the right decisions regarding commercialization as opposed to the trained professionals in the TLOs.

Commercialization of research innovations

Universities are not developers, manufacturers or marketers of commercial products; faculty creates early stage innovations, the vast majority of which need significant development and investment to turn them into commercial products. Commercialization of university research takes place in the private sector under licenses with existing or startup companies. Resources dedicated by industry and regulatory processes largely determine the speed at which products reach the market. The non-profit activities associated with evaluating and protecting an invention and negotiating a licensing agreement for commercial use are not the most important or most time-consuming or costly aspect of commercialization. The most time-consuming and expensive aspect of commercialization occurs after the license is signed, in particular for therapeutic, diagnostic and medical-device products requiring clinical trials for approval. Industry and regulatory agencies set the pace. Simply shopping a technology to a different university or third party will not improve the speed at which a technology is commercialized. It will, in fact, slow down the process.

The free agency concept would add a new layer of bureaucracy to the technology transfer process, including the need for agreements among the inventors of the particular invention as most inventions have more than one inventor, between the inventors’ institution and the licensing agent which would add considerable time to the technology transfer process BEFORE marketing and licensing could even be started, as well as potentially reducing inventors’ shares of royalties through management fees assessed by the licensing agent.

In addition, a free agency model would increase the risk of technologies, and startup companies formed to develop those technologies, leaving the state within which they were created. Currently, TLO’s, especially those at public institutions, make it a priority to license to startup companies within their home state when feasible, thus feeding the region’s economic development.

The current U.S. system works

AUTM data clearly indicate that many offices throughout the country carry out robust and successful evaluation, protection and licensing, not just a few. Any process is subject to improvement, and to that end, TLOs and AUTM freely share best practices as they evolve, and experienced offices advise and assist less-experienced offices. AUTM provides professional development programs and meetings to further disseminate best practices. Small offices typically do not have as much patenting and licensing activity as larger offices, but small offices are developing institutional expertise as they gain experience and interact with each other. University technology licensing in the United States is the envy of the rest of the world.

It is important to note that the majority of university technology licensing offices retain little, if any, of the revenue generated through their activities – most revenue goes to inventors, their laboratories, and to departments and colleges for reinvestment into further research. While covering costs, providing revenue incentives to inventors, and revenue for re-investment in research is a desired outcome, most TLOs exist primarily as a service to faculty and to ensure that results of their research are licensed to entities that can translate them into useful products that benefit society. Differences in perceived effectiveness can be attributed to a number of factors including research expenditures of the university, age of the TLO, tenure of its staff, resources allocated by the university to support technology transfer, and external resources and infrastructure that support entrepreneurial and business development activities. Absent careful research, it is irresponsible to claim that certain universities are successful and others are unsuccessful only because of their TLOs. One would have to take into account the varied missions of the universities, the quality and type of their research, as well as the TLOs, with the primary understanding that research at certain institutions may be more applicable to commercialization as a route of dissemination than others.

TLOs differ because research institutions differ. Each TLO reflects its local and regional needs and environment. In particular, they reflect the diverse cultures and priorities of their institution and faculty. Truly, this is diversity at its finest.

Inventors' rights to own intellectual property and use any technology licensing "agent"

The free agency concept suggests that faculty and inventors should have the right to determine which office—a TLO or even a third party such as an attorney or other for-profit entity—to use for technology licensing while their own institution would retain ownership. This assumes that using the TLO of their institution is a disadvantage, with no data to back the assumption, that a large number of faculty would rather use a TLO at another university or a third party, and that other universities would have the inclination and the resources to handle inventions coming from inventors other than their own faculty. MIT, Stanford and WARF, large, experienced TLOs generally seen as successful, have already stated clearly that "It would be inappropriate for us to handle inventions from inventors outside our own institutions, and we have no interest in doing so."

The National Research Council of the National Academies recently conducted an in-depth study on the commercialization of federally funded research and found: "A persuasive case has not been made for converting to an inventor ownership or 'free agency' system in which inventors are able to dispose their inventions without university administration approval. If evidence is developed suggesting that either would be more effective than the current system, other significant practical consequences and policy considerations would have to be considered, such as the potential for conflicts of interest and adverse effects on public accountability."¹

The free agency concept assumes that utilizing outside entities will lead to greater commercialization. This is a stretch that assumes faculty, their host institutions, industry, and venture capitalists would want such a system. Technology transfer works best when faculty have a strong, ongoing relationship with their university TLO and work with them as a team for such development and licensing.

Efficient technology transfer requires discoveries be seamlessly translated into intellectual property that can be licensed in parallel with their publication in the scientific literature. University TLOs provide the upfront funding for creating this intellectual property—most faculty inventors have little or no prior experience in technology

¹ Managing University Intellectual Property in the Public Interest, Committee on Science, Technology, and Law Policy and Global Affairs, National Research Council of the National Academies, p. 73

transfer, product development, or business development, nor are they willing to bear the expense of protecting their inventions. Universities would be unlikely to bear these upfront intellectual property costs if they don't control the marketing and licensing of the technology. AUTM has asked its members if they would be permitted to provide services to faculty from unrelated institutions. Several members indicated that are not permitted to provide services to faculty from unrelated institutions and would not want to even if the rules were changed. We did not hear from any members who would be permitted to provide services to faculty from other institutions or who think that would be a sound business practice.

Because the majority of university inventions involve more than one faculty, postdoc, and/or graduate student inventor, potentially from more than one institution because of the collaborative nature of science, the free agency concept would potentially pit faculty co-inventors against each other as they strive to agree on the best strategy for licensing their invention, and then to find a licensing agent willing to take on their invention. University TLOs are in the best position to be neutral, objective and unbiased advocates of federally funded inventions. Further, the benefit of this expertise extends to the transfer of technologies that have other sources of funding.

Finally, industry licensees, already understandably risk-averse, would be even more unlikely to license a technology under the free agency concept as untangling title and ownership would be more complicated and fraught with potential legal burdens.

Alternative proposal

As an alternative to free agency, AUTM proposes the funding of partnerships between small institutions which cannot afford to staff a sophisticated TLO and a nearby large institution which had the necessary resources. The vast majority of minority-serving institutions would benefit from and embrace this mechanism.

In conclusion

The free agency concept is not based on actual research or data related to the current technology transfer process at universities, and is not supported by AUTM. Technology transfer professionals work every day to find industry partners willing to invest large sums of money in early stage technology so that knowledge may be transferred into products which benefit the very society that funds the research. The process of identifying, protecting and licensing discoveries made at such an early stage is among the most challenging of disciplines. It involves a highly complex intersection and interaction of technology, law and business, not to mention individual, regional and organizational needs, expectations, and personalities.

Universities should expect and insist on high quality, effective service by their TLOs and, in fact, TLOs already compete for the best licensing professionals. As stated above, AUTM does not believe that inefficiencies in the technology transfer process are slowing the pace of innovation in America. To the contrary, since the passing of Bayh-Dole, university innovation has done nothing but increase. Academic technology transfer is diverse and relies on local and regional strengths and needs as well as successful practices that are continually improving.

Finally we do not believe that a licensing free agent system would do anything other than to create confusion and slow the technology transfer process, something that our country cannot afford.