Much patent law, policy, and theory presumes the existence of robust licensing markets for patented inventions. From the Bayh-Dole Act to prospect theory, many elements of the patent system implicitly assume that patentees can identify licensees, negotiate agreements, and transfer technologies with relative ease. In significant part, this belief in robust licensing markets relates to another presumption that transferring patent rights is sufficient to transfer a patented technology.

Drawing from empirical studies of university-industry technology transfer, this Article challenges these preconceptions. It shows that licensing markets are strikingly “thin” and that personal relationships, rather than one-off market interactions, dominate university technology transfer. More significantly, this Article highlights the role of tacit knowledge in successfully transferring university inventions. By emphasizing the importance of uncodified “know how,” this Article argues that formal intellectual property rights are “incomplete” as conduits for transferring technical knowledge.

Finally, this Article argues that universities and licensee firms are responding to the limitations of intellectual property by adopting organizational forms to facilitate the transfer of tacit knowledge. In short, it contends that private firms are vertically integrating with academic human capital. Through a continuum of relationships including co-publishing, sponsored research, and equity participation, licensee firms are bringing academic scientists (and their tacit knowledge) “in house,” thus accelerating the development of university intellectual property. This phenomenon represents an underappreciated illustration of law and economics theories of the firm, which predict vertical integration in contexts where contractual relationships are difficult or incomplete.