

## Analysis of UChicago Patenting and Licensing Data to Predict Innovation

### Company Background/Description/Profile

The Polsky Center for Entrepreneurship and Innovation's tech transfer team creates and manages the intellectual property arising from University early-stage research and creates partnerships with companies (through licensing) to develop the intellectual property into products. University of Chicago inventions have been transformed into several products on or near the market, in fields ranging from healthcare to manufacturing to energy production.

Over the past thirty years, the office has filed over 6,000 US and foreign patents based on a subset of over 3,500 submitted invention disclosures. A minority of those patents have been licensed to companies, through over 250 license agreements.

The patenting and licensing processes both play out over several years, during which the University invests ~\$3M/year in external legal expenses. Companies licensing the intellectual property reimburse the University for a significant fraction of those costs, with some of that reimbursement being for recently incurred costs and some of it being for costs incurred several years earlier. In addition, the University receives royalties on sales of marketed products, which may come in several years after the intellectual property is licensed. Over the last five years, the University has received over \$40M in cumulative license revenue. These funds are divided between the inventors, research support, and covering the expenses of the Polsky Center.

### Business Problem/Opportunity Statement

The University invests in patenting early stage research with incomplete information about its commercial prospects. In addition, the patenting process itself is slow, expensive and uncertain. A detailed analysis of the University's patent and licensing data should yield insights on key decision points and suggest opportunities for improvements in the Polsky Center's processes.

### Data Description

Data on the University's patents and license agreements are stored in a database provided by Inteum Company, LLC. The product is designed for academic technology commercialization organizations. The database contains metadata, original documents (e.g., pdfs of patent applications), financial data, and some associated correspondence. Much of the data describes the decisions made during the process of getting a patent allowed, which typically takes three to five years and involves extensive correspondence with US and foreign patent offices, carried out through external patent attorneys.

Some additional data exists in separate locations.