



FACULTY & RESEARCH

Article | Journal of Economic Geography | January 2009

Spatial Diversity in Invention: Evidence from the Early R&D Labs

by [Tom Nicholas](#)

Abstract

This article uses historical data on inventor and firm R&D lab locations to examine the technological and geographic structure of corporate knowledge capital accumulation during a formative period in the organization of US innovation. Despite the localization of inventive activity around the labs, one-quarter of inventors lived outside a 30 mile commuting radius of the nearest facility of the firm they assigned their patents to. A strong positive effect of distance from a lab on technological importance is identified, especially for inventors from large cities that were geographically separated from a firm's labs. A patent case-control method helps explain spatial sourcing by showing that the average quality of externally available inventions was high. Firms selected complementary, not substitute, inventions from non-lab urban locations, suggesting a link between the organization and the geography of innovation.

Keywords: [Factories, Labs, and Plants](#); [Geographic Location](#); [Innovation and Invention](#); [Patents](#); [Knowledge Acquisition](#); [Research and Development](#); [United States](#);

Format: Print [Find at Harvard Read Now](#)

Citation:

Nicholas, Tom. "[Spatial Diversity in Invention: Evidence from the Early R&D Labs](#)." *Journal of Economic Geography* 9, no. 1 (January 2009).

[Export Citation](#)

About the Author

[Tom Nicholas](#)

William J. Abernathy Professor of Business Administration
[Entrepreneurial Management](#)

[View Profile »](#)[View Publications »](#)