## The Effect of Collaboration Network on Inventors' Job Match, Productivity and Tenure.

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## Abstract

It has been argued in the economic literature that job search through informal job networks improves the employer–employee match quality. This paper argues that inventors' research collaboration networks reduce the uncertainty of firms about the match qualities of inventors prior to hiring. We estimate the effect of inventors' collaboration networks on their productivity and mobility using the U.S. patent application database. It is found that networkrecruited inventors are more productive and have longer tenure than publicly recruited inventors. The evidence from fixed-effect regressions shows that the higher productivity and longer tenure of network-recruited inventors are not solely attributable to their unobserved ability. These results are consistent with the job match hypothesis between inventors and firms through their collaboration networks.

Keywords: job networks, match quality, inventor, mobility, productivity, patent.

JEL Classification: J44, J63, O32.