



## Postdoctoral Position in the Science of Teams and Innovation

The Knowledge Lab at the University of Chicago seeks to hire an outstanding candidate for a postdoctoral research project with support from the National Science Foundation that uses large-scale data analysis and online team experiments to explore how to design teams for innovation and success. The project, titled "Understanding Team Success and Failure" was partially inspired by insight from our own recent work studying more than 50 million teams in science and technology that illustrated how smaller teams are much more likely than larger ones to produce work that disrupts the frontier. The project is also motivated by the realization that the vast majority of research on teams exhibits success bias, where data on failed teams remains under-recorded or censored. This project will involves a two-stage research program to understand how successful teams of different sizes and shapes "think differently" and can be designed to accelerate scientific, technological and creative discovery, invention and development.

Postdoctoral candidates will design and conduct independent research, in collaboration with UChicago Professor and Knowledge Lab Director James Evans, and Dashun Wang, a network scientist and physicist from Northwestern University's Kellogg School of Management. Candidates much have substantial computational and data science background and a Ph.D. in Sociology, Economics, Psychology or a related Social/Behavioral Science, Physics, Applied Math, Computer Science, Engineering or a related field, and a strong publishing background.

Specifically, the successful candidate will be responsible for assembling data, constructing features and evaluating success and failure outcomes for millions R&D teams over 100 years in terms of team size, network structure, role composition and experience. Second, insights developed from this investigation will enable the candidate, in collaboration with Evans, Wang and the broader team, to collaborate on the launch of large-scale online team experiments to isolate the causal mechanisms driving team success and failure. We will publish the results of analyses and experiments and make recommendations for policy to design teams optimized for specific purposes, such as advancing science and technology. Candidates must have experience with statistical models, inference, and knowledge of experimental design. Experience with Bayesian inference and machine learning a strong plus. Candidates should also have extensive experience (2 or more years) with scientific computing in Python. Positions could begin anytime within the coming year, and as early as September 2018. Competitive salary & benefits.

To apply, please send CV and names for letters from at least two references to Candice Lewis, <u>cllewis@uchicago.edu</u>.