On Leading a Lab: Strengthening Scientific Leadership in Responsible Research

A Workshop

December 4-5, 2023 National Academies Keck Center 500 Fifth Street, NW Washington, DC

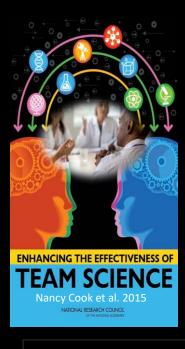
Brian Uzzi Kellogg School of Management Northwestern Institute on Complex Systems and Data Science Northwestern University



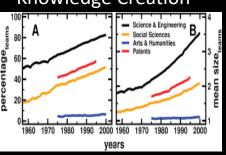
Team Science

Science of Science Literature

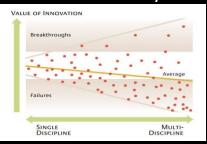
- Big Data (10s of Million teams)
- Observational Data Methods

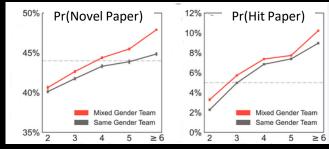


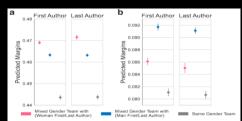
(1) Teams Dominate Knowledge Creation



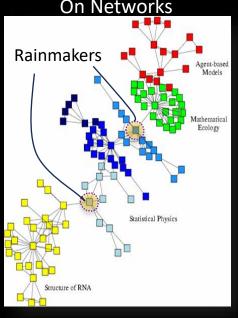
(2) Teams Prosper from Diversity



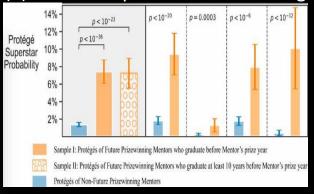




(3) Leadership Thrives On Networks



(4) Mentorship is linked to learning



References in note panel



Professional Development

Most Professional Development programs employ academic Team Performance research

- Focus on performance boosting factors
- Nearly 100 years of research with changing foci Delegation -> Diversity -> DEI -> AI
- Experimental and field Data on different types of teams (But, <u>rarely</u> science team studies)

4 Level Model of Team Effectiveness