Can Big Science Be Too Big?

February 14, 2019

Modern science is largely a team sport, and over the past few decades the makeup of those teams has shifted, from small groups of collaborators to ever larger consortiums, with rosters far longer than that of the New England Patriots. Answering big questions often requires scientists and institutions to pool resources and data, whether the research involves detecting <u>gravitational waves in deep space</u>, or sorting out <u>the genetics of brain development</u>.

But that shift has prompted scientists to examine the relative merits of small groups versus large ones. Is supersizing research projects the most efficient way to advance knowledge? What is gained and what, if anything, is lost?

Psychologists have found that people working in larger groups tend to <u>generate fewer ideas</u> than when they work in smaller groups, or when working alone, and become less receptive to ideas from outside. Why that would be isn't entirely clear, but it runs counter to intuition, said <u>Suparna Rajaram</u>, a professor of psychology at Stony Brook University.