A Michigan State University researcher helped write a groundbreaking new report from the National Research Council that concludes scientific research is increasingly dominated by teams - a promising approach that is also rife with challenges.

Steve Kozlowski, professor of psychology, said the book-length report is likely to have major public policy and research funding implications as academic and scientific research communities are still largely structured around an outdated concept of the independent solo investigator.

Team science can be challenging, especially when teams or groups are geographically dispersed, include diverse disciplines or experience changing membership. Yet the evidence indicates that innovation and impact are enhanced by multidisciplinary science teams.

Kozlowski has served on numerous multidisciplinary research teams that have received millions of dollars in federal funding to tackle issues dealing generally with teamwork, including a $2.5 million project to help NASA build a better team on Mars.

Kozlowski said resolving the challenges that impede science team effectiveness requires attention to assembling the right people, training and development, and team leadership.

"Universities need to better support and recognize team science and funding agencies need to support research to improve the effectiveness of team science," said Kozlowski, who served voluntarily for two years on the committee that developed the NRC report. "Social scientists like me who study teams and team-science practitioners, and scientists working in teams need to collaborate on research efforts to produce knowledge that can be applied to enhance the effectiveness of team science."

The NRC complete report can be read or downloaded free here.