

Seminar Series



Dr. Scott Powers

Assistant Professor of Sport Analytics and Statistics, Rice University

Scott Powers is an assistant professor of sport analytics and statistics at Rice University, where he has served since 2023. He earned his PhD in statistics in 2017 before working in professional baseball for six years—five with the Los Angeles Dodgers, where he was analytics director during their 2020 World Series championship season, and one with the Houston Astros, where he served as assistant general manager during their 2022 World Series title. His current research investigates on-field strategy optimization across sports and examines how leagues can design incentive structures that enhance athlete safety and increase fan engagement.

Winning Baseball Games by Solving Statistics Puzzles

This talk presents three applications of statistical methodology to research questions in baseball. First, we consider a modification of supervised learning techniques applied to pitch-tracking data. Specifically, we examine how the modeling framework changes when the objective is to evaluate the pitcher rather than the pitch. Second, we analyze the strategic interaction between pitcher and baserunner under Major League Baseball's recently implemented pickoff limits.

We model this cat-and-mouse dynamic as a stochastic game and investigate how a runner may optimally adjust leadoff distance in response to successive pickoff attempts. Third, we explore the newly available swing-level bat-tracking data released by MLB, which provide measurements of bat speed and swing length at the point of contact. We address the methodological challenge that the outcome itself determines the point of measurement and discuss potential approaches for inference in this setting.

[Click here to join
the Zoom meeting!](#)



TEXAS A&M
UNIVERSITY®

TEXAS A&M
AGRILIFE

TEES
TEXAS A&M ENGINEERING
EXPERIMENT STATION