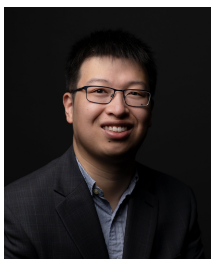




THE SOCIOLOGY DEPARTMENT COLLOQUIUM PRESENTS:

## Understanding Failure Dynamics in Science and Innovation



**Yian Yin**

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Northwestern University

Monday, November 29th from 12:30-1:50pm CT  
Albion Small Room/SSRB 305  
and via Zoom: <https://bit.ly/3wNxYgj>

Human achievements are often preceded by repeated attempts that initially fail, but little is known about the mechanisms that govern the dynamics of failure. In this talk, I will present two related but distinct studies to help us understand failure dynamics across a wide variety of settings. In each study, I will begin by drawing together a large variety of empirical datasets spanning the domains of science and technology that capture failed attempts as well as their successful counterparts. I then build a mathematical framework to model how successful future attempts build on past failures, and how a community of innovators collectively contribute to punctuated record-breaking dynamics. Through these two examples, I hope to illustrate how our knowledge about failure dynamics can help us better understand the emergence of success and human achievements.

*In-person attendance is available on a first-come, first-served basis. Please email Meredith Clason if you would like to attend the talk in the Albion Small Room (SSRB 305). Once the available seats are taken, the event will be available only by Zoom.*