



NORTHWESTERN INSTITUTE
ON COMPLEX SYSTEMS (NICO)

CHAMBERS HALL
600 FOSTER STREET
EVANSTON, IL 60208-4057
T . 847 491 2527
F . 847 556 1280



NORTHWESTERN
UNIVERSITY

**Northwestern Institute on Complex Systems
invites you to its**

Weekly Seminar

Speaker: Dr. Stefan Wuchty, NICO Post Doc

Title: The Increasing Dominance of Teams in the Production of Knowledge

When: Wednesday, January 10, 2007

Where: Chambers Hall, 600 Foster Street, Lower Classroom Level

Time: 12:00 – 1:00

NICO Coffee Hour will follow for questions, networking, and collaboration

Abstract

An acclaimed tradition in the history and sociology of science emphasizes the role of the individual genius in scientific discovery. Recent studies, however, have explored an apparent shift in science from this individual-based model of scientific advance to a teamwork model. Examining all papers and patents published over many decades in all domains of science and patenting, I present evidence for the presence of universal patterns, suggesting that the process of scientific knowledge creation has fundamentally changed. The results indicate three facts that demonstrate with remarkable generality that teams dominate solo authors in the production of scientific knowledge. First, research is increasingly done in teams across virtually all scientific fields of inquiry. Second, teams produce more highly cited research on average than individuals do and this team advantage is increasing annually. Third, teams now produce the exceptionally high impact research, a distinction that was once the domain of solo authors.