

Table 1: Growing Perverse Incentives in Academia (adapted from Edwards–Roy 2017, 10.1089/ees.2016.0223, under the terms of the CC-BY-NC license)

<b>Incentive</b>	<b>Intended effect</b>	<b>Actual effect</b>
Researchers rewarded for increased:		
... number of publications.	Improve research productivity, provide a means of evaluating performance.	Avalanche of substandard, incremental papers; Poor methods and increase in false discovery rates leading to a natural selection of bad science (Smaldino–Mcelreath, 2016); Reduced quality of peer review
... number of citations.	Reward quality work that influences others	Extended reference lists to inflate citations; Reviewers request citation of their work through peer review
... grant funding	Ensure that research programs are funded, promote growth, generate overhead	Increased time writing proposals and less time gathering and thinking about data; Overselling positive results and downplay of negative results
Increase PhD student productivity	Higher school ranking and more prestige of program	Lower standards and create oversupply of PhDs; Postdocs often required for entry-level academic positions, and PhDs hired for work MS students used to do
Reduced teaching load for research-active faculty	Necessary to pursue additional competitive grants	Increased demand for untenured, adjunct faculty to teach classes
Teachers rewarded for increased:		
... student evaluation scores	Improved accountability; Ensure customer satisfaction	Reduced course work, grade inflation
... student test scores	Improve teacher effectiveness	Teaching to the tests; Emphasis on short-term learning
Departments rewarded for increasing:		
... U.S. News ranking	Stronger departments	Extensive efforts to reverse engineer, game, and cheat rankings
... numbers of BS, MS, and PhD degrees granted	Promote efficiency; Stop students from being trapped in degree programs; Impress the state legislature	Class sizes increase; Entrance requirements decrease; Reduce graduation requirements
... student credit/contact hours (SCH)	The university’s teaching mission is fulfilled	SCH-maximization games are played; Duplication of classes