



Evaluate and perish?

Sopravvivere al Dottorato e continuare a fare ricerca nell'era della valutazione

Giuseppe De Nicolao

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ROARS

Return On Academic ReSearch



UNIVERSITÀ
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“Bandi finti, baroni e tagli: io, precaria a vita negli atenei”



Pubblichiamo la lettera aperta di Gilda Policastro al premier Matteo Renzi, sulla condizione dei ricercatori universitari

» GILDA POLICASTRO

Caro Matteo Renzi, le scrivo perché ogni giorno sento lei e i suoi ministri parlare di cambiamento, di rinnovamento, di riforme. Soprattutto quest'ultima voce parrebbe potersi caricare di promesse e speranze al sapore di “realità effettuale”, per dirla con Machiavelli: si sta riformando, a sentirvi, quest'Italia dei figli e dei nipoti le cui condizioni sociali ed economiche per una larga maggioranza degradano rispetto a quelle dei nonni e dei padri. Si stanno rinnovando, da quel che proclamano interviste e tweet quotidiani, la scuola e l'università, ovvero i settori su cui gli stati moderni hanno basato la loro crescita anche materiale, perché non può esserci sviluppo senza ricerca e senza avanzamento delle conoscenze.

Gli sciagurati dei 70 tra riforme e caste

lavoro di tesi originale, al sistema dei crediti e del “3+2”, culminante in smilze tesine compilative dalla cui discussione pro forma si esce “dottori”. Sono passata dalla laurea con lode in Letteratura italiana al dottorato nelle università d'eccellenza, a sentire le statistiche (e contravvenendo al noto ammonimento leopardiano che invitava a diffidare). I miei genitori, entrambi insegnanti di scuola, hanno investito nella mia formazione garantendomi la copertura economica di un alloggio nelle città in cui ho scelto di studiare e perfezionarmi, ma soprattutto di tasse maggiorate rispetto a quelle di studenti figli di imprenditori o liberi professionisti i quali, a differenza degli statali, potevano consentirsi qualche deroga o “autosgravio” fiscale (si chiamerebbe evasione, in uno Stato più equo, e sarebbe combattuta).

L'accademia è tuttofare

to, offrendomi oltretutto la possibilità di guadagnare 18 mila euro all'anno. Poi più nulla: il finanziamento con cui il mio assegno veniva richiesto e rinnovato ha avuto termine e dal 2010 al 2012 non ho avuto la possibilità di radicarmi in nessun contesto universitario perché nel frattempo i concorsi venivano banditi con sempre minor frequenza, e, soprattutto, già destinati in partenza a qualcuno, anche se naturalmente poteva darsi qualche circostanza particolare (sfortunata per il designato e fortunata per i suoi competitor) che scombinasse i piani al barone di turno, ma si trattava di situazioni rarissime e per lo più leggendarie. Nel frattempo ho chiesto all'Inps, a cui ero stata costretta a iscrivermi all'atto della stipula del primo contratto, un sussidio di disoccupazione (o “sostegno al reddito”, come si chiamava qualche anno fa), ma non ne avevo i re-

Figure 1: New faculty positions versus new PhDs.

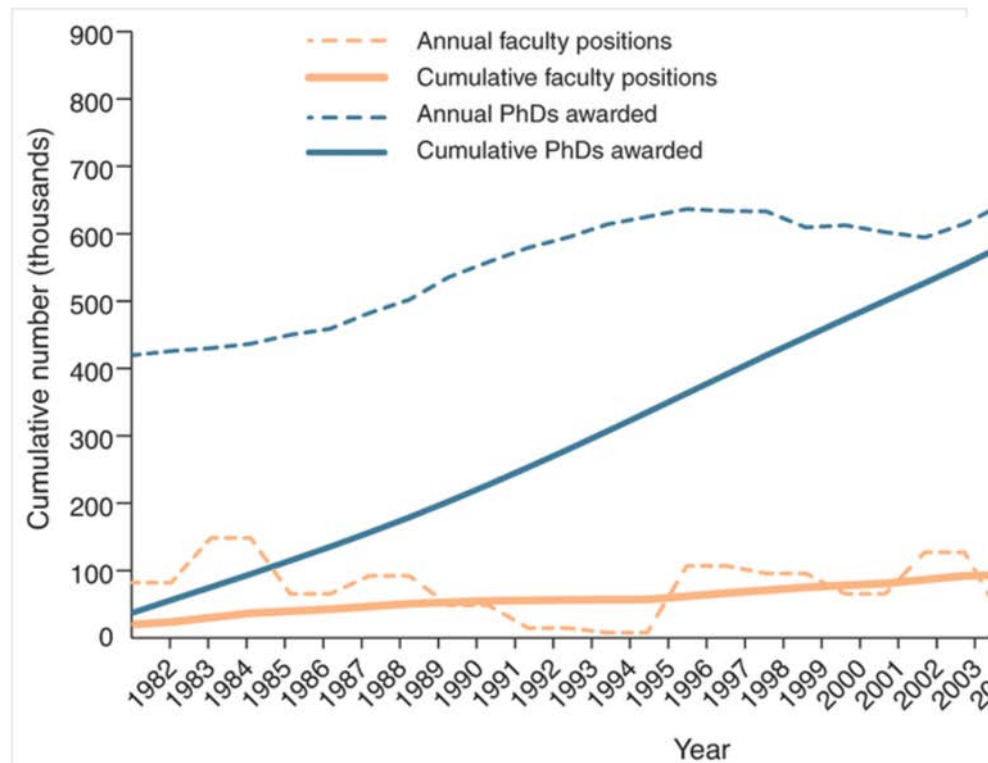
From

The missing piece to changing the university culture

Maximiliaan Schillebeeckx, Brett Maricque & Cory Lewis

Nature Biotechnology **31**, 938–941 (2013) doi:10.1038/nbt.2706

Published online 08 October 2013



Since 1982, almost 800,000 PhDs were awarded in science and engineering (S&E) fields, whereas only about 100,000 academic faculty positions were created in those fields within the same time frame. The number of S&E PhDs awarded annually has also increased over this time frame, from ~19,000 in 1982 to ~36,000 in 2011. The number of faculty positions created each year, however, has not changed, with roughly 3,000 new positions created annually^{2, 10}.

Too Few University Jobs For America's Young Scientists

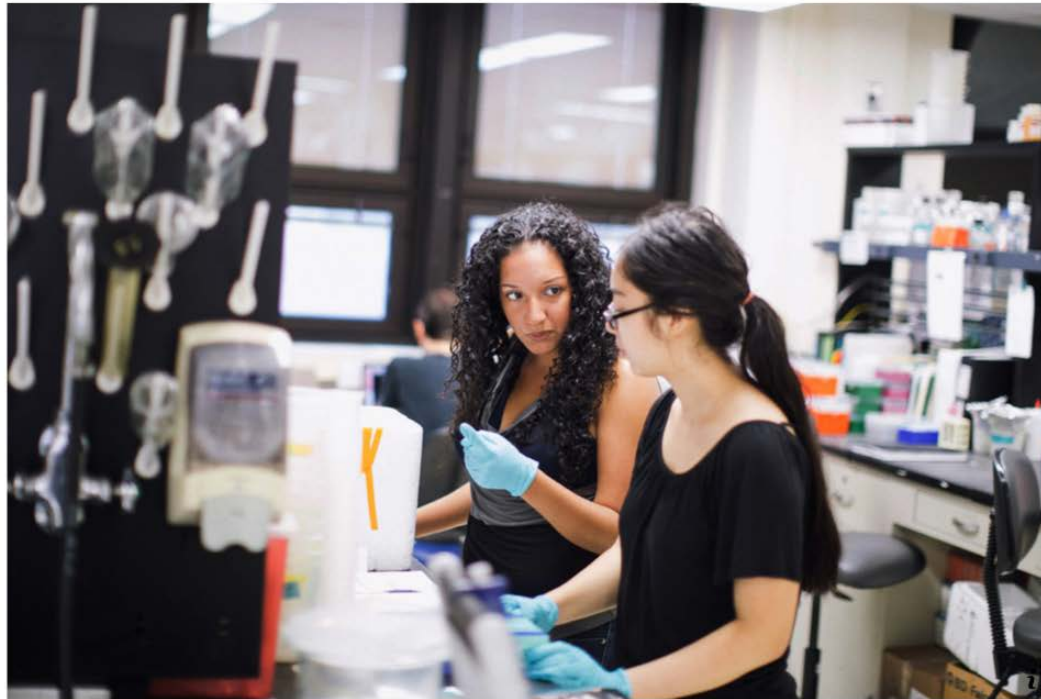
by RICHARD HARRIS

September 16, 2014 3:38 AM ET

Listen to the Story

Morning Edition

7 min 47 sec



Ramsay de Give for NPR

Imagine a job where about half of all the work is being done by people who are in training. That's, in fact, what happens in the world of biological and medical research.

Academics fight hourly contracts

A day of action on Wednesday will highlight the poor pay and job insecurity of many staff at universities



Anna Fazackerley

The Guardian, Tuesday 4 November 2014



Sarah Kendzior

Writer at Al Jazeera English

The Adjunct Crisis Is Everyone's Problem

Doctoral degrees

The disposable academic

Why doing a PhD is often a waste of time

Dec 16th 2010 | from the print edition

ON THE evening before All Saints' Day in 1517, Martin Luther nailed 95 theses to the door of a church in Wittenberg. In those days a thesis was simply a position one wanted to argue. Luther, an Augustinian friar, asserted that Christians could not buy their way to heaven. Today a doctoral thesis is both an idea and an account of a period of original research. Writing one is the aim of the hundreds of thousands of students who embark on a doctorate of philosophy (PhD) every year.

In most countries a PhD is a basic requirement for a career in academia. It is an introduction to the world of independent research—a kind of intellectual masterpiece, created by an apprentice in close collaboration with a supervisor. The requirements to complete one vary enormously between countries, universities and even subjects. Some students will first



What Can You Do With a Humanities Ph.D., Anyway?

The choice to leave academia does not have to mean life as a barista.



THE CHRONICLE OF HIGHER EDUCATION

April 25, 2014



The Ph.D. Placement Project

Investigating graduate placement rates.

September 19, 2013 by Chand John

The Ph.D.-Industry Gap

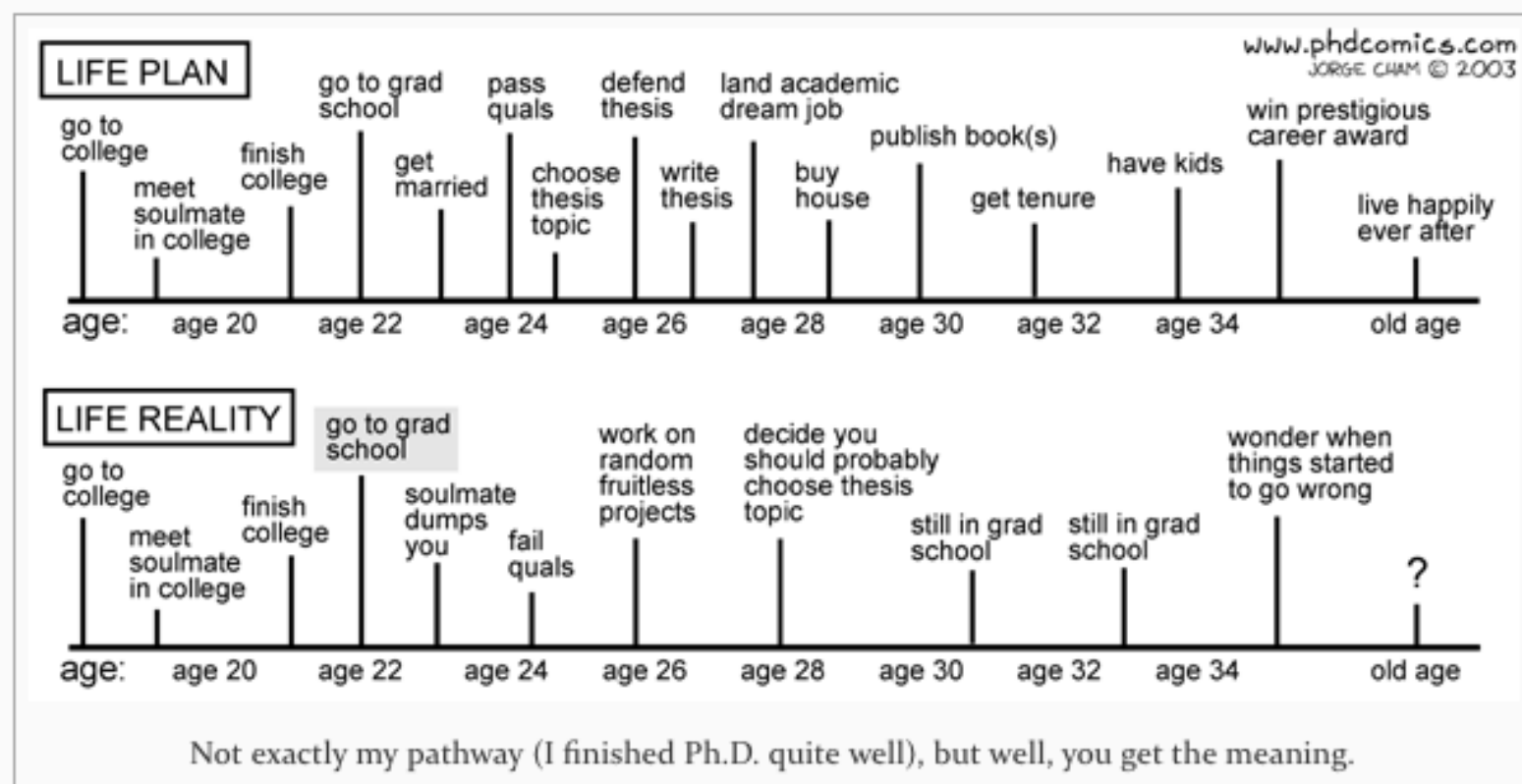
Imagine you're a brand-new Porsche in 2011. You're sitting in a dealership, being test-driven by many enamored consumers but never purchased. Later you hear that the 2011 Toyota Camry outsold the Lexus 1.5 to 1, the Cadillac 2 to 1, and the Porsche 10 to 1. You ask yourself: Was it worth being an impressive, expensive car, if no one ever buys you?

Goodbye academia, I get a life.

One of my first memories is myself, 5 years old, going to my mother and declare to her, as serious as only children can be: "I will be a scientist."

Yesterday night I was in my office in the Department of Chemistry at the University of Cambridge packing my stuff, resolved to not go back to research again -at least not in the shortcoming future.

What has gone wrong?



Learning and Teaching hub

From the Higher Education Network

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Academics Anonymous: why I'm leaving academia

I will no longer put up with low pay, unstable contracts and the requirement to be available at all times

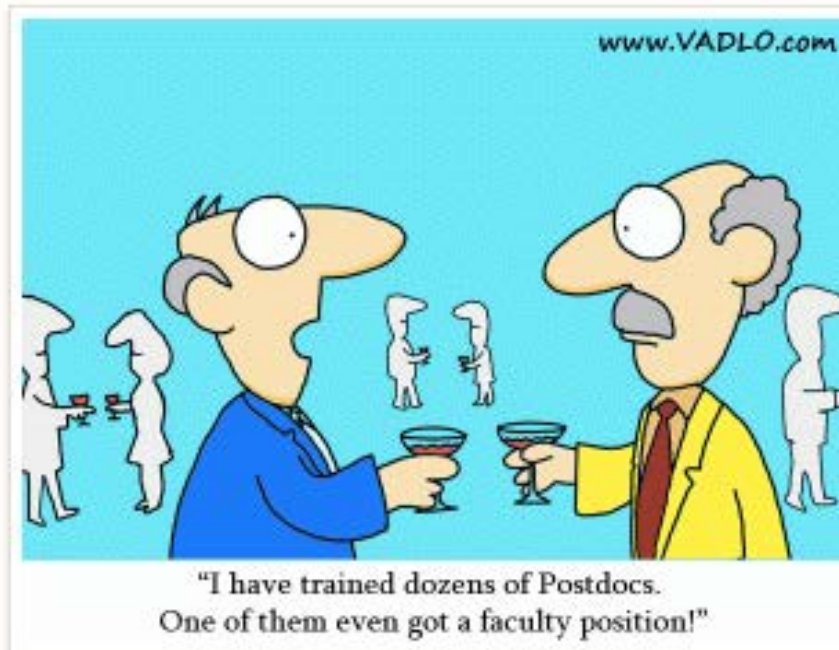
Anonymous academic

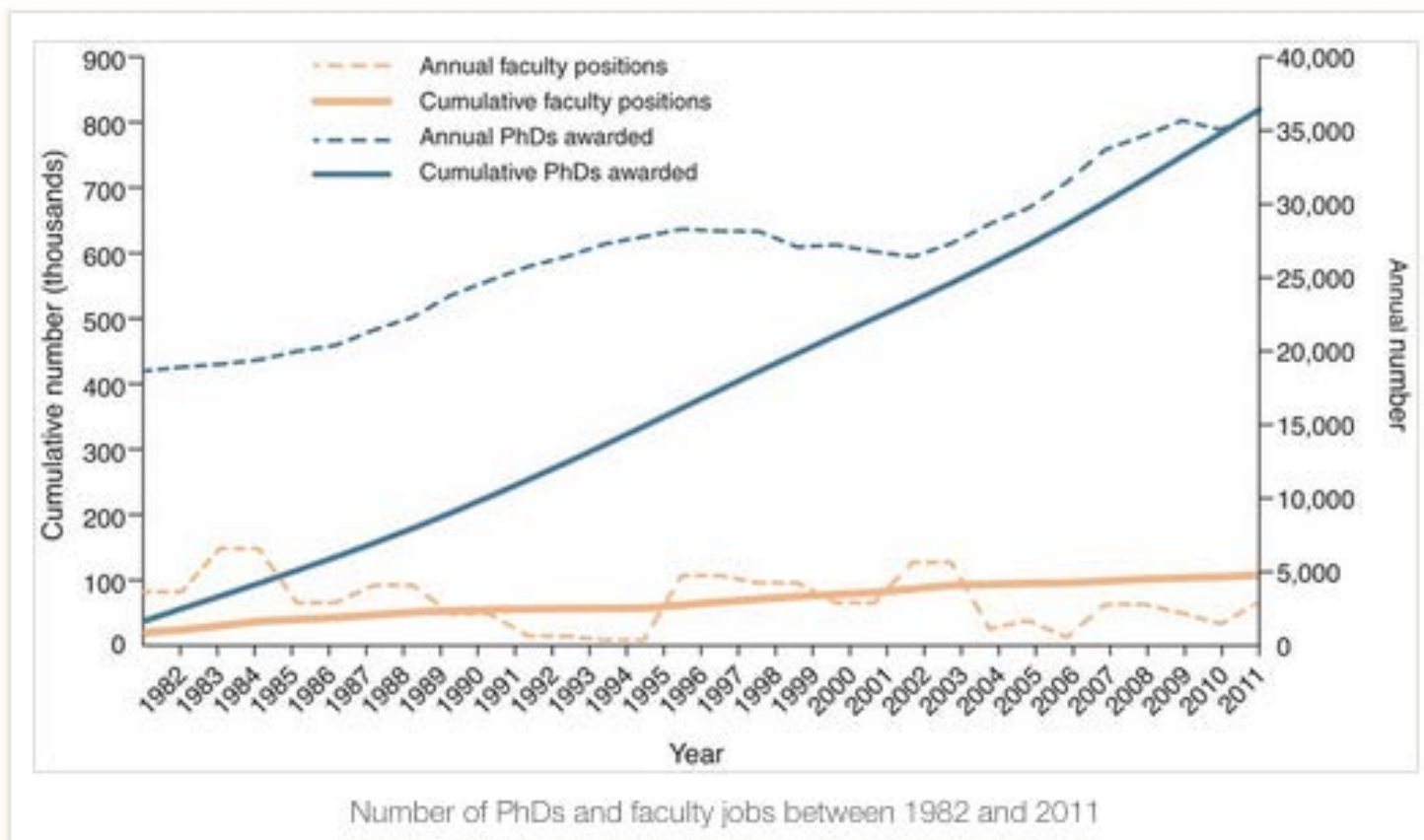
Guardian Professional, Thursday 1 May 2014 13.56 BST

IS IT MORALLY ACCEPTABLE TO HIRE POSTDOCS?

Posted by **skryazhi** in **Uncategorized** and tagged with **academia**, **jobs**

Since I started interviewing for faculty jobs, I had to seriously ponder on how I would run my potential future lab. One question in particular has been bothering me quite a lot. **How many postdocs (if any) should I hire?** This is what I would like to discuss here today. I will be deliberately provocative, but also probably quite naïve. So please, do share your thoughts and contradict me if you think I am wrong.





This is a figure from [this paper](#) published last year. There are two observations here. First, it shows that the number of annually awarded PhDs today is about 10 times higher than the number of annually opened faculty positions. In other words, the chance for freshly minted PhD to end up as a professor is about 10%. The infographic below made by a fellow Harvard postdoc [Jessica Polka](#) illustrates the same point very nicely. And here is [another estimate](#) that puts this chance at about 6%. These pieces of data should already be enough to conclude that that for a freshly minted PhD investing time into an postdoc is quite similar to “investing” money into gambling.

The second observation is that over the past 30 years the total number faculty positions stayed almost constant. This is very interesting if we think of academia as a reproducing population [1]: one generation of PIs “produces” the next generation of PIs. In population genetics people often model such reproducing population with the so-called [Wright-Fisher model](#). One key feature of this model is that the total number of individuals in the population stays constant (for example because the available resources are limited). Every generation all individuals attempt to reproduce, but because the total population size cannot grow, each individual on average leaves only one surviving offspring. And this is almost exactly what happens in academia. The size of academia stays roughly constant, which means that the average PI will “produce” **over their entire career** only a single postdoc or graduate student who would become a PI him/herself.

When I think about my potential future lab in this light, I can't help but see my potential postdocs as people walking into a casino. And this would make me, the PI, very much like the owner of that casino, i.e., an institutions that in most cases collects the reward and sends the person home minus their cash. So, is this morally acceptable?

[Where will a biology PhD take you?](#)

Where will a biology PhD take you?

I have heard four types of answers to this question.

Answer #1. There is no problem. There are actually plenty of jobs out there. Good people always get jobs.

Answer #2. There is no problem. Postdocs are adults, they well know it's a gamble and choose to do it anyway. Ultimately, it's not my problem what happens to them after they leave my lab.

Answer #3. Yes, it's a moral problem. But it's a tough world where everyone has to fend for themselves. I need to make my career, so let the chips fall where they may.

Answer #4. Yes, it's a moral problem, and I am trying to deal with it.

To conclude this long post, I would like to leave you, the reader, with some questions. If you are a graduate student, ask yourself whether you really want to enter the academic track. Unless you are an A-trainer, are you willing to gamble on 3+ years of your life? If you are a postdoc aspiring to be a PI, how would *you* run your lab so that it is fair to people you hire? If you are a PI, do your postdocs work for the promise of a future faculty job? If so, do you think you are being fair to them? And given an estimate of your academic fitness from past experience, how many postdocs should you hire in the future to maintain fairness?

PhD ‘overproduction’ is not new and faculty retirements won’t solve it

The wave of upcoming retirements is a myth and PhD numbers have little to do with the academic job market anyway.

By MELONIE FULLICK | March 25, 2015

If doctoral enrollment is not driven by the need for faculty (i.e. the academic job market), then why do universities expand their PhD numbers? There are plenty of reasons, only a couple of which I’ll touch on here. Firstly, PhD programs bring prestige to a department and contribute to its reputation. Successful supervision of doctoral students also helps with academic faculty career advancement, and brings the pleasure of graduate teaching and mentoring. So if the money is available, the option to expand or create programs is an attractive one.

Another reason is that in Ontario the money *has* been available, what with the government’s plans to expand graduate enrollments. PhDs bring more government funding than undergraduates, so they’re contributing important resources (both symbolic and material). This is also nothing new; Von Zur-Muehlen (1978) writes that “by 1975-76, Ontario universities were receiving about \$12,000 a year from the provincial government, for each PhD student, in addition to tuition fees. Thus, it was in the universities’ interest to expand doctoral enrolment.” It seems that [available funding](#), not academic job market numbers, has been the primary driver of doctoral enrollment.

Any discussion of PhD “overproduction” needs to take into account the important question of the purpose of the PhD. When different groups cannot agree on this purpose, at least in terms coherent enough that they can produce policies and programs that align, then doctoral students are the ones who lose out.

You could argue there’s a danger here of attaching the PhD to some notion of training for the workforce, which would be a corruption of the quest for “knowledge for its own sake.” But then I’d have to ask: if graduate education isn’t instrumental, why is there such a focus on preparation for a particular job, i.e. the tenure-track professor? Surely this is still an instrumental end for the process, and one that is less and less available to graduates. I’d be the last person to argue that the PhD should be “training” for one kind of job or another, but if that’s how it’s already being treated — and if that treatment is reinforcing some destructive myths — let’s not pretend otherwise.

[< Previous Article](#)

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Correspondence

Publication metrics and success on the academic job market

David van Dijk⁴, Ohad Manor⁴, Lucas B. Carey^{1,2,3}✉⁴ These authors contributed equally to this work[Open Archive](#)DOI: <http://dx.doi.org/10.1016/j.cub.2014.04.039> |  CrossMark

Article Info

 442        39[Summary](#)[Full Text](#)[Images](#)[References](#)[Supp. Info.](#)[Comments](#)

Summary

The number of applicants vastly outnumbers the available academic faculty positions. What makes a successful academic job market candidate is the subject of much current discussion [1–4]. Yet, so far there has been no quantitative analysis of who becomes a principal investigator (PI). We here use a machine-learning approach to predict who becomes a PI, based on data from over 25,000 scientists in PubMed. We show that success in academia is predictable. It depends on the number of publications, the impact factor (IF) of the journals in which those papers are published, and the number of papers that receive more citations than average for the journal in which they were published (citations/IF). However, both the scientist's gender and the rank of their university are also of importance, suggesting that non-publication features play a statistically significant role in the academic hiring process. Our model (www.pipredictor.com) allows anyone to calculate their likelihood of becoming a PI.