Science of a Ponytail Article

The science behind your ponytail (and more science you never knew existed)

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**Story highlights**

* The Ig Nobel Prizes will celebrate their 25th anniversary in September this year
* Previous winners of the satirical awards have gone on to win an actual Nobel Prize

**(CNN)**At first Raymond Goldstein thought he'd received a spam email.

The message to the Cambridge University physicist was asking for help working out the dynamics of hair, specifically the shape of ponytails. Goldstein thought he'd "won the Nigerian lottery."

Poised to click delete, he scrolled through the message one more time and discovered it was from global consumer goods giant Unilever. Curiosity piqued, he met with a company representative, and the rest, as they say, is history.

Assembling a team of balding physicists, Goldstein set out to tackle the subject, publishing their research in a [peer review journal](http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.108.078101). It detailed the fluid mechanics of hair, drawing on a rich seam of scientific observation stretching back to Da Vinci. They even coined a new term: hairodynamics.

Attention from the scientific community soon followed, and within a year they were collecting a Nobel Prize. An Ig Nobel Prize, that is.

**The prize you never thought you'd want**

A satirical cousin to the more esteemed Swedish award, the [Ig Nobel](http://www.improbable.com/ig/%22%20%5Ct%20%22_blank) seeks to highlight research that first makes you laugh, then makes you think. This year marks their 25th anniversary, so what better time to celebrate the Ig Nobels' contribution to the research community?

Every year thousands vie for the awards -- "always sourced from the cheapest materials" according to founder Marc Abrahams -- held at Harvard University.

2007's award, a chicken and egg ouroboros

The ceremony is bathos at its finest. Winners receive their awards from genuine Nobel laureates, but speeches are curtailed by a screaming girl declaring her boredom. Each year a cast of professional singers and scientists perform a [mini-opera](https://youtu.be/LfpbEjs5umk?t=1h27m10s). Last year's was set to Mozart and featured a chorus of microbial bacteria.

Past recipients include a man who dressed up as a polar bear to scare reindeer and a study of homosexual necrophilia among mallard ducks (commended by Abrahams for "its high literary quality"). However, not all winners can have such high scientific kudos.

**A history of satire**

The Ig Nobels skewered the U.S. Government in 2012, awarding them the Prize for Literature "for issuing a report about reports about reports that recommends the preparation of a report about the report about reports about reports." You can read it [here](http://www.gao.gov/products/GAO-12-480R).

In 2009 the Math Prize went to Gideon Gono, then head of Zimbabwe's Reserve Bank, for printing a Z$100 trillion note (while also printing 1c).

A one hundred trillion dollar note, issued by Gideon Gono

Last year the Italian National Institute of Statistics landed the Economics Prize for bringing the country out of recession through the use of prostitutes, drugs and smuggling. (The Italian government ended up setting a precedent in Europe, with the UK soon including the so-called "black economy" in its figures -- national GDP[jumped by 5% that quarter](http://www.ft.com/cms/s/2/65704ba0-e730-11e3-88be-00144feabdc0.html#axzz3UepZJbB1), equivalent to $15 billion.)

As proved by the Ig Nobels, the line between ridiculous and serious research has always been blurred. This is no better reflected than in Dutch-British physicist Andre Geim.

In 2000 Geim scooped the Ig Nobel for Biology for using magnets to levitate frogs. Ten years later he went on to receive the Nobel Prize in Physics for his "groundbreaking experiments regarding the two-dimensional material graphene." It is hard to say which is the greater achievement.

**Gearing up for a party**

Abrahams is currently touring the UK touting the Igs, supported by previous winners such as Goldstein and potential candidates like David Dunstan, who found fame by conducting a two year study into the homing properties of garden snails (his modus operandi: throwing them over the garden fence).

Marc Abrahams at the Ig Nobel prize-giving ceremony

Soon Abrahams will have to settle down and sift through what he predicts will be about 9,000 entries, before the anniversary ceremony on September 17.

Despite his longstanding and much admired pastiche of the Nobels, he is still yet to be invited to Stockholm for the awards proper. Asked if he would attend if offered the opportunity, Abrahams demurs, saying "he wouldn't want to be a distraction."

And as for what the Nobel Prize could learn from his own mischievous creation?

"Absolutely nothing."