

# Folklore, Gene Editing, and the Twittersphere: #CRISPRfacts and #Gattaca



Leah Lowthorp, Ph.D.  
Harvard University  
Center for Genetics and Society

No hunger.  
No pollution.  
No disease.

WIRED

AUG 2015 | \$4.99

And the end  
of life as  
we know it.  
The Genesis  
Engine.

Editing DNA is now  
as easy as cut and paste.  
Welcome to the  
post-natural world.





Daniel MacArthur  
@dgmacarthur

Following

Wired maybe overhyping CRISPR just a \*little\* bit (via @EricTopol)

**Engine.**

**We now have the power to quickly and easily alter DNA. It could eliminate disease. It could solve world hunger. It could provide unlimited clean energy.**

RETWEETS 102 LIKES 77

5:16 AM - 22 Jul 2015

15 102 77



Chris Dwan  
@fdmts

Follow

Replying to @dgmacarthur

@dgmacarthur @EricTopol CRISPR cannot be overhyped. CRISPR proves  $P = NP$ . #crisprfacts

RETWEETS 13 LIKES 18

5:43 AM - 22 Jul 2015

13 18



Skeptical PhD  
@SkepticalPhD

Follow

#crisprfacts is trending on normal Twitter? Not biotwitter but...normal Twitter? Countdown till \$SGMO and \$CLLS CEO tantrum editorial.

LIKES 4

10:22 AM - 22 Jul 2015

4



**Chris Pickett**

@ChrisPickett5

Follow

When you gaze long into the abyss, CRISPR gazes back. [#crisprfacts](#)

RETWEET 1 LIKES 4



6:46 AM - 22 Jul 2015

1 1 4



**Cassie Ramos**

@ScientistCassie

Follow

CRISPR started all major fashion trends in the 90s, including off-the-shoulder overalls and Jennifer Aniston's haircut [#CRISPRfacts](#)

3:46 PM - 24 Jul 2015



**Katrine Bosley**

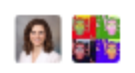
@ksbosley

Follow

Replying to @michael\_gilman

. @michael\_gilman And it can tell you how to find the lost continent of Atlantis. [#CRISPRfacts](#)

LIKES 2



10:13 AM - 22 Jul 2015

1 2



**Todd Pelham**

@BioBDTodd

 Follow

CRISPR explains the existence of every superhero. Those origin stories are just cover. [#CRISPRfacts](#)

LIKES

2



10:45 AM - 22 Jul 2015





**Daniel MacArthur** @dgmacarthur · 22 Jul 2015

It turns out all of the universe's dark matter is actually made of CRISPR.

@WIRED #crisprfacts

3 13 23



**Michael Eisen** @mbeisen · 22 Jul 2015

Jimmy Hoffa is buried in CRISPR #CRISPRfacts @dgmacarthur @WIRED

3 4 10



**Matthew Hahn** @3rdreviewer · 22 Jul 2015

Tom Brady used CRISPR to underinflate pigs #CRISPRfacts @mbeisen

@dgmacarthur @WIRED

4 2 7



**Prof-like Substance** @ProfLikeSubst · 22 Jul 2015

When there was only one set of footsteps, it was CRISPR carrying you.

#CRISPRfacts @GenomeDaddy @3rdreviewer @mbeisen @dgmacarthur @WIRED

2 9 31



**Michael Eisen**

@mbeisen

Follow

Replying to @ProfLikeSubst

Carly Simon was singing about CRISPR  
#CRISPRfacts @ProfLikeSubst  
@GenomeDaddy @3rdreviewer  
@dgmacarthur @WIRED

RETWEETS 2 LIKES 7



6:20 AM - 22 Jul 2015

1 2 7



Iddo Friedberg  
@iddux

Follow

#CRISPRfacts

SO CRISPR WILL END WORLD HUNGER, SOLVE THE FOSSIL-FUEL CRISIS, AND CURE CANCER?



YOU MUST BE NEW HERE

made on imgur

RETWEETS 2 LIKES 2



10:09 AM - 24 Jul 2015

Retweet 2 Like 2



Michele Banks  
@artologica

Follow

CRISPR woke up like this #crisprfacts



RETWEETS 7 LIKES 10



7:31 AM - 22 Jul 2015 from Washington, DC

Retweet 7 Like 10



**Ed Yong** ✓  
@edyong209

Following

Who knows what evil lurks in the hearts of men? CRISPR knows. [#crisprfacts](#)

RETWEETS 13  
LIKES 29



6:11 AM - 22 Jul 2015

↩ 13 ❤️ 29



**Chris Gunter**  
@girlscientist

Follow

No, Luke, CRISPR is your father. [#CRISPRfacts](#)

RETWEETS 22  
LIKES 45



6:31 AM - 22 Jul 2015

↩ 1 ↻ 22 ❤️ 45





**Kristin Clift**

@KristinClift

Following

CRISPR knows the answer #CRISPRfacts  
#TheDress

**WHAT  
COLOR IS  
THE  
DRESS?**



RETWEETS 2 LIKES 2



8:19 AM - 22 Jul 2015

Reply Retweet 2 Like 2

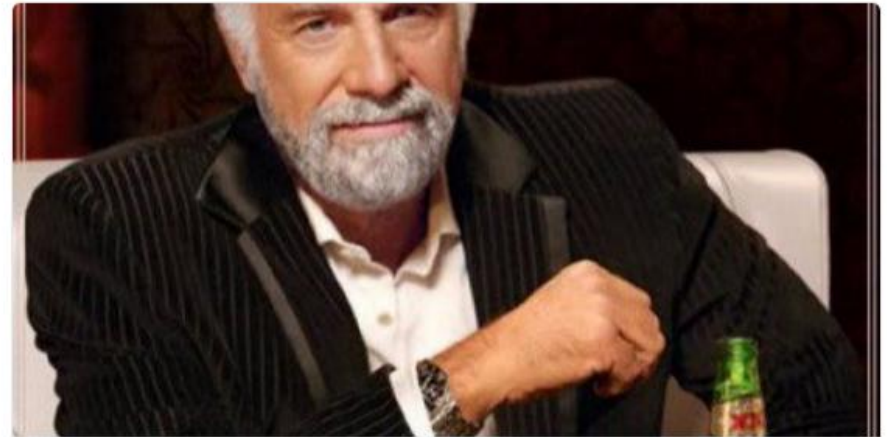


**Daniel Garcia**

@tgfbetta

Follow

I don't always edit the genome, but when I do I use CRISPR #CRISPRfacts po.st/Q46SYy via @imgflip



**The Most Interesting Man In The World**

@imgflip

imgflip.com

LIKES 3



8:39 AM - 23 Jul 2015

Reply Retweet Like 3



**Joanna Rifkin**

@JoannaRifkin

Follow



CRISPR does not sleep, it waits. Oh hang on, I think that's Chuck Norris ... [#CRISPRfacts](#)

2:56 PM - 22 Jul 2015



**My Cousin Amygdala**

@CousinAmygdala

Follow



The only thing Chuck Norris fears is CRISPR [#crisprfacts](#)

LIKES

5



7:25 AM - 22 Jul 2015



**Kathryn Crouch**

@KathrynCrouch81

Follow

Chuck Norris: engineered with CRISPR [#crisprfacts](#)

RETWEETS

2



12:36 PM - 22 Jul 2015





**Michele Busby**

@michelebusby

Follow

CRISPR convinced Donald Trump he was "presidential material" [#CRISPRfacts](#)

RETWEETS

3

LIKES

3



5:24 PM - 22 Jul 2015



**Dr Adam Rutherford**

@AdamRutherford

**Following**

[#crisprfacts](#) Donald Trumps hair can only be understood using CRISPR.

RETWEETS

12

LIKES

20



5:50 AM - 22 Jul 2015

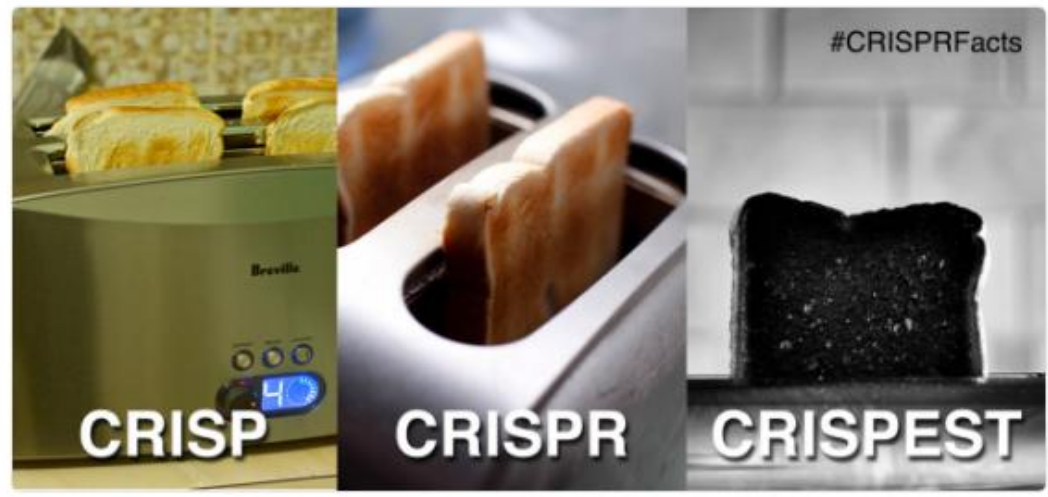




**TribeCode**  
@TribeCode

Follow

Twitter turns down the CRISPR hype |  
@PopSci - [bit.ly/1JANWZR](http://bit.ly/1JANWZR) #CRISPRfacts



LIKE  
1

6:00 AM - 3 Aug 2015

1



**Drug Monkey**  
@drugmonkeyblog

Follow

Monsanto made a lettuce that stays CRISPR  
for two weeks #CRISPRfacts

RETWEETS  
2

LIKES  
3



7:04 AM - 22 Jul 2015

2 3



**Edan Foley**

@Imin200

Follow

In the future, CRISPR will give rise to a master race of intelligent apes [#CRISPRfacts](#)



**ElatedAcademic**

@PushyProf



And then scientists said, let there be CRISPR. [#CRISPRfacts](#)

7:08 AM - 22 Jul 2015

Retweet 1 Like

LIKE

1



**Michael Eisen**

@mbeisen

Follow

7:36 AM - 22 Jul 2015

Retweet 1 Like

the off-target edits CRISPR makes are because it knows they make the organism better [#CRISPRfacts](#) [@dgmacarthur](#) [@WIRED](#)

RETWEETS

21

LIKES

31



6:27 AM - 22 Jul 2015

Retweet 2 Like 21 Like 31



**Jack Barger** @JackBarger · 22 Jul 2015

A long-read, but definitely worth it. [#Gattaca](#) may be closer than ever.  
[#crisprfacts](#)



### **The Genesis Engine**

Editing DNA is now cut-and-paste. We could eliminate disease, cure hunger—or break the world.

[wired.com](http://wired.com)



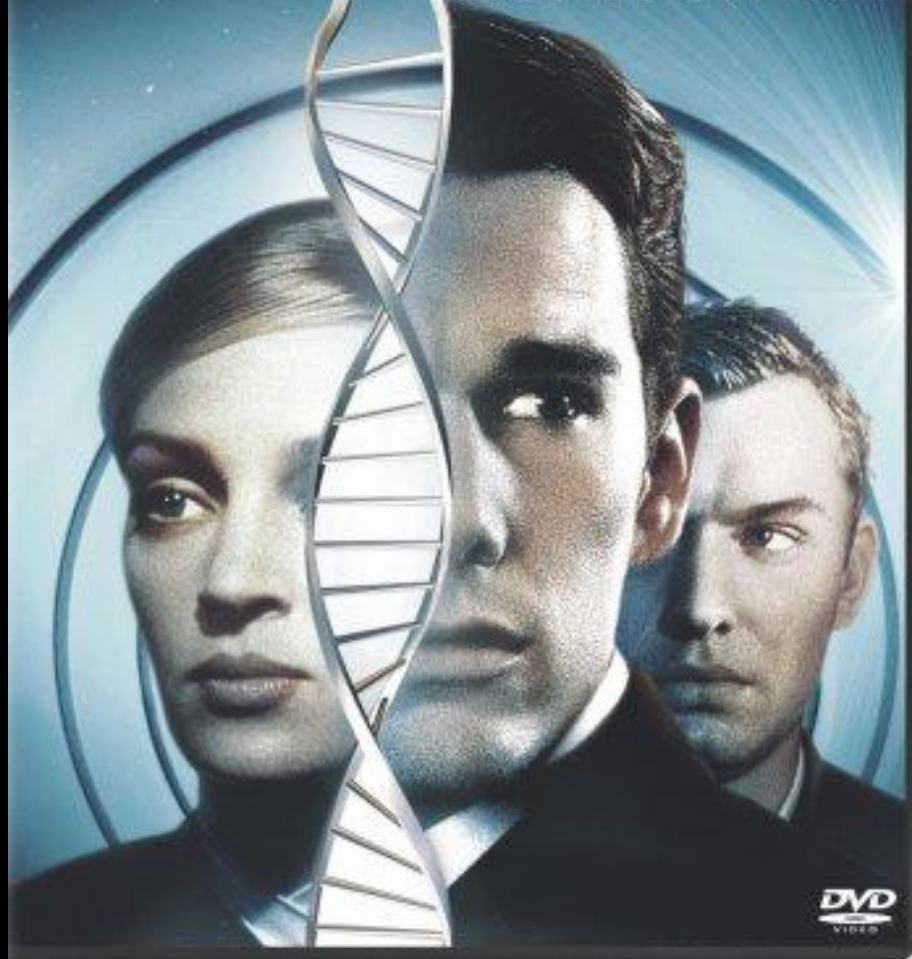
ETHAN HAWKE

UMA THURMAN

JUDE LAW

# GATTACA

SPECIAL EDITION



The National Academies of  
SCIENCES • ENGINEERING • MEDICINE

REPORT

# Human Genome Editing

**SCIENCE,  
ETHICS,  
AND  
GOVERNANCE**

NATIONAL ACADEMY OF SCIENCES  
NATIONAL ACADEMY OF MEDICINE





Joselyn

@JossaDosBichos

Follow



#GATTACA anyone?

Scientists edit the DNA of human embryos that could turn into people using CRISPR



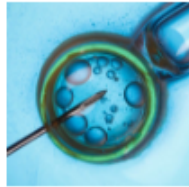
**In a first, scientists have edited the DNA of human embryos that could turn in...**

US biologists edited the genes of viable human embryos with few mistakes using gene-editing technique CRISPR for the first time, going beyond previous work.

[businessinsider.com](https://www.businessinsider.com)

 **TheLoudTable**  
@TheLoudTable

#Gattaca is real everyone.....



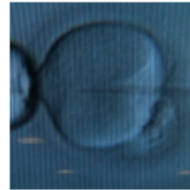
**io9** @io9  
It's official: For the first time ever, US scientists have created a human embryo. [on.io9.com/jXUhhJf](https://on.io9.com/jXUhhJf)

10:33 AM - 2 Aug 2017

 **Marie Vieux Chauvet**  
@DaughterduDusk

Follow

I remember this scene from #Gattaca



**CNN** @CNN  
For the first time in the US, scientists have reportedly edited the genes of human embryos [cnn.it/2u3jiYg](https://cnn.it/2u3jiYg)

1:21 PM - 29 Jul 2017

 **Pablo Munoz**  
@pablo\_jack

Follow

Primeros embriones humanos editados genéticamente con la técnica CRISPR. A prepararse! #GATTACA

**Kevin Mitchell** @WiringTheBrain  
EXCLUSIVE: First human embryos edited in U.S., using CRISPR - via @techreview [technologyreview.com/s/608350/first...](https://technologyreview.com/s/608350/first...) - buckle up, folks!

8:57 AM - 27 Jul 2017

2 Retweets 2 Likes



 **Richard Kilroy** @RichardKilroy · Jul 28  
#gattaca





**Hopkins**

@thatshopsy

Follow



[reuters.com/article/us-hea ...](https://reuters.com/article/us-hea...) There you have it folks. We're all invalids now. [#gattaca](#)



REUTERS

**First editing of human embryos carried out in United States**

Technology that allows alteration of genes in a human embryo has been used for the first time in the United States, according to Oregon Health and Science University (OHSU) in Portland, which...  
[reuters.com](https://reuters.com)

10:59 PM - 27 Jul 2017



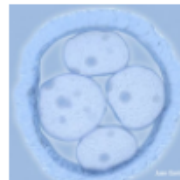
**Symphorians**

@symphorians1

Follow



"...this child is still you. Simply, the best, of you. You could conceive naturally a 1000 times and never get such a result." [#gattaca](#)



**Scientific American** @sciam

First human embryos edited in the U.S., scientists say [bit.ly/2w3qViX](https://bit.ly/2w3qViX)

7:22 AM - 27 Jul 2017



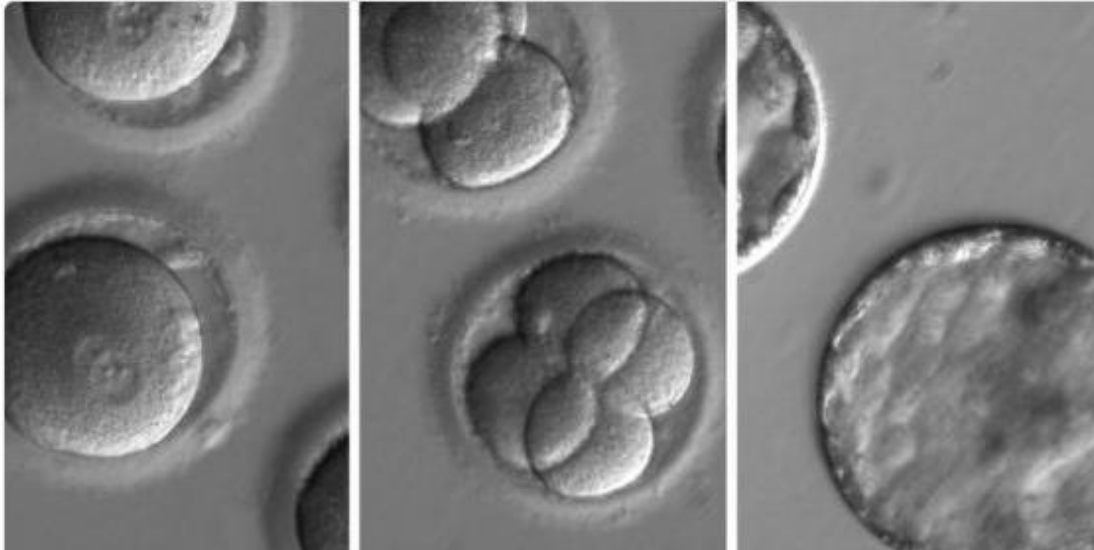
**jason**

@lakesidephyserg

Follow



Hollywood. 10% entertainment, 90% public service announcement. [#gattaca](#)



**Human embryos edited to stop disease**

The technique could prevent deadly diseases being passed down the generations.

[bbc.co.uk](http://bbc.co.uk)

2:24 PM - 2 Aug 2017



**will** @wilwin94 · Jul 26



it's in Portland.

Male Babies born with perfect barbershop curl mustaches, and can live on Pabst Blue Ribbon

Female Babies come with Tattoos



**will** @wilwin94 · Jul 26



naturally resistant to rural racism, rain, and rhubarb poisoning.

naturally drawn to bicycles, public transit, and protesting anything.





[Genetics and Society](#)

@C\_G\_S



Brace yourselves... [#crisprfacts](#)



RETWEETS

2

LIKES

2



5:01 PM - 22 Jul 2015

