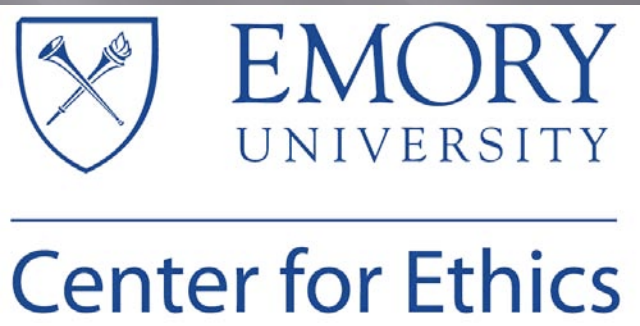


# FUTURE SOCIETAL PERSPECTIVES ON GENE AND CELL THERAPIES AND HUMAN ENHANCEMENT

WADA, BEIJING, 2013



**Paul Root Wolpe, Ph.D.**

Asa Griggs Candler Professor of Bioethics

Director, Center for Ethics

Editor-in-Chief, AJOB Neuroscience

# Outline

- I. **Ethics – a slightly different take**
  - What Ethics is
  - Ethics, Sports, PEDs
  - Sports and Social Media
- II. **Two major social trends that impact attitudes towards sports ethics**
  - Information technology {Social Media}
  - Biotechnology
- III. **Reflections**

# Ethics, Values, Morals

- ▣ **VALUES** reflect what we hold and commit to (e.g., “fairness” “sportsmanship”)
- ▣ **ETHICS** reflects what we, and our communities, believe about how to realize and order our values (“Cheating is a form of poor sportsmanship and is unethical”)
- ▣ **MORALS** reflect how we actually behave (“Lance Armstrong had a moral failure.”)

*Therefore...*

- ▣ **ETHICS** is the system by which we translate our deepest and most dearly held values into action
- ▣ Being **UNETHICAL** is failing to live up to those values

# Ethical Ideas and Perspectives (a sociologist's questions)

- ❑ Where do they come from? (Why are “natural” sports values and “enhanced” sports not?)
- ❑ Who promotes them? (Why are some sports more rigorous than others?)
- ❑ How are they disseminated? (How do we communicate anti-doping values?)
- ❑ Whose interests are being served? (Who benefits from lax doping regulations or enforcement?)
- ❑ Where are the ethical trends going right now?
- ❑ Why do ethical ideas/questions arise at certain times and cultural contexts?

# Relative Importance of Values:

# Why sport is a special case

- ▣ Sports are wholly artificial constructs
- ▣ Sport generally involves direct competition with an 'other' (or sometimes with self)
  - Tends to be a zero-sum game
- ▣ Sport is based on agreeing to a consensual set of rules all play by
  - Violations undermine the stated 'goal' of besting an other under agreed upon rules
  - Violations therefore threaten the game itself
- ▣ Sports inherently require honesty and trust

# Ethics and PEDs

- ▣ “When it comes to performance-enhancing drugs, gene doping, and the panoply of manipulations banned widely in sports, the challenge is less about fairness than about meaning.” – Tom Murray, (Hastings Center Report, 2010)
- ▣ Sport is about setting boundaries around limitations – physical and environmental
  - We go out of our way to level playing fields when possible – gender segregation, weight classes in boxing, golf handicapping, age stratification, etc.

# Social Media

# Social Media

- ▣ **Characteristics** (derived and elaborated from Bradley, 2010)
  - Mass participation/collaboration
  - Collective identity formation around cause/site
  - Transparency/open dialogue
  - Independence/‘anytime, anyplace collaboration’
  - Persistence/endurance
  - Perpetuation into other venues and sites
  - Emergent structures, culture, expertise, action

# Sports, Doping, & Social Media

- ▣ Social Media and PED use
  - Information resource
  - Access resource
- ▣ Social Media and the Control of Doping Discourse
  - Branding
  - Claims-making
  - Rapid response
  - Damage Control

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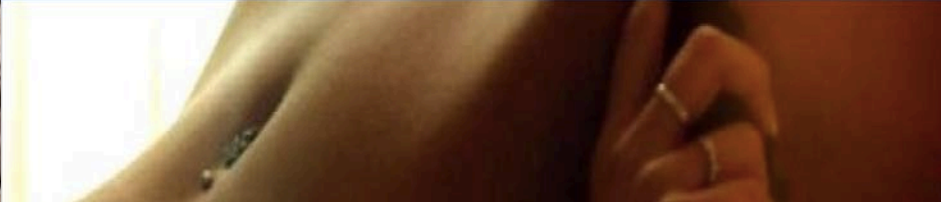
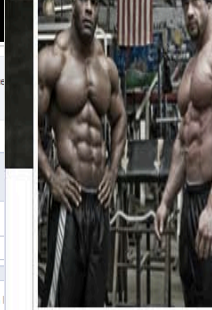
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## The side effects of Anabolic Steroid

Anabolic Steroid abuse has become quite the national concern. These drugs are used mostly by weight lifters, body builders, long distant runners, cyclists, and others who claim that the drugs

#anabolic steroid #steroid

## Here is a Cross-Section of the Different Anabolic Steroids and Their Application

Whenever you start talking about Steroids and deciding you have to discover all there is to it; keep in mind it will not be an overnight task. That is just

#steroids #anabolic steroids



#bodybuilding #muscles #creatine

## The Effects of Clenbuterol



The positive effects of Clenbuterol

Fat burning and muscle-drying

#buy anabolic steroids #clenbuterol

## Buy Anabolic Steroids

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Buy anabolic steroids online from our legal steroids pharmacy. Glvitamins.com offers a large selection of popular anabolic steroids and effective

## Things to know about Buying Steroids

Steroids can be very dangerous if not taking properly. If you choose to buy steroids you are putting yourself at risk. Bodybuilders and athletes think that if they buy steroids it will improve their chances of winning a competition, or enhance their performance. Most people that buy steroids do not realize the risk of side effects that taking steroids can cause. There is a difference between using steroids and abusing steroids. If you are on a cycle and sticking to that cycle while taking steroids, than you are taking them properly. If you are taking steroids, and you are not on a cycle, or maybe taking them by injection and orally at the same time thinking it will help, you are abusing steroids and can cause more harm to your body. Here is a list of some of the side effects of taking steroids:

- High blood pressure
- Increased acne
- Hair loss and baldness
- Prostate Cancer
- Excessive hair growth



Lance Armstrong



**Lance Armstrong** ✓

@lancearmstrong

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My official statement re: @usantidoping's pitiful charade [bit.ly/Ozm7XZ](http://bit.ly/Ozm7XZ)

Reply Retweeted Favorite

**14,039**  
RETWEETS

**2,041**  
FAVORITES



12:03 PM - 24 Aug 12 via web - Embed this Tweet

# 4,208,919

accounts reached

# 4,341,730

 impressions

4,098,747



1 tweet

108,097

2-4 tweets

1,581

5-7 tweets

494

8+ tweets

Each bar shows how many accounts received how many tweets

## activity

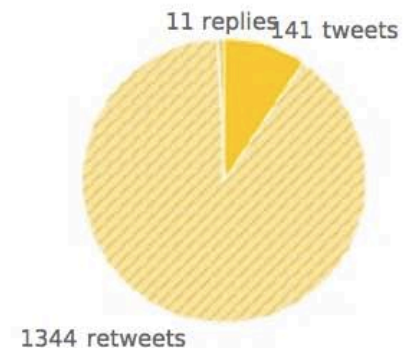
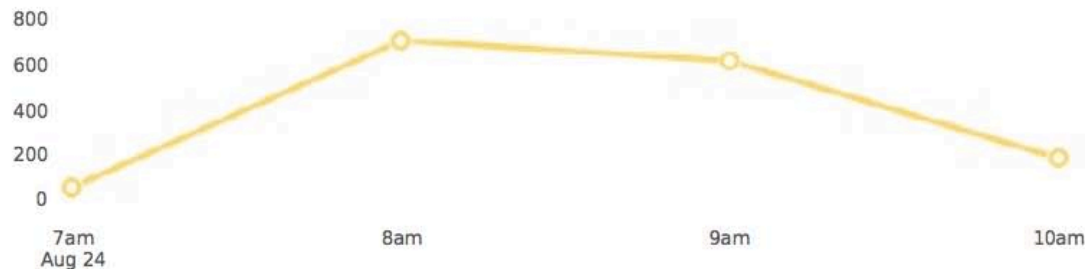
# 1,496

 tweets

# 1,485

 contributors

# 4

 hours

## Armstrong still the Tour champion — or so he says on social media

By Matthew Beaudin Published Jan. 8, 2013

51 comments  Tweet  Share  Share  Pin it  Print

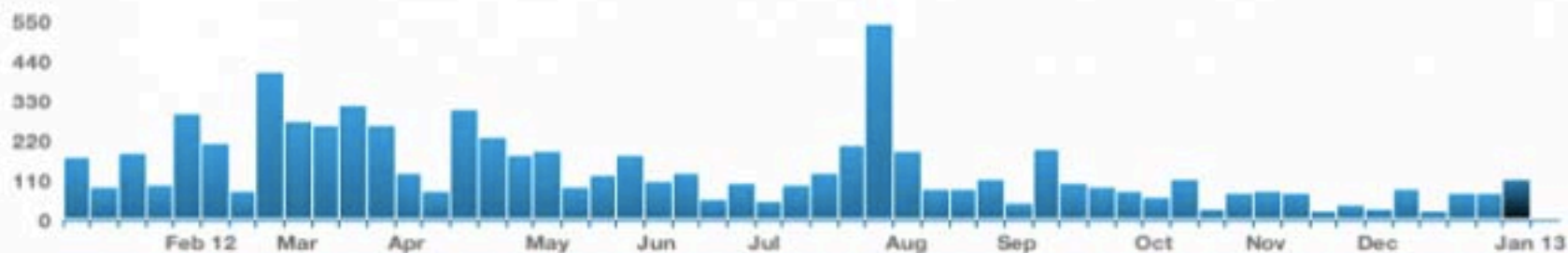


Lance A.

Austin, Texas

Activities for Dec 31, 2012 - Jan 06, 2013

107.1 mi 7 hr 37 m 5,360 ft



Lance Armstrong continues to defend his stripped Tour titles on social media, including Strava.

# Twitter Erupts as Lance Armstrong Extends Confession on Day 2 of Oprah Interview

 Like 2

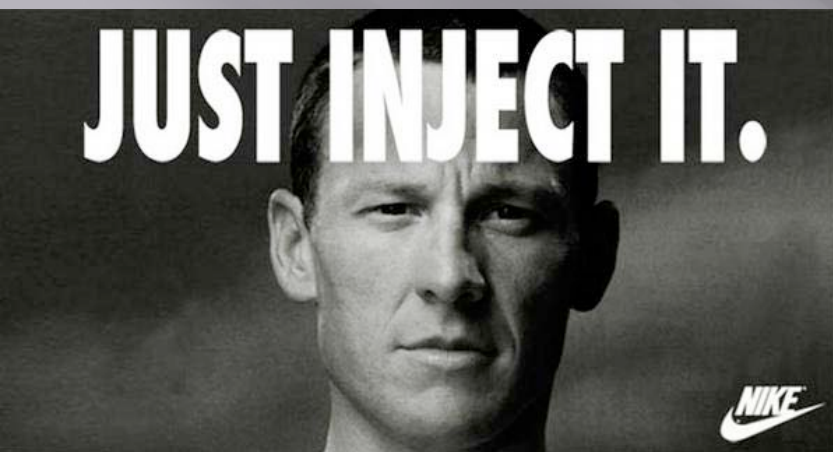
 +1

BY RYAN RUDNANSKY (FEATURED COLUMNIST) ON JANUARY 18, 2013

23,077 reads 22 



**A**fter **Lance Armstrong** confessed that he used performance-enhancing drugs throughout his cycling career to Oprah Winfrey in Thursday's interview, the world of Twitter was set on fire.





**Lance Armstrong** ✓

@lancearmstrong

 Follow

Knowing I have 0 cred on the doping issue - I still can't help but think, "really Di Luca? Are you that fucking stupid??"

9:38 AM - 24 May 2013

4,133 RETWEETS 987 FAVORITES

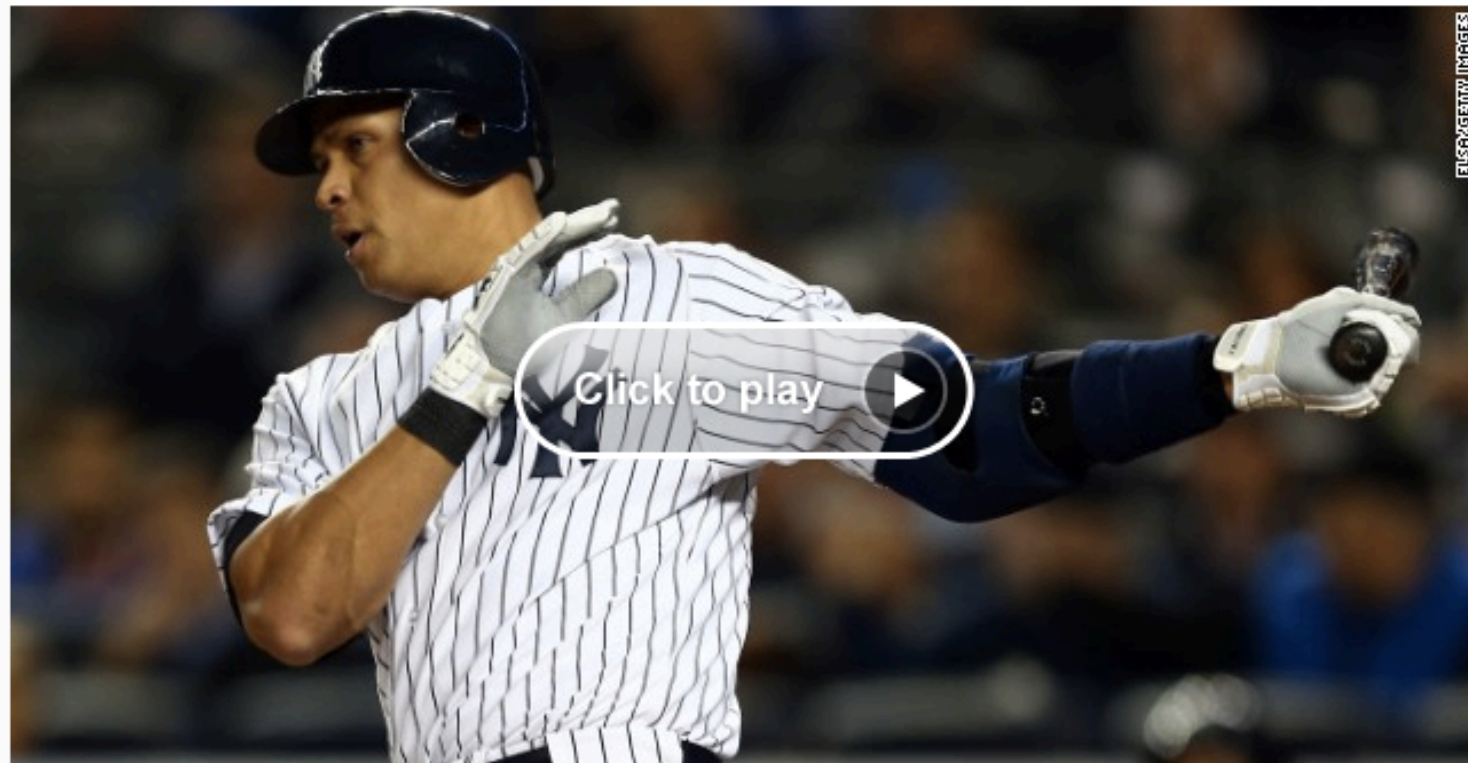


As of late May,  
Lance Armstrong still had  
3,965,000 followers on Twitter

# Report: Some 20 baseball players may face suspension in doping scandal

By Ben Brumfield and Jill Martin, CNN

updated 4:15 PM EDT, Wed June 5, 2013



## Report: MLB drug suspensions loom

### STORY HIGHLIGHTS

- **NEW:** Players union says MLB is interviewing players, who have attorneys
- Ryan Braun sticks by his denial:

**(CNN)** -- Major League Baseball is set to suspend some 20 players in the coming weeks due to a scandal involving performance-enhancing drugs, according to an ESPN report that said a key figure in the case is now ready to cooperate with investigators.

## Twitter Reacts to MLB Reportedly Seeking to Suspend Up to 20 Players



BY TIM KEENEY (FEATURED COLUMNIST) ON JUNE 4, 2013

9,413 reads 15

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Mike McGinnis/Getty Images



Center for Ethics

The **MLB** world was delivered a bombshell on Tuesday night when it was revealed that Ryan Braun, **Alex Rodriguez** and several other players are facing potential suspensions for performance-enhancing drugs.

ESPN's **T.J. Quinn** had the news:

*BREAKING: MLB will seek to suspend A-Rod, Ryan Braun and about 20 players connected to Miami clinic. Founder Tony Bosch agreed to cooperate.*

— T.J. Quinn (@TJQuinnESPN) **June 4, 2013**

He **went on to elaborate** on Tony Bosch's anticipated involvement in the case:

*Sources tell @OTLonESPN Bosch will swear an affidavit that he provided drugs to players. MLB may seek 100-game suspensions for Braun, A-Rod.*

— T.J. Quinn (@TJQuinnESPN) **June 4, 2013**

Bosch, of course, is the Biogenesis founder, and if he indeed participates in the investigation, it will not only set a never-before-seen precedent, but it will also make it that much more difficult for players to appeal the suspensions.

Bleacher Report's Lead Writer for Sports Medicine, Will Carroll, **talked a bit** about that:

*Bosch's involvement in MLB investigation is huge factor. Penalties coming, but very tough appeals for 20+ players involved.*

— Will Carroll (@injuryexpert) **June 5, 2013**

*A-Rod should be pantsed in a Yankee Stadium shame ceremony while fans cheer and the ghosts of baseball greats fly around fast in circles.*

— pourmecoffee (@pourcemecoffee) **June 5, 2013**

*We're roaring right past the point where the suspensions/public shaming is more distracting and detrimental to the sport than the cheating.*

— Jonathan Bernhardt (@jonbernhardt) **June 4, 2013**

*If A-Rod were suspended, that's the only way the Yanks could get around paying him (just for those games). Contract could not be voided.*

— darren rovell (@darrenrovell) **June 5, 2013**

*ESPN report, if correct, would likely foretell the largest group punishment by MLB since the "Black Sox" Scandal broke open in Sept. 1920*

— Keith Olbermann (@KeithOlbermann) **June 5, 2013**

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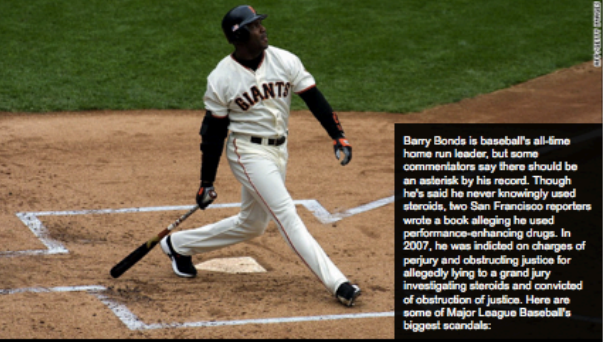
Sports

## Baseball, this time throw the book at users of performance-enhancing drugs

By **Mike Downey**, Special to CNN  
updated 8:49 PM EDT, Wed June 5, 2013

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Barry Bonds is baseball's all-time home run leader, but some commentators say there should be an asterisk by his record. Though he's said he never knowingly used steroids, two San Francisco reporters wrote a book alleging he used performance-enhancing drugs. In 2007, he was indicted on charges of perjury and obstructing justice for allegedly lying to a grand jury investigating steroids and convicted of obstruction of justice. Here are some of Major League Baseball's biggest scandals:

### Barry Bonds: Perjury Indictment

HIDE CAPTION

1 2 3 4 5 6 7 8 9 10 11

**STORY HIGHLIGHTS**

- Mike Downey: ESPN reports as many as 20 baseball players could get suspended for PED use.
- He says this time, MLB should

**Editor's note:** Mike Downey is a former columnist for the Los Angeles Times and the Chicago Tribune.

(CNN) -- Baseball is a dirty game, we know that. Grass stains. Rosin bags. Pine tar. Dust. Sweat. Spit. Tobacco drool.

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### Opinion on the news

**Why Michelle Obama got heckled**  
updated 2:39 PM EDT, Wed June 5, 2013

LZ Granderson says maybe it was unfair to heckle the first lady, but gay people are tired of Democrats throwing them under the bus for political expediency.

**Throw the book at baseball cheaters**  
updated 8:49 PM EDT, Wed June 5, 2013

Mike Downey says ESPN

TV: CNN CNN CNN en Español HLN

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Sports

## Opinion: It's time to allow doping in sport

By **Ellis Cashmore**, special to CNN  
updated 5:33 AM EDT, Wed October 24, 2012

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**Piers: Armstrong a 'disgraceful fraud'**

**STORY HIGHLIGHTS**

- Is it time to relax anti-doping rules and allow the use of drugs in sport?
- Academic and author Ellis Cashmore says allowing doping would make sport safer.
- Cashmore: Cheating a matter of definition: changing rules would make drugs acceptable.
- Cashmore: Fans would not be

**Editor's note:** Ellis Cashmore is a professor of culture, media and sport at Staffordshire University in the UK, and the author of *Making Sense of Sports*.

(CNN) -- The Lance Armstrong case forces us to consider a philosophical problem that has tormented sport since 1988 when Ben Johnson was disqualified from the Olympics after testing positive for drugs.

Not 'How we can improve detection and make punishment serve as

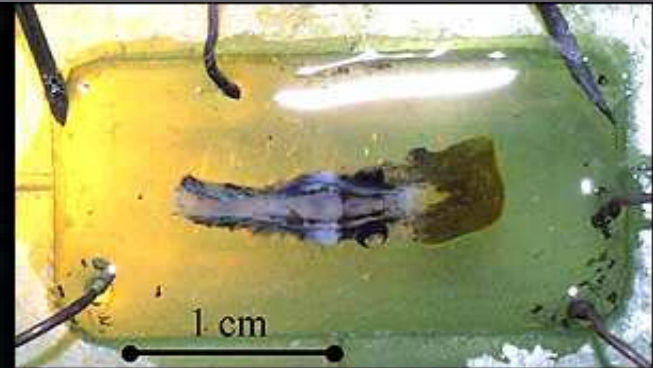
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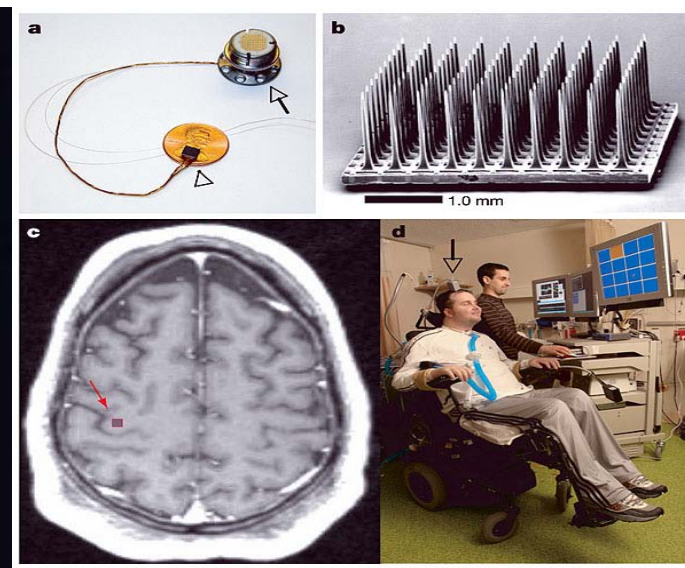
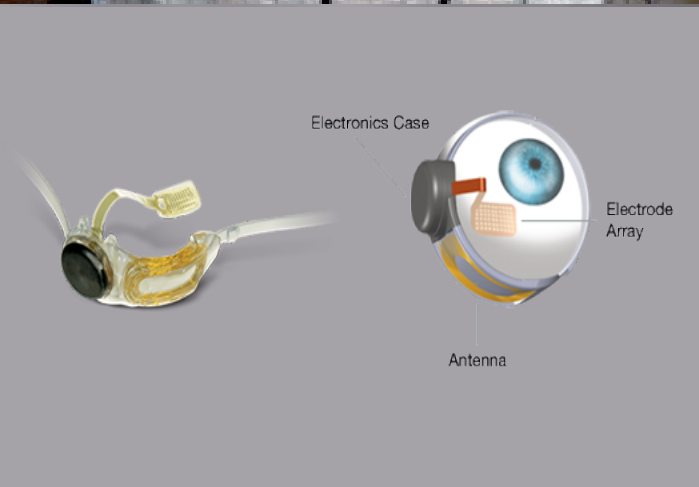
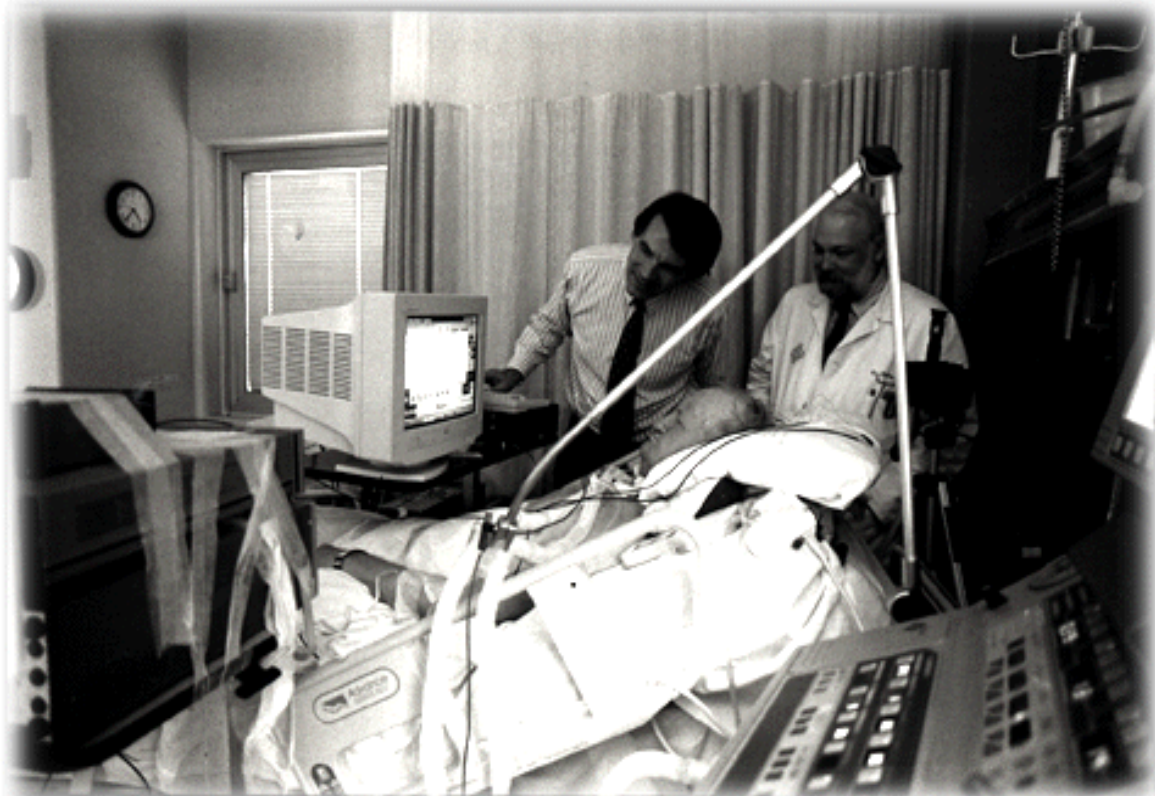
# Biotechnology

# Increasing Technological Power











Arthur "Peg Leg Sam" Jackson



# Increasing Public Acceptance of Lifestyle Enhancement Drugs

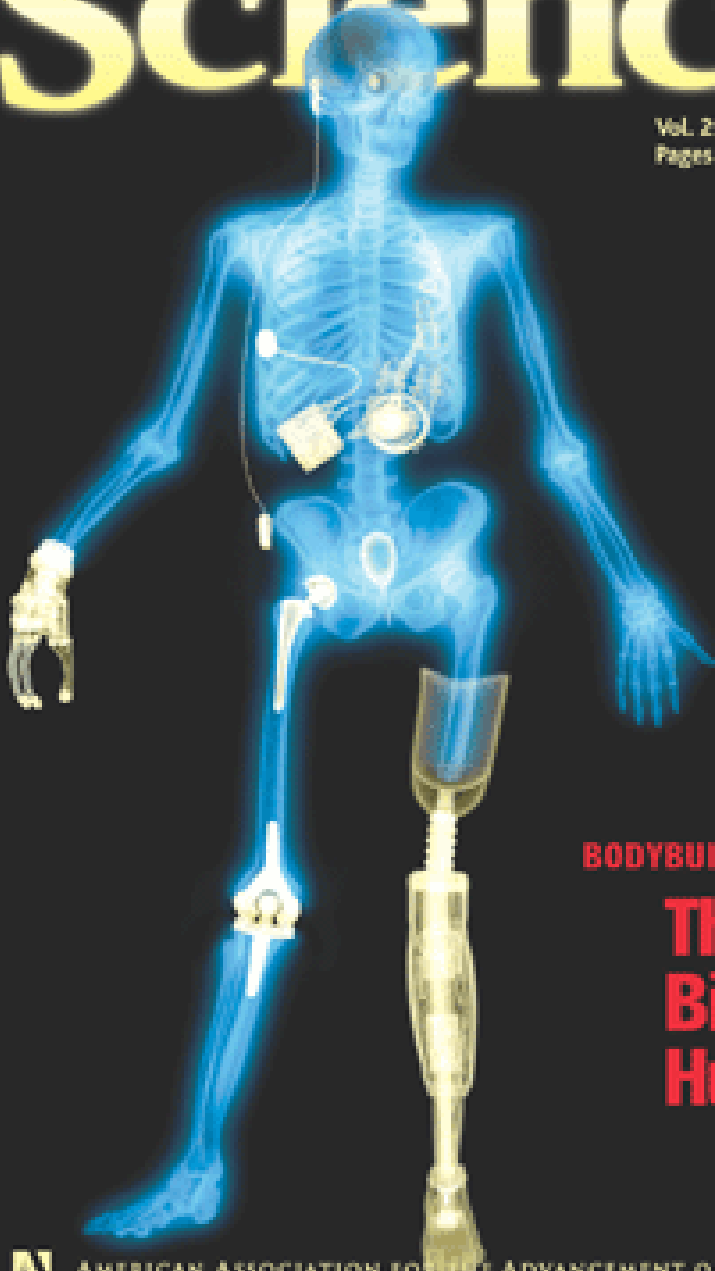
- Pharmaceuticals
- Cogniceuticals
- Moodiceuticals
- Sensiceuticals
- Recreaceuticals
- Nutriceuticals



# Science

8 February 2002

Vol. 295 No. 5557  
Pages 917-1180 \$9



**BODYBUILDING:**

**The  
Bionic  
Human**

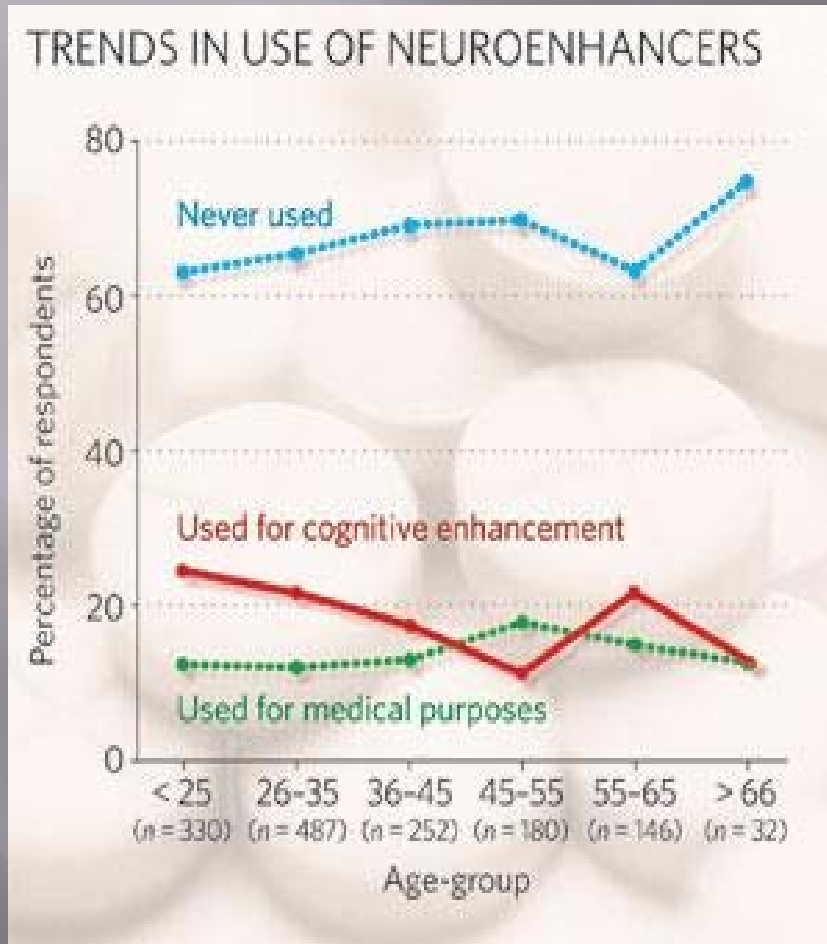


AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

We are all becoming Cyborgs, an integrated network of organic, chemical, biomechanical, and information technologies

# Scientists' Use of Brain Enhancers

Nature 452, 674-675; 2008



20% of readers reported using at least one of these for non-medical reasons:

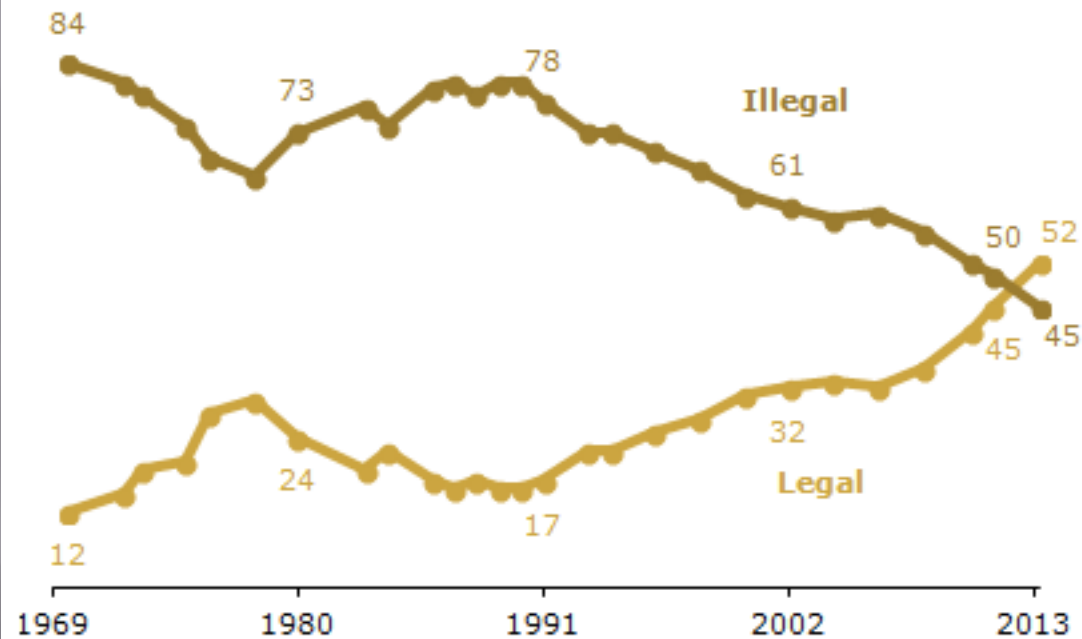
Ritalin (62%)

Modafinil (44%)

Beta blockers (15%)

## Views of Legalizing Marijuana: 1969-2013

% saying marijuana should be ...



PEW RESEARCH CENTER March 13-17, 2013.  
1973-2008 data from General Social Survey; 1969 and 1972 data from Gallup.

# Reflections





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