Who Faces Criminal Sanctions For Scientific Misconduct?

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Richard Smith: Should scientific fraud be a crime?

In one of the last times a scientist was
published. The

Retraction Watch

Shoud scientific misconduct be handled by the police? It’s fraud
week at Nature and Nature Medicine

with 33 comments

It’s really hard to get papers retracted, police might be best-equipped to handle
scientific misconduct investigations, and there’s finally software that will identify likely
image manipulation.

Those are three highlights from a number of pieces that have appeared in Nature and
Nature Medicine in the past few weeks. Not surprisingly, there are common threads, so
join us as we follow the bouncing ball.

At Britain’s first and only summit meeting on research misconduct in 2000, Alexa
of medical law and ethics, argued that research misconduct (the gentlemanly ph
to be a criminal offence. The idea seemed outrageous. Nobody took it seriously, but
published an editorial not promoting but contemplating the idea. To me it begins:
research misconduct will eventually become a criminal offence.
Should scientific fraud be prosecuted as a crime?

Yes 82.56% (620 votes)

No 17.44% (131 votes)

Total Votes: 751

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Comments (4)  Return To Poll
Methodology

**Search Terms:**
- Retraction Watch: “Sentenced”

**For more information:**
- Google
  - Adding: Charging, Sentencing Information
  - Subjects
  - Background Information

**Filtered out:** Non-science researcher related, charges that were dismissed, charges of espionage
Three categories

Direct

Indirect

Perimeter
Between 1979-2015:
39 Researchers criminally charged
4 awaiting final dispositions

Only 5 U.S. researchers had concurrent ORI misconduct findings
(<2% of over 250 misconduct findings)
Geography:

US (27), China (7), Australia (2), one each Denmark, Russia, South Korea, UK

Range:

Fines and suspended sentences to 15 years in prison, with an outlier case involving a life sentence for 1st degree murder.
Indirect

2 investigations involved multiple persons being charged:

Seven researchers in China charged with embezzlement

Four United States researchers convicted of bribery
Woo Suk Hwang
- Seoul, S Korea
- 1.5 years suspended sentence

Direct and Indirect

Korean Supreme Court Upholds Disgraced Cloner's Criminal Sentence

By Myoung Ahn, Dennis Normile | Feb. 27, 2013, 12:45 PM

Discredited stem cell scientist Woo Suk Hwang suffered a setback in his bid to reclaim respectability today when South Korea's Supreme Court confirmed his conviction on embezzlement and bioethics violations. The court also sent Hwang's plea to overturn his dismissal from Seoul National University (SNU) back to a lower court for review and upheld previous rulings acquitting him of fraud charges.

FRAUD, RETRACTIONS NO BARRIER TO US CLONING PATENT FOR WOO-SUK HWANG

Woo-Suk Hwang is having quite a comeback.

The cloning researcher's fall from grace in 2005 and 2006 was covered worldwide, featuring two high-profile retractions from Science and convictions (now under appeal) on charges he embezzled government funds and broke South Korea's Bioethics law. But as Nature reported last month, in a profile focusing on Hwang's Biotec Research Foundation,

Despite his legal troubles — and the widespread belief that his career was over — Hwang continued to work, thanks to the supporters who amassed US$3.3 million to launch Sooam. About 13 scientists followed Hwang from SNU, and around half of those remain today among Sooam's 45 staff. His team now creates some 200 cow and pig embryos per day, and delivers about 15 cloned puppies per month.

And now, the U.S. Patent and Trademark Office has awarded Hwang a patent based on a cell line described in his retracted Science papers, as the Korea Times reports. The New York Times picked up the story Friday.

Despite all that, Dr. Hwang has just been awarded an American patent covering the disputed work, leaving some scientists dumbfounded and providing fodder to critics who say the Patent Office is too lax.

"Shocked, that's all I can say," said Shoukhrat Mitalipov, a professor at Oregon Health and Science University who appears to have actually accomplished what Dr. Hwang claims to have done. "I thought somebody was kidding, but I guess they were not."

(An aside: Mitalipov's work, published last year in Cell, was subjected to extensive corrections.)

The patent cites both of Hwang's retracted Science papers, without noting they're retracted. Apparently that wasn't a problem, notes the Times:

But a spokesman for the United States Patent and Trademark Office, and some outside patent lawyers, said the system operates on an honor code and that patent examiners cannot independently verify the accuracy of these claims.
Eaton, Steven
- Edinburgh, UK
- 3 months
- "first person to serve time under the UK's Good Laboratory Practice Regulations, 1999"
Dong-Pyou Han
• Iowa, United States
• 57 months prison: 3 yrs probation:
  $7,216,890.12 restitution, $200 court fees

Former ISU scientist's stiff fraud sentence sends message

How long should a scientist who cheats spend in prison? If you're Dong-Pyou Han, the answer is nearly five years, according to a federal judge who sentenced the researcher Wednesday to 57 months in prison for misusing taxpayer funds.

Han has admitted to cooking data using government grant money to make the AIDS vaccine he was working on look more effective. In addition to incarceration, Han was ordered to pay back more than $7 million to the National Institutes of Health — a sum that's surely symbolic for a former assistant professor of biomedical sciences at Iowa State University. The judge ignored pleas for leniency from Han's lawyer, who'd asked for probation.

As U.S. District Judge James Gritzner told the courtroom, as reported in The Des Moines Register, "The court cannot get beyond the breach of the sacred trust in this kind of research… The seriousness of this offense is just stunning."
Patrick Harran

- California, United States
- 5 years, adjudication withheld

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

PEOPLE OF THE STATE OF CALIFORNIA,

Plaintiff,

v.

PATRICK HARRAN (713-49),

Defendant.

THE PEOPLE OF THE STATE OF CALIFORNIA and Defendant Professor Patrick Harran (“Defendant Harran”), through his counsel Thomas P. O’Brien, hereby agree to continue this prosecution against Defendant Harran according to the terms of this Deferred Prosecution Agreement. Five (5) years subsequent to the execution of the Deferred Prosecution Agreement, after full compliance with the terms and conditions set forth herein, the People will move to dismiss with prejudice all filed charges in the criminal action, case number BA939059, against Defendant Harran in the furtherance of justice pursuant to Penal Code section 1385.

Chemical Patrick Harran faced criminal charges after an accidental death in his lab.

A US scientific society has decided not to award an honorary fellowship to chemist Patrick Harran, who was prosecuted for the 2000 accidental death of a 23-year-old researcher in his lab.
Erin Potts-Kant
• North Carolina, United States
• Probation, Community Service

Retraction Watch

Former Duke researcher charged with embezzlement has paper retracted

A former Duke researcher has had his paper retracted after accusations of embezzlement were made. Erin Potts-Kant, a former colleague of Perimeter, was alleged to have misused funds from the university.

Perimeter

Whistleblower sues Duke, claims doctoral data helped win $200 million in grants

A former Duke researcher, Erin Potts-Kant, has filed a lawsuit against the university after being accused of embezzlement. The lawsuit claims that the researcher used the university's resources to gain more than $200 million in grants.

Science

Retraction Watch

Former Duke researcher charged with embezzlement has paper retracted
Some people have concerns about criminal sanctions and science
Conclusions

1. Financial issues seemed to be the greatest driving force for criminal convictions

2. Need to assure consistency in processes. When applied, criminal sanctions should be used within clear guidelines and not just based on umbrage.

3. Need to thoroughly examine cost/benefit of pursuing more criminal prosecution of direct research misconduct

4. Need to provide education and guidance to those involved in a criminal justice procedure

“A research misconduct proceeding is more complicated than the regulations make it appear because there are a limited number of individuals who have the scientific background and experience to examine the allegations and the research. The individuals who have that background and experience may also have conflicts of interest that preclude them from participating in the proceeding. The federal regulations require the institution to ensure that the individuals responsible for carrying out any part of the research misconduct proceeding do not have unresolved personal, professional or financial conflicts of interest with the complainant, researcher or witnesses involved in the proceeding. “

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