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Cases discussed 1998-2011

•	Duplication/redundancy	109
•	Authorship issues	61
•	No ethics approval	46
•	Falsification/fabrication	41
•	Plagiarism	43
•	No or inadequate consent	39
•	Unethical research or clinical malpractice	34
•	Undeclared conflict of interest	22
•	Reviewer misconduct	19
•	Editor misconduct	13
•	Data ownership	5
•	Other	49

Publication Ethics

 Honesty and integrity are essential if the public is to be protected and science validated

 Researchers, editors, publishers and sponsors are all responsible Why does it happen when journals exist to enhance the academic database?

- and... enhance seniority and income
- and... increase publishers' profits
- and (in biomedicine) ... enhance pharmaceutical company profits

How frequent is research misconduct?

- 1.97% of scientists admittedfalsification/fabrication
- 33.7% admitted other 'questionable research practices (qrp)'
- 14% report fabrication/falsification by colleagues
- 72% report observing 'qrp' by colleagues

How many scientists fabricate & falsify research? A systematic review & metaanalysis of survey data. Fanelli D PLoS ONE 2009;4:e5738

How honest are researchers?

 107/194 NHS consultants had observed research misconduct

• 11 admitted personal misconduct

- 35 said they might do it in future
- Geggie J Med Ethics 2002;28:207

Student plagiarism

- 16% of 363 respondents admitted plagiarising
- No previous advice:24%

• Detection rate: 3%

BMJ 2004:70 doi:10.1136/bmj.329.7457.70-c

Duplicates and plagiarisers

62,213 Medline citations

- 0.04% with no shared authors highly similar = plagiarism
- 1.35% with shared authors highly similar = duplication
- So there may be 3500 plagiarised and 117,500 duplicate papers
- Déjà vu—A study of duplicate citations in Medline Mounir Errami et al *Bioinformatics 2008;24:243-9*

 'To copy ideas and passages of text from someone else's work and use them as if they were one's own.'

 Unreferenced use of the ideas of others submitted as a 'new' paper by a different author. •Ojuawo A. Milla PJ. Lindley KJ. Non infective colitis in infancy: evidence in favour of minor immunodeficiency in its pathogenesis. East African Medical Journal. 74(4):233-6, 1997 Held at BMA Library, No longer received UI: 9299824

•Ojuawo A. St Louis D. Lindley KJ. Milla PJ. Non-infective colitis in infancy: evidence in favour of minor immunodeficiency in its pathogenesis. Archives of Disease in Childhood. 76(4):345-8, 1997. Held at BMA Library, Currently received UI: 9166029 Dr S Dutta-Roy erased by the GMC in November 2007

• Plagiarised the work of colleagues

 Invented a co-author (Dr Kupp), whom he blamed for the plagiarism

- A paper is published written by a junior researcher from China
- An author complains that quotations have been taken from his book chapter without citation
- The author apologises, states his English is uncertain and the author expressed precisely what he, himself had wanted to say

- Author A publishes review in journal X
- Group B publishes review in journal Y
- Group A claim of 2 of 33 paragraphs copied without attribution
- Editor of journal Y seeks explanation
- Group B claim 'innocent error'
- Editor Y prefers no action; editor X prefers retraction of paper in journal Y

Editor's reasons for 'no action'

- Only about 6% of the review duplicated
- Group B came to many different conclusions from that of author A
- Review paper duplication does not affect systematic reviews

- Epidemiological study of 30,000 patients
- Similar study published elsewhere
- Latter authors would not have resources
- Many authors geographically distant
- Medline search reveals a pattern

Regulatory body unhelpful

Types of plagiarism

- Intellectual theft
- Intellectual sloth ("cut and paste")
- Language constraints
- Technical (missing "...")
- Self-plagiarism (journalists' "recycling")

Shafer SL. Anesth Analgesia 2011;112;491-3

Avoiding plagiarism

- Can it be accidental?
- Always reference the work of others
- Put the words of others in quotation marks
- Seek permission to copy tables, figures etc.
- This slide by permission of Elizabeth Wager

What do journals do?

cross check

Sample Report

Turn <mark>it</mark> in		
	•	





etBlast



- Obscure journals
- On-line CPD
- PhD dissertations
- Other on-line sources

ANESTHESIA & ANALGESIA®

- Authors urged to self-screen
- Supervisors urged to insist

"No longer can a prominent investigator deny accountability for plagiarism because a junior co-author copied text without his or her knowledge"

Impact of plagiarism

- 'Originals': journal IF 0.147 52.59 (3.87)
- 'Duplicates' IF 0.272 6.25 (1.6)

• Original:duplicate citations = 28:2

 In 10 pairs, duplicate cited more often than original

Long et al Science 2009;323: 1293-4

Plagiarists respond

- 60/163 identified authors of papers containing plagiarism
- 28% denied wrongdoing
- 35% confessed (and mostly apologetic)
- 22% were co-authors who denied writing the manuscript
- 17% claimed they did not know they were cited as authors

Long et al Science 2009;323:1293-4

How is fraud detected?

- Colleagues (usually junior)
- Other whistleblowers
- Reviewers
- Readers
- Regulatory bodies
- Editors (plagiarism software/photoshop)
- Statisticians
- Sponsors
- Publishers

Why do researchers not detect fraud?

- Junior researchers fearful for their job
- Overwhelmed by charisma
- Bullying and threats
- Not trusting their own suspicion
- Lack of support from institution
- Turning a blind eye

Why editors detect few cases

- Normally trust authors
- Paper not within specialty knowledge
- Initial paper triage is cursory
- Lack of statistical expertise
- Effect of conflict of interest
- Hunger for high impact papers
- Cannot afford image screening or plagiarism detection software

What do editors watch for?

- Authors unlikely to have sufficient resources
- Data 'too good to be true'
- Findings hard to believe
- Paper submitted by back door
- Author puts undue pressure on editor
- Reviewer reports concern

Academic responses

- Not all institutions have robust systems
- UK universities and research councils have rejected a mandatory supervisory body to investigate and regulate research practices
- UKRIO procedures published 2009 are advisory only

Academic responses

- A Croatian government report finds a senior researcher guilty of serial plagiarism and duplication: the Univ. of Zagreb tells it to get lost.
- Paper retracted for plagiarism by Stem Cell Dev J: University of Newcastle says: 'submitted in error' and blames junior author.
- A senior academic is currently under GMC investigation for alleged 'cover-up' of research misconduct

CODE OF PRACTICE FOR RESEARCH Promoting good practice and preventing misconduct

September 2009



Guidelines & Codes of Conduct

- World Association of Medical Editors
 <u>www.wame.org</u>
- International Committee of Medical Journal Editors <u>www.icmje.org</u>
- Committee on Publication Ethics <u>www.publicationethics.org</u>
- Council of Science Editors
 <u>www.councilscienceeditors.org</u>

Further resources

Plagiarism and the Law. Saunders J 2007

http://www.bllaw.co.uk/pdf/Plagiarism%20and%20the%20law.pdf

- Best practice guidelines on publication ethics: a publishers perspective. Graf et al Int J Clin Pract 2007;61 (Suppl. 152) 1-26
- JISC: advice for universities on student plagiarism

http://www.jisc.ac.uk

Scientific Misconduct Blog

http://scientific-misconduct.blogspot.com

 About all manner of corporate pharmaceutical scientific misconduct and related curious incidents. If you're not outraged, you're not paying attention.



Rogues Gallery



Hendrik Schön, USA (1 paper every 8 days in 2001)



Hwang Woo-Suk, South Korea, 2005



Eric T Poehlman, Canada, 2005 (& prison 2007)



Hans Werner Gottinger ?100 plagiarised papers





Prof Scott Reuben US: 10 Andrew Wakefield UK years fake research. Six Erased 2010 months jail

Man of the Match Award



Hans-Werner Gottinger

Innovation, Technology and Hypercompetition Review and synthesis



Hans Werner Gottinger 100+