How a publisher’s research integrity group works

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Who am I?

Springer Nature Research Integrity Group
Who’s responsible for research integrity & publication ethics?

- researcher
- collaborator
- ethics committee/IRB
- institution
- funder
- government
- third-party service
- peer-reviewer
- editor
- publisher
- reader
- media

Everyone who is involved in the research enterprise
How big a problem is it?

- large & increasing, but mostly unrecognised
- a few authors have many retractions
- geographical differences
Honest error or deliberate misconduct?
Springer Nature Research Integrity Group

- 11 staff providing training and advice
- ex-editorial with post-graduate qualification
- about 3,000 journals & 300,000 books

What do we do?

- training for in-house staff and external editors
- advice on resolving specific cases
- policy, workflow, product & system development
- and pretty much anything else that crops up!
What are our working principles?

- maintain the reliability of the scholarly record
- punishment is not an aim *per se*
- industry best practice (Committee on Publication Ethics)
- editorial independence
- prevention is better than cure
- positivity, transparency & partnership
How are problems detected?

- plagiarism-detection software
- duplicate submission checks
- text-mining for problematic features
- staff checks for policy compliance
- image manipulation spot-checks
- peer review
- big-data mapping networks of ‘bad actors’
- complaints from external stakeholders
Who reports problems?

- researchers
- collaborators
- co-authors
- research participants
- institutions
- funders
- government bodies
- journalists
- bloggers
- special interest groups
- members of public
- other publishers
- semi-professional whistle-blowers
What type of problems do we see?

- 1,300 new ‘standard’ cases in 2020
- about 40 ‘large’ cases in 2020
- about 2,500 papers/chapters investigated in total
- number of cases increases every year

**Pie chart 1:**
- Plagiarism/duplicate pub (318)
- Data (errors/fabrication etc.) 251
- Authorship (189)
- Ethics/consent (116)
- Peer review process (89)
- Image manipulation (88)
- Policy (66)
- Permission/license (63)
- Consent to publish (40)
- Defamation (32)
- Competing interests (20)
- Animal ethics (7)
- Trial Registration (7)

**Pie chart 2:**
- Published 649
- Unpublished 362
- Not Applicable 28
What are ‘large cases’?

- peer-review: fake reports, identity theft, organised ‘rings’
- fake/manipulated data
- paper mills
- plagiarism
- duplicate submission
- theft of papers
- editor misconduct
- authorship for sale
- citation manipulation
- ethics breaches
- legal threats

Currently ~40 ‘large’ cases involving more than 1,500 papers total
What does a typical investigation involve?

- potential problem detected
- staff/EiC use ‘self-service’ resources to attempt resolution without SNRIG
- difficult cases escalated to SNRIG
- analyse full manuscript and peer-review history
- look for all possible problems
- request explanation from author
- legal consultation
- advise Editor-in-Chief of best-practice resolution
- Editor-in-Chief makes final decision

VIDEO
What actions can be taken?

- reject manuscript
- correction
- rebuttal/Letter to the Editor
- editorial or publisher note
- editorial expression of concern
- retraction
- report to authors’ institution & funder
- legal defense

How long does it take?
What’s hampering progress?

- stakeholders dramatically underestimate extent of problems
- chronic underinvestment in training & prevention
- standard quality control & peer review does not detect all problems
- poor information-sharing between stakeholders
- lack of standardisation (geographical, subject area)
- no binding regulations or sanctions
What’s the prognosis?

- time
- money
- openness
- transparency
- collaboration
- standardisation
- pragmatism
- an appreciation of incrementalism
- patience....

What’s needed?
Questions?