



Committee on Publication Ethics

COPE

The past – present – and future

Sabine Kleinert
Vice-Chair of COPE
Senior Executive Editor *The Lancet*

Thorax Associate Editors' meeting

London, November 2007

www.publicationethics.org.uk



Why does publication ethics matter?

Published research influences other researchers and changes practice !

Journal reputation

Editors as guardians of the research record

Editors' role in fostering research integrity



Why does research integrity matter?

Public trust in research

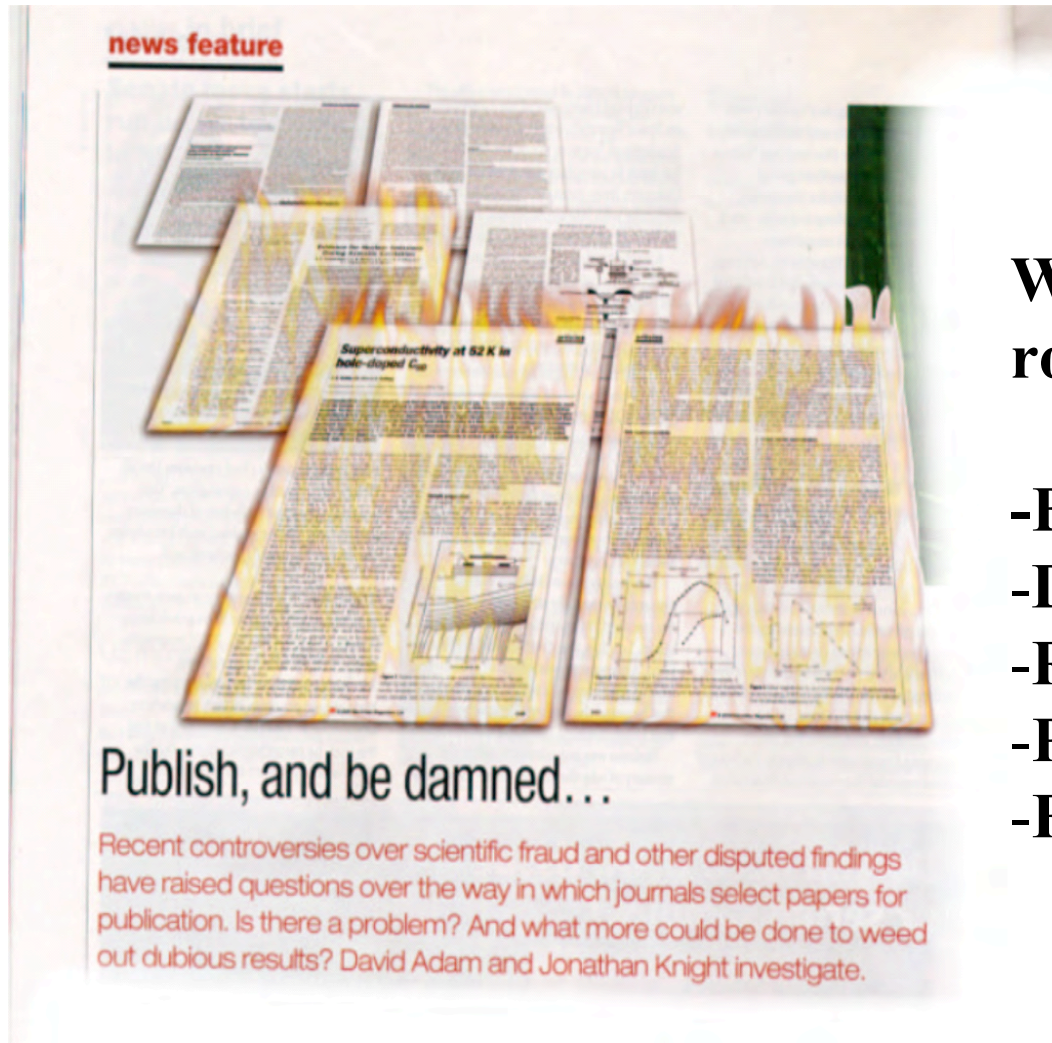
67 retractions in MEDLINE in 2005

97, in 2006

What is worse..... many continue to be cited (or included in systematic reviews) after retraction



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What is journals' and editors' role in:

- Being part of the problem**
- Detecting misconduct**
- Reacting to misconduct**
- Preventing misconduct**
- Fostering integrity**

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- **What is happening to research integrity (pressure to publish)?**
- **Was there anything journals/editors could have done to prevent publication in recent high-profile cases?**
- **Should editors have more stringent rules and be less trusting?**
- **Would it actually help?**

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Research misconduct - definitions

- **Fabrication of data or cases**
 - **Wilful distortion of data (Falsification)**
 - **Plagiarism**
 - **No ethics approval**
 - **Not admitting missing data**
 - **Ignoring outliers**
 - **No data on side effects**
 - **Gift authorship**
 - **Redundant publication**
 - **Inadequate literature search**
-
- FFP**
- serious**
- Questionable Research Practice (QRP)**



COPE - the past

- started in 1997 as “self-help” group of editors (Richard Smith, Richard Horton, Mike Farthing)
- 4 meetings a year
- anonymous discussion of suspected misconduct cases
- advice to editors on how to proceed
- cases (and outcomes if available) documented in annual printed reports
- Guidelines on Good Publication Practice
- annual conferences



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**Summary of COPE cases
1997- 2006**

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Year	No of cases	“Evidence of misconduct”	“Probably no misconduct”	Not applicable
1997-2000	108	87	11	10
2001	39	30	9	0
2002	18	14	4	0
2003	22	15	5	2
2004	39	26	8	5
2005	24	21	3	0
2006	35	26	5	4
Total	285	219	45	21

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Problems/dilemmas discussed (n=285)*

• Duplicate/redundant publication	77
• No ethics approval	34
• Authorship issues	31
• No or inadequate informed consent	30
• Falsification or fabrication	28
• Plagiarism	26
• Unethical research or clinical malpractice	19
• Undeclared conflict of interest	15
• Reviewer misconduct	8
• Editorial misconduct	6
• (miscellaneous	41)

*More than one possible



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**Of 285 cases, 172 (60%) pre-publication
95 (33%) post-publication**

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Common difficulties for editors

- **Time consuming!**
- **No reply from authors**
- **No reply from head of institutions**
- **Inadequate investigation by institution**
- **No institution**
- **Managing/analysing raw data**
- **What to do, if alleged misconduct is unproven?**



COPE - the present

since 2001 elected Chair, Vice-Chair, Treasurer, Secretary (added in 2007), and other Council members (currently 12 members, 3 vacancies, advertised with deadline of Dec 3)



COPE members (August 2007)

**282 members (with over 300 journals signed up)
from 29 countries:**

Argentina, Australia, Belgium, Brazil, Canada, China, Croatia, Denmark, Finland, France, Germany, Iceland, India, Iran, Iraq, Ireland, Italy, Japan, New Zealand, Norway, Romania, Serbia, Singapore, Sweden, the Netherlands, Turkey, UK, USA, and Venezuela



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- Chair: Harvey Marcovitch
- Vice-Chair: Sabine Kleinert
- Treasurer: Jeremy Theobald
- Secretary: Liz Wager

- Ombudsman: Richard Green

- Council: Tim Albert, Virginia Barbour, Trish Groves, Peter Hall, Charlotte Haug, Margaret Rees, Steve Yentis, Pritpal Tamber

- Administration: Linda Gough

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COPE - the present

- 2005: Code of Conduct for editors – developed after wide consultation as minimum standard COPE members should adhere to

“The code sets out standards of good editorial conduct. It also calls on editors to take seriously their role as guardians of biomedical science by taking all reasonable steps to ensure that allegations of research misconduct are properly investigated”.



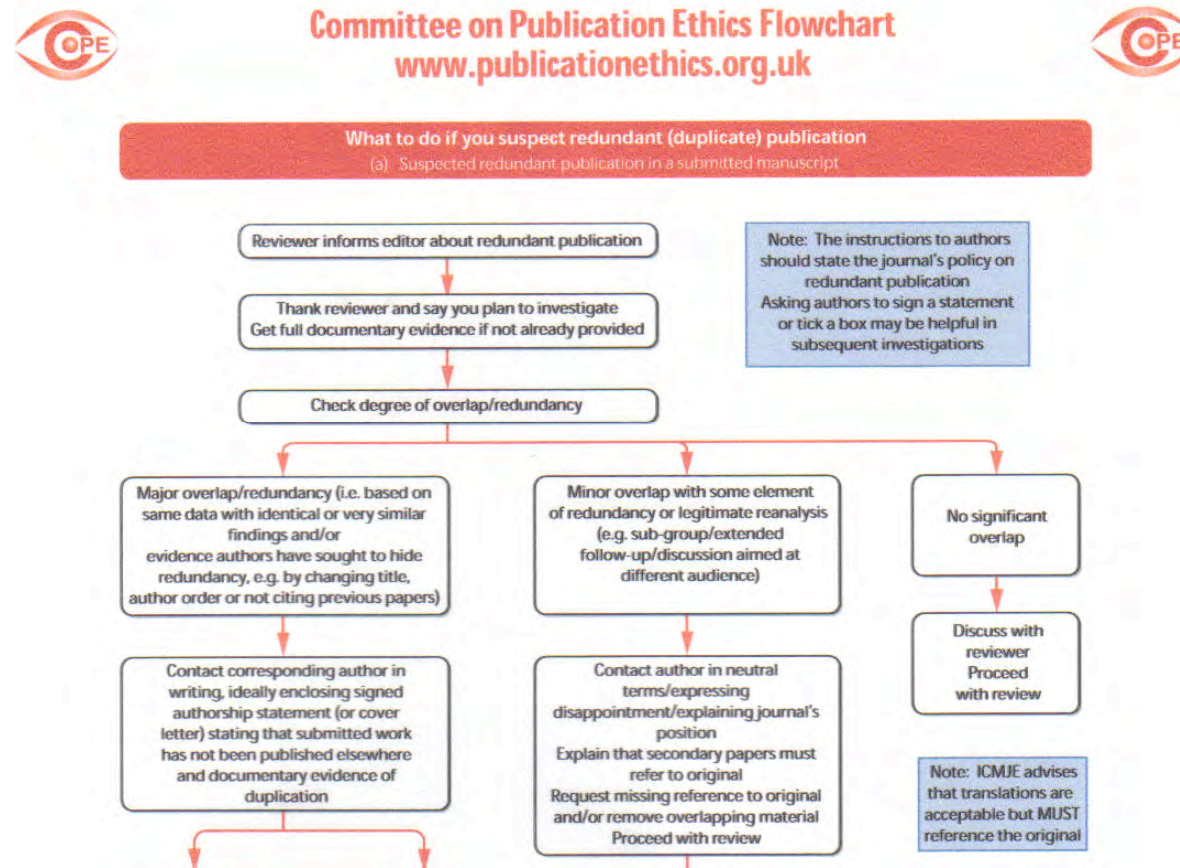
COPE - the present

- 2006/7: Development of flowcharts for common problems
- Currently 14 flowcharts with more in development:
 - Redundant publication (in submitted or published paper)
 - Plagiarism (in submitted or published paper)
 - Fabricated data (in submitted or published paper)
 - Changes in authorship (addition or removal of author before or after publication)
 - Undisclosed conflict of interest (in submitted or published paper)
 - Ethical problem in submitted paper
 - How COPE handles complaints against editors



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COPE flowcharts as practical guides for editors



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COPE flowcharts as practical guides for editors

- Accessible for all on COPE website
- Translated into Farsi, Croatian, Spanish, and Japanese
- Non-exclusive licence to reproduce to: Blackwell-Wiley, Elsevier, Francis & Taylor
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 - Prof of Pathology at Harvard Medical School; Australian Rural Health Education Network; Prof at Aichi Shukutoku University, Japan; Archives of Iranian Medicine; Peruvian Association of Scientific Publishers



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[RAISING THE QUALITY OF BIOMEDICAL JOURNALS — COPE](#)

Organization of journal editors concerned about dealing with possible breaches in research and publication ethics. Includes guidelines on good practice, ...
www.publicationethics.org.uk/ - 24k - [Cached](#) - [Similar pages](#)

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COPE Ltd operates a range of very successful social enterprises in the Shetland Islands, and offers consultancy services to existing and prospective social ...
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COPE - the present

- Two rounds of research grants per year (up to £5000 each) – deadline Dec 1 and June 1

“to fund research in the field of publication ethics”

At least one of the applicants must be a COPE member



COPE - the present

- Links with:
 - UK Panel of Research Integrity
 - CSE
 - WAME



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COPE - the present

Co-sponsor and planning of first World Conference
On Research Integrity, Lisbon, September 2007



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COPE - the present

Raising the quality of Biomedical Journals

By doing so, indirectly fostering research integrity



Case examples

- **Case 1: Plagiarism in foreign-language journal (+authorship issues)**
- **Case 2: “data too good to be true”**



Case 1: plagiarism in foreign language

REVIEW
Review

Management of acute optic neuritis

S J Hickman, C M Dalton, D H Miller, G T Plant

Optic neuritis is a common condition that causes reversible loss of vision. It can be clinically isolated or can arise as one of the manifestations of multiple sclerosis. Occasional cases are due to other causes, and in these instances management can differ radically. The treatment of optic neuritis has been investigated in several trials, the results of which have shown that corticosteroids speed up the recovery of vision without affecting the final visual outcome. Other aspects of management, however, are controversial, and there is uncertainty about when to investigate and when to treat the condition. Here we review the diagnostic features of optic neuritis, its differential diagnosis, and give practical guidance about management of patients. The condition's association with multiple sclerosis will be considered in the light of studies that define the risk for development of multiple sclerosis and with respect to results of trials of disease-modifying drugs in these individuals.

Optic neuritis is common, having an incidence of 1–5 per 100 000 per year.^{1–3} The incidence is highest in caucasians,⁴ in countries at high latitudes,⁵ and in spring.⁶ Individuals aged 20–49 years are most at risk, with women more often affected than men.² The condition usually presents as subacute unilateral loss of vision, although loss of vision in both eyes can arise, either simultaneously or sequentially. Most instances of optic neuritis are due to idiopathic inflammatory demyelination, which can arise in isolation, or as a manifestation of multiple sclerosis.⁶

Despite some major studies there are still many controversial areas in the management of optic neuritis, with differences of opinion expressed in surveys done to investigate the way the condition is managed.^{7,8} In this Review, we discuss the diagnosis and management of optic

might be seen by the patient on eye movement.¹¹ Clearly, subclinical cases are frequent, since some patients present with Uhthoff's phenomenon (visual deterioration on getting warm, or during exercise),¹² and delayed visual evoked potentials are not uncommon in early multiple sclerosis, even without a previous history of optic neuritis.¹¹

The maximum visual loss varies from minor blurring to no perception of light in the affected eye. Abnormal colour vision, reduced contrast sensitivity, visual field loss, and a relative afferent pupillary defect (RAPD) are usually present in the affected eye.^{4,10,14} The presence of an RAPD is a useful objective sign of a unilateral optic neuropathy, although it is not specific for optic neuritis. The absence of an RAPD can indicate mild clinical involvement in the affected eye, previous optic neuritis in the contralateral

TRUKKET TILBAKE

ie Tidsskr Nor Lægeforen 2005; 125: 2056

Øversiktsartikkel MEDISIN OG VITENSKAP ■

Optikusnevritt – diagnose, behandling og oppfølging

Sammendrag

Bakgrunn. Optikusnevritt er en vanlig tilstand som kan opptre isolert eller som en manifestasjon av multipel sklerose. Tilstanden er godt klinisk karakterisert, men differensialdiagnostisk vil mange tilstander måtte overveies. Behandling av optikusnevritt har vært undersøkt i flere studier. Disse viser at kortikosteroider bidrar til raskere restitusjon av synstyrken uten at den endelige synstyrken påvirkes vesentlig. Både diagnose og behandlingsmuligheter har endret seg i de senere år. Aspekter ved utredning, behandling og oppfølging er kontroversielle.

Materiale og metode. En nasjonal gruppe av nevrologer og øyeleger har vurdert retningslinjer for diagnose, behandling og oppfølging av optikusnevritt basert på egen klinisk erfaring og gjennomgåelse av relevante bokkapitler samt literatursøk i PubMed.

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Antonie Gjaever Beiske
Akershus universitetssykehus

Kjell-Morten Myhr
Haukeland Universitetssykehus

Klinikk og sykdomsforløp

I ramme 1 skisseres de typiske symptomer og tegn ved optikusnevritt (11). Tilstanden viser seg som regel som en subakutt ensidig synsreduksjon med moderate smerter som aksentueres ved øybevegelser og progredierer i løpet av få dager til to uker (12). Smerteintensiteten er varierende, nattesøvn forstyrres vanligvis ikke, og en tidel rapporterer ingen smerte. Enkelte pasienter observerer lysglimt (fotopsier) ved øybevegelser. Noen pasienter fremviser Uhthoff's fenomen (synsreduksjon ved økt kroppstemperatur eller i tilknytning til fysisk anstrengelse). Forsinket visuelt fremkalt respons er heller ikke uvanlig å finne ved debut av multipel sklerose, noe som kan tyde på en tilsynelatende asymptomatisk optikusnevritt (13).

Den maksimale synsreduksjon varierer fra lett tåkesyn til manglende lyssans på affisert øye. Redusert fargesyn, redusert kontrastsensitivitet, synsfeltutfall og relativ afferent pupilldefekt i pupillrefleks ved belysning er vanligvis til stede i det affiserte øyet. Selv om ingen av disse funn isolert sett er spesifikk for optikusnevritt, gir de sammen



Case 1:

- **Paper retracted**
- **Difficulties:**
 - **A number of authors very senior respected Norwegian researchers**
 - **Some on IAB of Norwegian Medical Journal**
 - **Some clearly not very familiar with content of paper (?authorship)**



Case 2 (Lancet case)

- **Paper describes exciting new technique with very good results**
- **2 of 3 reviewers say “too good to be true”, one contacts manufacturer – confirmation results impossible**



Case 2 (Lancet case)

- Corresponding author (=supervisor of postdoc) challenged and paper rejected (pointing out discussed at COPE also).
- Corresponding author instigates institutional investigation: outcome – postdoc omitted, possibly fabricated data (but now at a different institution)
- Supervisor undergoes retraining on how to supervise



**Adding COPE into the equation,
makes negotiations easier for
editors and adds the weight of an
international outside body!!**



Fostering research integrity What can editors do?

- **COPE – pursue misconduct, adhere to good publication standards**
COPE support for editors might facilitate response from authors/institutions
- **Heightened vigilance, especially high-risk papers (public impact, collaborations, unexpected results, commercial interest, reviewers' suspicion)**



4 | International Herald Tribune
Thursday, November 30, 2006.

Panel urges tighter rules for science publications

Stem cell scandal prompted review

By Nicholas Wade

Fraudulent stem cell reports that shook the scientific world could have been prevented by extra review procedures, according to a panel appointed by Science, the journal that published the claims.

Donald Kennedy, the editor of Science, said the journal would accept the panel's major findings.

A South Korean researcher, Hwang Woo Suk, reported in Science in 2004 that he had generated embryonic stem cells from an adult human cell, the necessary first step in proposed schemes for growing replacement tissues from a patient's own cells. In a second report, in 2005, he claimed that he could perform this step routinely and efficiently, using very few human eggs.

Both reports proved to be fabrications, and the journal formally retracted the papers last January.

The fraud came to light not through any of the formal checking procedures in the scientific process, but because a whistle-blower in Hwang's lab spoke to a South Korean television station.

Science has long taken the position that its reviewing procedures work well but cannot be expected to detect deliberate fraud; therefore, no change is necessary. But the spectacular nature of the fraud prompted deeper thought on the part of leading journals.

After reviewing the paper record of how the Hwang reports were handled, a panel headed by John Brauman, a chemist at Stanford University, recommended four changes in Science's procedures on Tuesday.

A risk-assessment method should be developed to flag high-visibility papers for further review, the panel said. Also, authors should specify their individual contributions to a paper, a reform aimed at Hwang's stratagem of allowing another researcher, Gerald Schatten of the University of Pittsburgh, to be the lead author of one of the reports even though he had done none of the experiments.

The panel advised online publication of more of the raw data on which a report is based. It also suggested that Science, Nature and other leading journals establish common standards to prevent authors bent on deceit from favoring journals with laxer standards.

What should editors do? (Science investigation)

- Risk stratify papers
- Clarify contributions/responsibilities of authors
- Make primary data available to reviewers/readers
- Act in concert with other “high-profile journals”



What can editors do?

- **Insist on prospective trial registration**
- **Check protocol with submission**



What can editors do?

- **Ensure adherence to best reporting standards (CONSORT, STARD, STROBE.....etc) – oddities may be more apparent**



What can editors do?

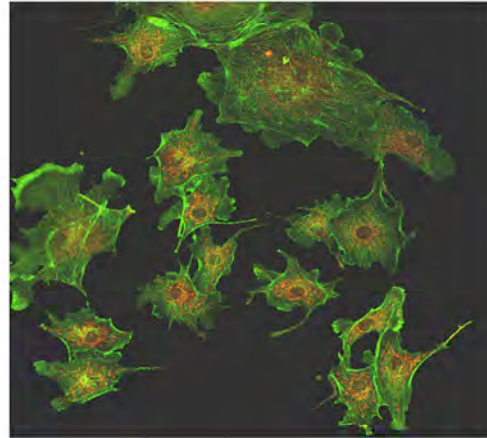
- **Screening for:**
 - **Plagiarism (CrossCheck or similar)**
 - **Figure manipulation (J Cell Biol)**

BUT: time-consuming and not fool-proof



Figure 6

Manipulated
image



Manipulation
revealed
by contrast
adjustment

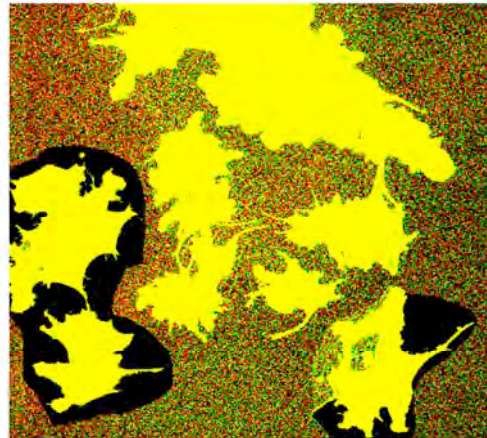


Figure manipulation

Rossner M, Yamada KM *J Cell Biol* 2004; 166: 11-15.



What can editors do?

- Declared transparent policies on conflict of interest and role of sponsor (prior to peer review)
- Ask questions at submission stage (authors' contributions, involvement of medical writer....etc)



What can editors do?

- **?? Demand independent data monitoring for all studies**
- **Emphasise responsibility of ALL authors for data integrity!!**



COPE - the future

- Will become a charity (?end of 2007)
- Best practice guidelines (2007/8)
- Strengthen role in education (2008)
 - Distance-learning for editors
 - Workshops for editors
 - Offer to audit journals
- Improved website (2008)
 - Publication ethics blog, wiki
 - Letter templates for editors
 - Quarterly Bulletin/newsletter for members
- PR strategy



COPE - the future

- Further link with UK-PRI and UK research funders (Research Councils) – conference April 2008
- Work with CrossCheck and publishers to test/evaluate plagiarism screening tool
- COPE/Nature initiative: role of co-authors
- COPE/ALPSP Seminar on Responsible Publication Practices: October 2008



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COPE - the future



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