How to Write Errata, Corrigenda, and Retractions

by Jocelyn Graf
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Outline

- 1. Quiz: Please complete this quiz on the next page while you wait for the workshop to begin
- 2. Definitions of key terms
- 3. Thinking about errors, fabrication, and false knowledge
- 4. General guidelines for errata, corrigenda, and retractions
- 5. How to write errata and corrigenda with sample texts
- 5. How to write retractions with sample texts

About the presenter:

Jocelyn Graf has an M.A. in applied linguistics from the University of Illinois at Chicago, where she started her career teaching English academic writing to science professors and graduate students. She has also taught business English to managers at HSBC Bank in Mexico and Samsung Group in Korea. Until 2008, she was the Assistant Director of the English Writing Center at Hanyang University's Center for Teaching and Learning and a Visiting Professor in the College of Medicine. She now lives part of the year in Korea and part in Los Angeles. She recently completed four years of math, science, and engineering courses in order to be better able to serve her clients in the sciences. Her company, Proficia Language Services, is registered in Korea and has Korean-speaking staff available to communicate with Korean journal staff. Proficia offers proofreading for journal articles, responses to reviewers, grant applications, and PhD statements of purpose. The company also offers Korean to English translation services with English proofreading included. Ms. Graf can consult on preparing for a presentation or job interview, or writing presentation slides as well. Her textbook, the Handbook on Biomedical Research Writing, can be downloaded free from her website at http://www.jocelyngraf.com/learn.

1. Quiz: True or False?

1. Papers written by non-native native speakers	e speakers are more often retracted than those written by
2. Papers of authors from deve	eloping countries are more likely to be retracted than those from
3. Articles that are retracted ter	nd to be highly cited before the retraction.
4. After an article is retracted,	the number of citations of that article decreases dramatically.

The answers to the quiz are in Appendix 1 of this lecture handout.

2. Definitions of Key Terms

According to the National Library of Medicine (NLM), **errata** are "significant errors in the text, abstract, or descriptive part of an article. Errata do not include small imprecisions or typographic errors of little consequence" (1). The NLM does not make a distinction between errata and corrigenda. Both errors of the journal and the author are considered "errata" in its databases (2). However, many journals consider "errata" to be errors caused by the publisher and "corrigenda" to be errors caused by the author.

Furman et al. describe **retractions** as "the 'removal' from the literature of a paper determined to be sufficiently fraudulent, falsified, mistaken or not reproducible that the authors or editors act to acknowledge its invalidity in the public record" (3).

The NLM distinguishes in MEDLINE between full retractions and partial retractions:

"Sometimes only a single graph or table or statement is retracted for an article. Or authors may realize that they have drawn the wrong conclusions from their research, and wish to subsequently retract those conclusions, even though all of the scientific data reported in an article is sound and valid" (2).

If the journal wishes to issue a partial retraction, it is very important to clearly label the title as "Partial Retraction." Otherwise, the whole article will be retracted in MEDLINE.

Furman et al. also addressed the differences among errata, retractions, and other kinds of corrections. Although journals do not have a standard definition, Furman et al. state that "'full retractions'" invalidate the entire content of an article, while 'partial retractions' acknowledge sections of a paper or sets of analyses as inaccurate. Whereas 'errata,' 'corrections,' or 'comments,' identify isolated inaccuracies in a paper, retractions are reserved for circumstances in which significant portions of an article are incorrect or cannot be substantiated" (3).

Note that a key difference between retractions and other forms of correction is that an author is considered by the academic community to have "lost" the publication if it is retracted. However, if errors are corrected with errata or corrigenda, the authors can still list the papers on their CVs and use them for tenure applications and other university requirements. Therefore, in the vast majority of cases, only errata need to be published. Retractions are much rarer and more serious, and require the attention of the entire editorial board. The editor or the author must officially acknowledge the retraction for it to be considered legitimate.

For more information on the definitions of these terms and others in the biomedical sciences, plus some examples, see http://www.nlm.nih.gov/pubs/factsheets/errata.html.

3. Thinking about errors, fabrication, and false knowledge

Furman et al. compare error correction in research to similar phenomena in other fields (3):

- 1. Just as industries that produce physical products have a defect rate, the knowledge production industry (research) has an error rate.
- 2. Retraction rates are like crime rates: When retraction rates go up, it may be that errors have actually increased, or it may be that we are just identifying more errors.
- 3. Computer programmers have to protect their code from malicious attacks and accidental bugs. Likewise, researchers must test published data for accuracy and watch for errors.

Furman et al. emphasize that in fields such as industrial fabrication and computer programming, well-established procedures have been implemented for minimizing error and fault and correcting errors that do occur. In academic research, robust policies have only recently been implemented and are still under development.

4. General Guidelines for Errata, Corrigenda, and Retractions

• Label the notice with the proper word from this chart:

Singular	Plural
Erratum	Errata
Corrigendum	Corrigenda
Retraction	Retractions

- Be sure that the erratum or retraction is on a numbered page of the journal so that it can be properly cited and included in databases.
- If the journal includes a print edition, the erratum or retraction should be printed in a subsequent issue, not just included on the website.
- When an author finds the article electronically, the fact that the erratum or other notice
 exists should be clear in every location on the website: table of contents, abstract, full text,
 etc.

- In the electronic form, links should be available BOTH from the article to the erratum or retraction AND from the erratum or retraction back to the article.
- Even if the journal is not open access, the erratum or retraction should be freely accessible to the public.
- If the consequences of the error may cause serious harm (such as errors in drug dosages),
 the editor can contact the major databases to speed the process of correcting the database records.

Although the citation rate of retracted articles greatly drops after the retraction, some authors continue to cite the article. They may have downloaded the article before the retraction and not noticed the retraction notice. Also, as of 2009, the time lag between the retraction and indexing was still up to one year. Some notices of retraction are (strangely) behind a paywall. For biomedical articles, another option is to access the "Finding of Scientific Misconduct" in the NIH Guide for Grants and Contracts. These reports are all open access and usually contain more detail.

Special Note for Manuscript Editors and Fact Checkers: When reviewing the accuracy of the reference list, any cited article that has a retraction notice should be referred to the journal editor.

As reported by Neale et al. (4), Sox and Rennie recommend that author guidelines contain the following two requirements (5):

- 1. Authors must check every paper in their reference list to determine whether it has been retracted.
- 2. Authors who discover that their previously published article cited a study that was later retracted must submit a correction to the journal in which they published.

How Retractions, Errata, and Corrigenda Are Denoted in Databases

The National Library of Medicine (NLM) has two MeSH keywords related to retractions:

RETRACTION OF PUBLICATION: Added to the retraction notice.

RETRACTED PUBLICATION: Added to the paper that was retracted.

Using these key words, it is possible to search the PubMed database to view examples of retraction notices and retracted articles. Of course, the primary value of the keywords is to notify readers that a paper has been retracted.

5. How to Write Errata and Corrigenda

A collection of sample errata and corrigenda representing diverse fields of study appears at the end of this handout.

What Should an Erratum Include?

- The complete bibliographic information for the corrected article
- An explanation of the error and the correction of the error

What Should a Corrigendum Include?

- The complete bibliographic information for the corrected article
- Acknowledgement of the person who helped find the error(s)
- Explanation of the correction, whether brief or extensive
 - o Brief errors can be mentioned along with the corrected form
 - In the correction of an entire figure or table, only the erroneous parts need to be listed, along with a complete revised figure or table
- Citation of any articles related to the correction, along with a standard reference list

6. How to Write Retractions

According to Phil Davis, journal editors make several errors in their approach to retractions (6):

- 1. prefer not to issue retractions without author permission
- 2. fail to properly investigate or defend allegations of misconduct due to lack of resources
- 3. routinely issue ambiguous retraction notices (or none at all)
- 4. adhere poorly to established ethical guidelines for retractions

Of course, it should not be possible for a paper to be retracted simply because someone accuses the author of dishonesty or error. However, editorial boards often do not have the budget and time to investigate and evaluate whether reported false data is actually false. Furthermore, whether they find the truth or not, they may fear that the author will sue the journal.

Before the 1980's, retractions were not common and by 1988, only 70 retractions had appeared in the MEDLINE database for medical journal articles (1). In 1982, the *Journal of Clinical Investigation* announced the following policy, as cited in (1):

"Suggestions that journals take a greater role in ensuring against publication of false data are impractical. We are the JCI, not the FBI" (7).

Although this policy certainly saved time, money, and work for the editorial board, we can imagine that if this journal were to publish an author whose work was retracted in several other journals, this journal could have lost the trust of its readers for refusing to issue retractions. Also, dishonest researchers may have seen this journal as a good place to publish without fear of later retractions. Indeed, shortly after that 1982 statement, the JCI changed its retraction policy. One of the JCI's subsequent retractions is attached as a sample in the appendix to this document.

Another practice of at least one journal has been to use some intermediate category between valid and fraudulent papers. For example, the *American Journal of Cardiology* once had the following policy, as reported by (1):

"The Committee classified papers as valid, questionable, or demonstrably fraudulent. The conclusions of the following papers could not be shown to be supported by verifiable original experiments and analyses, and were therefore considered questionable" (8).

If a journal issues a notice of the "questionable" status of a paper, the paper is not officially retracted, so no retraction keywords are added to MEDLINE and authors may continue to cite the paper without realizing that the data has been questioned. Therefore, trying to use other classifications besides the standard "retraction" or "erratum" is not recommended. The editorial board must decide whether the paper deserves a retraction or erratum.

It should also be noted that if a researcher is found to have committed fraud by some organization besides the journal, such as a government agency, university, or funder, the researcher's papers are not automatically retracted (1). It is important for a journal's board of editors to stay informed about any major announcements of fraud in the field and review that author's previous publications in the journal to determine whether a retraction is needed. If a retraction is not appropriate, it may be worthwhile to note the information about the author in a letter to the editor or an editorial, which can be linked in MEDLINE to the article as a "comment." It is not necessary to retract an article simply because other articles by the same author have been retracted. The editorial board must evaluate only the article published in their own journal.

Although there is some risk to the journal of litigation from retractions if the authors do not agree with the decision, it is important to follow through with retractions or partial retractions if needed because the publication of false data can have several types of major impacts. Furman et al. describe three:

- 1. Endangering patients. Example: The 1998 British Lancet article claiming that MMR vaccination can cause autism was not retracted for ten years. During that time, vaccination rates decreased because people were afraid of the risk, and several measles epidemics resulted.
- 2. Wasting other researchers' time and money. Example: Scientists in more than ten top research labs around the world spent several years and millions of dollars trying to replicate the work of Schön, a physicist who studied super-conducting plastics.
- 3. Losing the confidence of funders and public support for science and academics.

More information about how editorial boards can protect their journal from lawsuits is included in the COPE guidelines on retractions, available at http://publicationethics.org/files/retraction%20guidelines.pdf and attached at the end of this document.

What Should a Retraction Include?

- Bibliographic information for the retracted paper and how to cite the retraction notice.
- Mention of whether the author consented to the retraction and agreed with the reason for the retraction.
- Description of the nature of the error or fraud.
- Description of any content that is still considered valid.
- Which authors claim responsibility for the error and which authors do not.

- Mention of one or more papers that are to be retracted. If multiple papers are included, they should be closely related, such as papers on the same general subject by the same research group.
- Extensive discussion of a retraction can be described in an editorial essay.

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Appendix 1. Answers to the quiz

- 1. False: No study has specifically investigated whether papers by non-native speakers are more likely to be retracted. However, in general, it has been found that the personal characteristics of authors are not correlated with the retraction rate.
- 2. False: In fact, papers by authors from top U.S. universities are most likely to be retracted.
- 3. True: It may be that articles with many citations have received greater scrutiny, and therefore readers are more likely to find the problems in those papers.

4. True: Although older studies found that it took years for the citation rate to drop, with the increasing use of computer databases, the citation rate now drops within months.

More information regarding the answers to the quiz can be found in the following recommended article:

Furman JL, Jensen K, Murray F. Governing knowledge in the scientific community: Exploring the role of retractions in biomedicine. Research Policy, Vol. 41, No. 2. (March 2012), pp. 276-290, doi:10.1016/j.respol.2011.11.001

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Errata

In: North FM, Syme SL, Feeney A, Shipley M, Marmot M. Psychosocial work environment and sickness absence among British civil servants: the Whitehall II Study. *Am J Public Health*. 1996;86:332–340.

In the first paragraph in the section "Externally Assessed Work Characteristics and Sickness Absence," the numbers given as *P* values are correlation coefficients; the *P* symbol should have been a rho.

In: Samuel MC, Osmond DE. Annotation: uncertainties in the estimation of HIV prevalence and incidence in the United States. *Am J Public Health*. 1996;86:627–628.

Dennis Osmond's middle initial should have been H, not E.

In: Susser M, Susser E. Choosing a future for epidemiology: I. eras and paradigms. Am J Public Health. 1996;86:668–673. In the reference list, references 1 through 3 were incorrectly ordered: reference 1 should have been Susser M, "Epidemiology today"; reference 2, Kuhn TS, The Structure of Scientific Revolutions; reference 3, Susser M, "Epidemiology in the United States after World War II." The reference numbers in the text are correct.

In: Susser M, Susser E. Choosing a future for epidemiology: II. from black box to Chinese boxes and eco-epidemiology. *Am J Public Health*. 1996;86:674–677.

In the third paragraph in the section "The Need for a New Paradigm," the superscript 3 at the end of the first sentence should have been a 4.

Corrigendum: Genome-wide association study identifies new HLA class II haplotypes strongly protective against narcolepsy

Hyun Hor, Zoltán Kutalik, Yves Dauvilliers, Armand Valsesia, Gert J Lammers, Claire E H M Donjacour, Alex Iranzo, Joan Santamaria, Rosa Peraita Adrados, José L Vicario, Sebastiaan Overeem, Isabelle Arnulf, Ioannis Theodorou, Poul Jennum, Stine Knudsen, Claudio Bassetti, Johannes Mathis, Michel Lecendreux, Geert Mayer, Peter Geisler, Antonio Benetó, Brice Petit, Corinne Pfister, Julie Vienne Bürki, Gérard Didelot, Michel Billiard, Guadalupe Ercilla, Willem Verduijn, Frans H J Claas, Peter Vollenwider, Gerard Waeber, Dawn M Waterworth, Vincent Mooser, Raphaël Heinzer, Jacques S Beckmann, Sven Bergmann & Mehdi Tafti

Nat. Genet. 42, 786–789 (2010); published online 15 August 2010; corrected after print 27 October 2010

In the version of this article initially published, the name of author Peter Vollenweider was incorrectly written as Peter Vollenwider. Also, Claudio Bassetti's affiliation was incorrectly listed as Neurocentro (Ente ospedaliero cantonale) della Svizzera Italiana, Ospedale Civico, Lugano, Switzerland. His correct affiliation is Department of Neurology, University Hospital Zurich, Zurich, Switzerland. These errors have been corrected in the HTML and PDF versions of the article.

Corrigendum: Twelve type 2 diabetes susceptibility loci identified through large-scale association analysis

Benjamin F Voight, Laura J Scott, Valgerdur Steinthorsdottir, Andrew P Morris, Christian Dina, Ryan P Welch, Eleftheria Zeggini, Cornelia Huth, Yurii S Aulchenko, Gudmar Thorleifsson, Laura J McCulloch, Teresa Ferreira, Harald Grallert, Najaf Amin, Guanming Wu, Cristen J Willer, Soumya Raychaudhuri, Steve A McCarroll, Claudia Langenberg, Oliver M Hofmann, Josée Dupuis, Lu Qi, Ayellet V Segrè, Mandy van Hoek, Pau Navarro, Kristin Ardlie, Beverley Balkau, Rafn Benediktsson, Amanda J Bennett, Roza Blagieva, Eric Boerwinkle, Lori L Bonnycastle, Kristina Bengtsson Boström, Bert Bravenboer, Suzannah Bumpstead, Noisël P Burtt, Guillaume Charpentier, Peter S Chines, Marilyn Cornelis, David J Couper, Gabe Crawford, Alex S F Doney, Katherine S Elliott, Amanda L Elliott, Michael R Erdos, Caroline S Fox, Christopher S Franklin, Martha Ganser, Christian Gieger, Niels Grarup, Todd Green, Simon Griffin, Christopher J Groves, Candace Guiducci, Samy Hadjadj, Neelam Hassanali, Christian Herder, Bo Isomaa, Anne U Jackson, Paul R V Johnson, Torben Jørgensen, Wen H L Kao, Norman Klopp, Augustine Kong, Peter Kraft, Johanna Kuusisto, Torsten Lauritzen, Man Li, Aloysius Lieverse, Cecilia M Lindgren, Valeriya Lyssenko, Michel Marre, Thomas Meitinger, Kristian Midthjell, Mario A Morken, Narisu Narisu, Peter Nilsson, Katharine R Owen, Felicity Payne, John R B Perry, Ann-Kristin Petersen, Carl Platou, Christine Proença, Inga Prokopenko, Wolfgang Rathmann, N William Rayner, Neil R Robertson, Ghislain Rocheleau, Michael Roden, Michael J Sampson, Richa Saxena, Beverley M Shields, Peter Shrader, Gunnar Sigurdsson, Thomas Sparsø, Klaus Strassburger, Heather M Stringham, Qi Sun, Amy J Swift, Barbara Thorand, Jean Tichet, Tiinamaija Tuomi, Rob M van Dam, Timon W van Haeften, Thijs van Herpt, Jana V van Vliet-Ostaptchouk, G Bragi Walters, Michael N Weedon, Cisca Wijmenga, Jacqueline Witteman, The MAGIC investigators, The GIANT Consortium, Richard N Bergman, Stephane Cauchi, Francis S Collins, Anna L Gloyn, Ulf Gyllensten, Torben Hansen, Winston A Hide, Graham A Hitman, Albert Hofman, David J Hunter, Kristian Hveem, Markku Laakso, Karen L Mohlke, Andrew D Morris, Colin N A Palmer, Peter P Pramstaller, Igor Rudan, Eric Sijbrands, Lincoln D Stein, Jaakko Tuomilehto, Andre Uitterlinden, Mark Walker, Nicholas J Wareham, Richard M Watanabe, Gonçalo R Abecasis, Bernhard O Boehm, Harry Campbell, Mark J Daly, Andrew T Hattersley, Frank B Hu, James B Meigs, James S Pankow, Oluf Pedersen, H-Erich Wichmann, Inês Barroso, Jose C Florez, Timothy M Frayling, Leif Groop, Rob Sladek, Unnur Thorsteinsdottir, James F Wilson, Thomas Illig, Philippe Froguel, Cornelia M van Duijn, Kari Stefansson, David Altshuler, Michael Boehnke & Mark I McCarthy Nat. Genet. 42, 579-589 (2010); published online 27 June 2010; corrected after print 27 August 2010

In the version of this article initially published, there was an error in Table 1. Specifically, for rs5945326, the risk and non-risk alleles were reversed. The correct risk allele at rs5945326 is A, the non-risk allele is G and the risk allele frequency in HapMap CEU is 0.79. These errors have been corrected in the HTML and PDF versions of the article.

Erratum: Genome-wide association identifies multiple ulcerative colitis susceptibility loci

Dermot P B McGovern, Agnès Gardet, Leif Törkvist, Philippe Goyette, Jonah Essers, Kent D Taylor, Benjamin M Neale, Rick T H Ong, Caroline Lagacé, Chun Li, Todd Green, Christine R Stevens, Claudine Beauchamp, Phillip R Fleshner, Marie Carlson, Mauro D'Amato, Jonas Halfvarson, Martin L Hibberd, Mikael Lördal, Leonid Padyukov, Angelo Andriulli, Elisabetta Colombo, Anna Latiano, Orazio Palmieri, Edmond-Jean Bernard, Colette Deslandres, Daan W Hommes, Dirk J de Jong, Pieter C Stokkers, Rinse K Weersma, The NIDDK IBD Genetics Consortium, Yashoda Sharma, Mark S Silverberg, Judy H Cho, Jing Wu, Kathryn Roeder, Steven R Brant, L Phillip Schumm, Richard H Duerr, Marla C Dubinsky, Nicole L Glazer, Talin Haritunians, Andy Ippoliti, Gil Y Melmed, David S Siscovick, Eric A Vasiliauskas, Stephan R Targan, Vito Annese, Cisca Wijmenga, Sven Pettersson, Jerome I Rotter, Ramnik J Xavier, Mark J Daly, John D Rioux & Mark Seielstad Nat. Genet. 42, 332–337 (2010); published online 14 March 2010; corrected after print 29 March 2011

In the version of this article initially published, Kathryn Roeder's affiliation was incorrect. Her correct affiliation is the Department of Statistics, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA. The error has been corrected in the HTML and PDF versions of the article.



Atmos. Chem. Phys., 11, 11919, 2011 www.atmos-chem-phys.net/11/11919/2011/ doi:10.5194/acp-11-11919-2011 © Author(s) 2011. CC Attribution 3.0 License.



Corrigendum to

"Experimental study of the role of physicochemical surface processing on the IN ability of mineral dust particles" published in Atmos. Chem. Phys., 11, 11131–11144, 2011

D. Niedermeier¹, S. Hartmann¹, T. Clauss¹, H. Wex¹, A. Kiselev^{1,2}, R. C. Sullivan³, P. J. DeMott³, M. D. Petters^{3,4}, P. Reitz^{5,6}, J. Schneider⁵, E. Mikhailov⁷, B. Sierau⁸, O. Stetzer⁸, B. Reimann⁹, U. Bundke⁹, R. A. Shaw¹⁰, A. Buchholz¹¹, T. F. Mentel¹¹, and F. Stratmann¹

In the abstract of the manuscript, the following sentence needs to be corrected: "A possible explanation could be the chemical transformation of ice active metal silicates to metal sulfates." "metal silicates" is wrong. It should be "aluminosilicates".



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CORRIGENDA: LOW-DIMENSIONAL REPRESENTATIONS OF QUASI-SIMPLE GROUPS

GERHARD HISS AND GUNTER MALLE

Abstract

This paper contains corrections to the tables of low-dimensional representations of quasi-simple groups published in the paper, 'Low-dimensional representations of quasi-simple groups', *LMS Journal of Computation and Mathematics* 4 (2001) 22–63.

In our paper 'Low-dimensional representations of quasi-simple groups', we determine all the absolutely irreducible representations of quasi-simple groups of dimension at most 250, excluding those of groups of Lie type in their defining characteristic.

Martin Liebeck has kindly pointed out to us three omissions in our tables: the 12- and 13-dimensional representations of the group $L_3(3)$, and the 248-dimensional representations of $L_4(5)$ in characteristic 2.

When checking our arguments and calculations we realized that in fact all the representations of $L_3(3)$ were missing, as well as the representations of $L_4(5)$ of dimension exceeding 247.

The absolutely irreducible representations of $L_3(3)$ can be found in the modular Atlas [7]. This leads to the first part of Table 1 below.

		•		
d	G	ℓ	field	ind
11	$L_3(3)$	13		+
12	$L_3(3)$	0, 2		+
13	$L_3(3)$	0, 13		+
16	$L_3(3)$	0, 2	d13	0
16	$L_3(3)$	13		+
26	$L_3(3)$	0, 13	i2	0
26	$L_3(3)$	$\neq 3$		+
27	$L_3(3)$	0		+
39	$L_3(3)$	0, 13		+
248	$2.L_4(5)$	$\neq 2, 5$		+
248	$L_4(5)$	2		+

Table 1: The missing representations

The absolutely irreducible representations of $L_4(5)$ of degree up to 247 were classified by Guralnick and Tiep [3], and are contained in the original table. From the proofs given by Tiep

and Zalesskii [9, Section 3], for example, it can be seen that the only other representations of degree at most 250 must arise as composition factors of the two ordinary 248-dimensional representations, which are both defined over the rationals [8, Proposition 13.5.6]. Since these characters are parametrized by elements of 2-power order in the dual group, [5, Proposition 1] shows that they remain irreducible for all primes $\ell \neq 2$, 5. This yields the second-last entry in Table 1.

To obtain the last entry of our table, note first that, by Broué–Michel [1], the two ordinary representations of degree 248 lie in the principal 2-block of $L_4(5)$. Using the decomposition numbers in [6], we find that the principal 2-block of $GL_4(5)$ has irreducible Brauer characters of degrees 1, 154, 496, 3224, and 11904. By Clifford theory, the restriction to $SL_4(5)$ of each of these characters has 1, 2, or 4 irreducible constituents of the same degree. By the Seitz–Zalesskii bound, the smallest non-trivial representation of $SL_4(5)$ has degree at least 152. Hence the character of degree 496 splits into two characters of degree 248 which are the reductions modulo 2 of the two ordinary characters of this degree. Jon Thackray has kindly constructed these representations over the field with two elements and computed their Frobenius–Schur indicators.

The existence of this representation had already been shown in [2].

Finally, Jon Thackray has pointed out to us that the Frobenius–Schur indicator for the 132-dimensional representations of the Harada–Norton group HN is –, rather than +, as given in our earlier table (see [4, Table 3]). This indicator has been known to the Atlas people for a long time.

For the convenience of the reader, we present the complete, corrected list of absolutely irreducible respresentations of quasi-simple groups in Table 2 below.

Table 2: Absolutely irreducible representations of quasi-simple groups, corrected

d	G	ℓ	field	ind
3	3.A ₆	0, 2	z3, b5	0
3	3.21_{6}	5	<i>z</i> 3	0
3	$3.\mathfrak{A}_7$	5	z3, b7	0
4	\mathfrak{A}_6	2		_
4	$2.\mathfrak{A}_{6}$	0, 5		_
4	\mathfrak{A}_7	2	<i>b</i> 7	0
4	$2.\mathfrak{A}_7$	7		_
4	$2.\mathfrak{A}_7$	$\neq 2, 7$	<i>b</i> 7	0
4	$4_2.L_3(4)$	3	i1, r7	0
4	$2.U_4(2)$	0, 5	<i>z</i> 3	0
5	\mathfrak{A}_6	0, 5		+
5	\mathfrak{A}_7	7		+
5	$U_4(2)$	0, 5	<i>z</i> 3	0
5	M_{11}	3	i2, b11	0
6	3.21_{6}	0, 5	<i>z</i> 3	0
6	$6.\mathfrak{A}_{6}$	0, 5	z3, r2	0

CORRIGENDUM

Addison L. Sears-Collins

Swiss Re Environmental and Commodity Markets Group, New York, New York

DAVID M. SCHULTZ

Division of Atmospheric Sciences, Department of Physical Sciences, University of Helsinki, and Finnish Meteorological Institute, Helsinki, Finland

ROBERT H. JOHNS

Norman, Oklahoma

Due to an oversight, an incorrect figure in Sears-Collins et al. (2006) was printed as Fig. 8. The correct Fig. 8 is reproduced below.

In addition, after publication, we discovered the similarity of our research with that of a previous study (Wallace 1975). Wallace (1975) examined the diurnal cycles of trace

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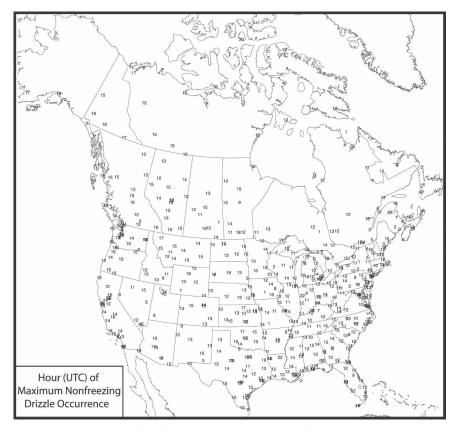


Fig. 8. Hour (UTC) of maximum nonfreezing drizzle occurrence.

precipitation events across the United States. Thus, their study provides a natural comparison to our diurnal cycles of drizzle occurrence.

Wallace (1975, his Figs. 4 and 9) examined the diurnal cycle in trace precipitation at many stations across the United States. His results are consistent with our results (Sears-Collins et al. 2006, their Figs. 9–10) that show relatively small diurnal cycles at many stations, except for stations along the Texas and Pacific coasts. Unfortunately, we did not compute the diurnal cycle for any stations in the southeast United States, where Wallace (1975) also found large amplitudes in the diurnal cycle.

For much of the United States in both summer and winter, Wallace (1975, his Figs. 4 and 9) observed a morning maximum in trace precipitation—results consistent with ours (Sears-Collins et al. 2006, their Fig. 8).

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Corrigenda to the Approved Lists of Bacterial Names Edited for the International Committee on Systematic Bacteriology by

L. R. HILL, V. B. D. SKERMAN, AND P. H. A. SNEATH3*

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This list contains factual corrections to the Approved Lists of Bacterial Names (2) that have been brought to the attention of the International Committee on Systematic Bacteriology. Some of the matters referred to the editors concern taxonomic problems, and enquirers have been advised in such cases to consider referring the matter to the Judicial Commission. The Approved Lists is the new starting document for bacterial names, and it is therefore noted that cases of omission from the Approved Lists of well-established names should be remedied by reviving the names under Rule 28a of the *International Code of Nomenclature of Bacteria* (1).

Therefore, the present list contains factual corrections on matters such as bibliographic and typographic errors and orthography. A small number of author citations have been amended where it is clear that this should be done. In a work as complex as the Approved Lists, it has not been possible to check all details against the earlier literature, so it is likely that a few errors remain undetected. However, it is hoped that this list contains the great majority of errors.

Page(s) Column Paragrap		(s) Line(s)	Change		
	Paragraph(s)		From	То	
227	1	9	2	Gottingen,	Schnittspahnstrasse, Darmstadt,
227 233-238	1	20	2	Landbouwhoge school, Wageningen,	Technische Hogeschol, Delft, TRIBE and entries for Tribes from p. 233, column 1, paragraph 1 (Acetobactereae), to p. 234, column 2, paragraph 2 (Wolbachieae), should follow Families after Vitreoscillaceae on p. 238
236	1	2	5	See below	Enterobacteriaceae Rahn 1937 Rahn, O. 1937. Zentralblatt fur Bakteriologie, Parasitenkunde und Hygiene. Abteilung II. 94:369–403. Type genus Escherichia Castellani and Chalmers 1919
236	1	9	1–6	† Editor's note 1979).	Omit
236	2	1	1	Hovind-Houger 1978	Hovind-Hougen 1979
			2	Hovind-Houger, K. 1978.	Hovind-Hougen, K. 1979.
238	1	1 and 2		- '	These paragraphs should be reversed
242	2	1	7	9: 771–775.	19:771–775.
244	1	7	1	Palleroni 1978	Palleroni 1979
244	1	7	2	Palleroni, N.J. 1978.	Palleroni, N.J. 1979.
244	1	7	5	Palleroni, N.J. 1978.	Palleroni, N.J. 1979.
247	2	4	1	pacifus	pacificus
250	2	3	6	Type species: A. serpens	Type species: A. serpens (Müller 1786)
252	$\bar{2}$	3	1	Muller	Müller
252	$\overline{2}$	3	3	Muller	Müller
254	$\bar{1}$	5	1	Dubinin	Dubinina
254	1	5	$\overline{2}$	Dubinin	Dubinina
255	1	4	1	A. brasiliense	A. brasilense
263	2	4	1-4	(Fujino, Miwatani, Tamura 1965)	(Fujino, Okuno, Nakada, Aoyama, Fukai, Mukai and Ueho 1951)
263	2	4	6-10	Fujino, T., T. Miwatani, 8:63–71;	Fujino, T., Y. Okuno, D. Nakada, A. Aoyama, K. Fukai, T. Mukai and T. Ueho. 1951. Journal of the Japanese Association of Infectious Diseases 25:11;
264	2	1	1	24: 21–18.	24: 21–28.
265	2	5	1	thermophilium	thermophilum
282	2	4	5	10: 51–545;	10: 517–545;

^{*} Corresponding author.

Continued on following page

Page(s)	Column	Paragraph(s)	Line(s)	Change		
				From	То	
362	2	3	1-9	(Dyar 1895) Bergey, Harrison, Breed, Hammer and Huntoon 1923 Dyar H. G. 1895. Annals of the New York Academy of Sciences 8:322–380; Bergey, D. H., F. C. Harrison, R. S. Breed, B. W. Hammer and F. M. Huntoon. 1923. Bergey's Manual of Determinative Bacteriology, 1st ed. The Williams and Wilkins Co., Baltimore. pp. 1–442.	(Lehmann and Neumann 1896) Breed, Murray and Hitchens 1948 Lehmann, K. B. and R. Neumann. 1896. Atlas and Grundriss der Bakteriologie un Lehrbuch der speciellen bakteriologische Diagnostik. 1st ed. J. F. Lehmann, Munchen; Breed, R. S., E. G. D. Murray and A. P. Hitchens. 1948. Bergey's Manual of Determinative Bacteriology, 6th ed. The Williams and Wilkins Co., Baltimore. pp. 1–1529.	
367	1	5	6	62: 189.	62: 186–189.	
367	2	8	2	Pier, G. B. and S. H. Madin.	Pier, G. B. and S. H. Madin. 1976.	
372	1	4	1	Waksman 1957	Waksman 1953	
372	1	4	3-7	Waksman, S. A. 1957 in Breed, R. S., E. G. D. Murray and N. R. Smith (eds). Bergey's Manual of Determinative Bacteriology, 7th ed. The Williams and Wilkins Co., Baltimore.	Waksman, S. A. 1953 in Waksman S. A. and H. A. Lechevalier. Guide to the classification of the actinomycetes and their antibiotics. The Williams and Wilkins Co., Baltimore. pp. 1–246.	
395 396	2 1	5 4	1 4-5	parvullus Japanese Medical Journal 5:237–338.	parvulus Japanese Journal of the Medical Sciences and Biology 5:327-339.	
400	2	3	1	castelarense	castelarensis	
404	1	3	1	violaceoniger	violaceusniger	
406	2	1	1	KCC A-2006	KCC A-0026	
406	$\frac{1}{2}$	3	ī	indianensis	indianense	
407	2	3	1	aureoversales	aureoversile	
408	1	4	1-2	Baldacci and Locci 1974	(Benedict, Dvonch, Shotwell, Pridham and Lindenfelser 1952) Baldacci, Farina and Locci 1966	
408	1	4	3-4	Baldacci, E. and R. Locci. 1974. Bergey 8.	Benedict, R. G., W. Dvonch, O. L. Shotwell, T. G. Pridham and L. A. Lindenfelser. 1952. Antibiotics and Chemotherapy 2:591–594; Baldacci, E., G. Farina and R. Locci. 1966. Giornale d Microbiologia 14:153–171.	
410	2	2	1	olivoreticulum	olivoreticuli	
410	2	5	1	parvisporogenum	parvisporogenes	
411	2	8	1	Tsiklinsky	Tsilinsky	
412	1	1	1	Tsiklinsky, P.	Tsilinsky, P.	
412	ī	ī	3	Tsiklinsky	Tsilinsky	
412	ī	3	1	dichotomica	dichotomicus	
412	ī	6	1	Tsiklinsky	Tsilinsky	
412	i	6	2	Tsiklinsky, P.	Tsilinsky, P.	
415	2	4	6	and Bringmann.	and G. Bringmann.	
416	1	4	1	paraluis-cuniculi	paraluiscuniculi	
417	2	4	1-2	Sakazaki, Iwanami and Fukumi 1963	(Fujino, Okuno, Nakada, Aoyama, Fukai, Mukai and Ueho 1951) Sakazaki, Iwanam and Fukumi 1963	
417	2	4	4-6	Sakazaki, R., S. Iwanami and H. Fukumi. 1963. Japanese Journal of Medical Science and Biology 16:161–188.	Fujino, T., Y. Okuno, D. Nakada, A. Aoyama, K. Fukai, T. Mukai and T. Ueho. 1951. Journal of the Japanese Association of Infectious Diseases 25:11; Sakazaki, R., S. Iwanami and H. Fukum. 1963. Japanese Journal of Medical Science and Biology 16:161-188.	

The editors are grateful to the many workers who have submitted corrections and will be glad to receive any further ones. The officers of the International Committee on Systematic Bacteriology also express their thanks to all those who have contributed to the Approved Lists.

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Retraction

Sphingosine-1-phosphate receptor-2 deficiency leads to inhibition of macrophage proinflammatory activities and atherosclerosis in apoE-deficient mice

Fei Wang, Yasuo Okamoto, Isao Inoki, Kazuaki Yoshioka, Wa Du, Xun Qi, Noriko Takuwa, Koichi Gonda, Yasuhiko Yamamoto, Ryunosuke Ohkawa, Takumi Nishiuchi, Naotoshi Sugimoto, Yutaka Yatomi, Kunitoshi Mitsumori, Masahide Asano, Makoto Kinoshita, and Yoh Takuwa

Original citation: *J Clin Invest*. 2010;120(11):3979–3995. doi:10.1172/JCI42315.

Citation for this retraction: J Clin Invest. 2012;122(3):1131. doi:10.1172/JCI63366.

All authors agree to retract the above article due to multiple use of the same images or manipulation of data in Figures 1A, 2D, 5C, 6B, 6C, and 8A and Supplemental Figure 8E. They are also not able to provide some of the raw data that are used in Figures 2A, 2B, 5, 6, 7C, 8, and 9C, Supplemental Tables 1–4, and Supplemental Figures 2C, 3, 4, 5, 7C, 8A–8C, 8E, 8F, 10A, and 10B. The first author, Fei Wang, has admitted his sole responsibility in altering figures. The authors apologize and deeply regret the impact of this action. However, the authors stand behind data showing that genetic deletion of S1pr2 or pharmacological S1PR2 inhibition alleviates atherosclerosis in *Apoe*^{-/-} mice fed a high-cholesterol diet.

Erratum

Synergy of understanding dermatologic disease and epidermal biology

John R. Stanley

Original citation: J Clin Invest. 2012;122(2):436-439. doi:10.1172/JCI62237.

Citation for this erratum: J Clin Invest. 2012;122(3):1131. doi:10.1172/JCI63339.

The artist for the painting in Figure 3 was misidentified. The image is from Schoolgirls by Nguyen Thanh Binh.

The JCI regrets the error.



Bothered and bewildered, but not bewitched

Unfortunately, we seem to run article amendments (corrections, errata, retractions, addenda) in every issue these days. In the current issue, we have a correction and a retraction — both coming after intensive investigations and peculiar situations we hadn't encountered before.

We are saddened to run another retraction in this issue, especially as the article (1) has only been in print for one month. Soon after the paper was posted online, one of the authors listed on the paper e-mailed our office, stating that he was surprised to see his name listed as a coauthor. He said he had been unaware of the preparation, submission, and acceptance of the article. He had provided an unpublished (at the time of submission) mouse with a floxed GSK-3B gene to the senior author's colleague for an unrelated set of experiments and had not specifically authorized the current set of experiments. He also stated that he had not signed an authorship agreement form, one of our prerequisites for publication.

The *JCI* authorship agreement form is clear about the need for each author to sign it, as it stipulates specific criteria and responsibility for authorship and is meant to ensure that the authors are not infringing on anyone else's proprietary rights. We queried the senior author of the study, Andrew Leask, after verifying that the signature provided on our form was inauthentic. Leask replied that in order to meet our production deadline, he signed the form for his coauthor. As the coauthor denies knowledge of the manuscript or consent to either its submission to or publication in the *JCI*, Leask has agreed to retract the article.

We issue this retraction with regret, knowing that the other coauthors, most likely postdoctoral fellows or students, did years of work and were rewarded with a high-profile publication that now ceases to exist. This is particularly a pity as the data themselves are not under question, but we cannot continue to endorse them. There are also the members of the lab who created the mice to consider — what if they wanted to do the same crosses and investigate the outcomes? Will a retracted paper reflect on their future work?

Our reason for retraction of the manuscript is based solely on the unauthorized signature on the authorship agreement form, but there are other issues at play here.

Some journals only require the signature of the senior/corresponding author on their copyright and agreement forms. Are they adequately protecting themselves and the other authors? We suspect that many senior authors, with coauthors' verbal assent, have signed for their colleagues when those individuals were not readily available. Is verbal agreement enough? Should e-mails or an online verification system be employed? Most vexingly, how should authors deal with a theoretical situation in which a coauthor either is unavailable for an extended period of time (e.g., due to illness) or withholds approval? Removing an author who has contributed key data does not seem to be the answer, but what is?

This retraction isn't the only authorship issue we've encountered lately. We received a letter, after publication of an article, from a researcher who claims he was not listed as a coauthor, despite being substantially involved in the design and discussion of the study and even in the execution of some of the key preliminary experiments. We cannot get involved in the claims of authorship and have referred this to the senior author's institution; perhaps a correction may be forthcoming, but this case underscores our point from a different perspective — the need for open, clear communication among collaborators.

On the topic of authors, yet another recent matter led to one of the most spirited Editorial Board meetings we have yet had. We received a controversial manuscript for review, with the source of the debate being that some of the authors' previous publications had been proven wrong - or, at least, others in the field had not been able to replicate their findings. The Editors had a long discussion about this issue - should we hold these authors to a higher burden of proof? Should we be suspicious of their data? Is it fair to ask more than three (our default number of referees) experts to evaluate it? Should those who claim to have been unable to replicate the data be particularly sought or instead specifically excluded as reviewers? In the end, we chose from a list of referees who were agreed by all to be above the fray, and we will abide by their recommendations.

In addition to the retraction this month. we are issuing a correction of an article from 2002 (2) about which there was originally some concern (3). After a thorough investigation into whether duplication of some panels in the published article was a deliberate falsification, the authors' institution has determined that the authors made an honest error — a panel that was duplicated in our version was correct in the first author's PhD thesis and is now being replaced; some omitted wording in a figure legend has now been added to clarify further duplication of panels later in the article. Another paper, however, from the same set of authors is likely to be retracted from Blood after the investigating committee found evidence that indicated falsification of figures (4). But in the same vein as in the previous case, we felt that the current data in question are the only set that is relevant – a cloud of suspicion over other or previous works shouldn't unduly influence our judgment.

The *JCI* may not always have the perfect solution to these problems, nor may we always be able to prevent them, but our policy is to have open discussion to promote fairness, both in our actions and those of our authors.

Ushma S. Neill Executive Editor

Laurence A. Turka Editor in Chief

- 1. Kapoor, M., et al. 2008. GSK-3b in mouse fibroblasts controls wound healing and fibrosis through an endothelin-1-dependent mechanism. *J. Clin. Invest.* **118**:3279–3290.
- 2. Reyes, M., et al. 2002. Origin of endothelial progenitors in human postnatal bone marrow. *J. Clin. Invest.* **109**:337–346.
- 3. Aldhous, P., and Reich, E.S. 2007 March 21. Fresh questions on stem cell findings. NewScientist.com news service. http://www.newscientist.com/channel/opinion/mg19325964.600-fresh-questions-on-stem-cell-findings.html.
- 4. Aldhous, P., and Reich, E.S. 2008 October 7. Stemcell researcher guilty of falsifying data. NewScientist. com news service. http://www.newscientist.com/ article/dn14886-stemcell-researcher-guilty-offalsifying-data.html.

Summary

Journal editors should consider retracting a publication if:

- they have clear evidence that the findings are unreliable, either as a result of misconduct (e.g. data fabrication) or honest error (e.g. miscalculation or experimental error)
- the findings have previously been published elsewhere without proper crossreferencing, permission or justification (i.e. cases of redundant publication)
- it constitutes plagiarism
- it reports unethical research

Journal editors should consider issuing an expression of concern if:

- they receive inconclusive evidence of research or publication misconduct by the authors
- there is evidence that the findings are unreliable but the authors' institution will not investigate the case
- they believe that an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive
- an investigation is underway but a judgement will not be available for a considerable time

Journal editors should consider issuing a correction if:

- a small portion of an otherwise reliable publication proves to be misleading (especially because of honest error)
- the author / contributor list is incorrect (i.e. a deserving author has been omitted or somebody who does not meet authorship criteria has been included)

Retractions are not usually appropriate if:

a change of authorship is required but there is no reason to doubt the validity of the findings

Notices of retraction should:

- be linked to the retracted article wherever possible (i.e. in all electronic versions)
- clearly identify the retracted article (e.g. by including the title and authors in the retraction heading)
- be clearly identified as a retraction (i.e. distinct from other types of correction or comment)
- be published promptly to minimize harmful effects from misleading publications

- be freely available to all readers (i.e. not behind access barriers or available only to subscribers)
- state who is retracting the article
- state the reason(s) for retraction (to distinguish misconduct from honest error)
- avoid statements that are potentially defamatory or libellous

The purpose of retraction

Retraction is a mechanism for correcting the literature and alerting readers to publications that contain such seriously flawed or erroneous data that their findings and conclusions cannot be relied upon. Unreliable data may result from honest error or from research misconduct.

Retractions are also used to alert readers to cases of redundant publication (i.e. when authors present the same data in several publications), plagiarism, and failure to disclose a major competing interest likely to influence interpretations or recommendations.

The main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave.

What form should a retraction take?

Notices of retraction should mention the reasons and basis for the retraction, to distinguish cases of misconduct from those of honest error; they should also specify who is retracting the article. They should be published in all versions of the journal (i.e. print and/or electronic). It is helpful to include the authors and title of the retracted article in the retraction heading.

Retracted articles should be clearly identified as such in all electronic sources (e.g. on the journal website and any bibliographic databases). Editors are responsible for ensuring that retractions are labelled in such a way that they are identified by bibliographic databases (which should also include a link to the retracted article). The retraction should appear on all electronic searches for the retracted publication.

Retracted articles should not be removed from printed copies of the journal (e.g. in libraries) nor from electronic archives but their retracted status should be indicated as clearly as possible.



Which publications should be retracted?

If only a small part of an article reports flawed data, and especially if this is the result of genuine error, then the problem is best rectified by a correction or erratum. (The term erratum usually refers to a production error, caused by the journal. The term corrigendum (or correction) usually refers to an author error.) Partial retractions are not helpful because they make it difficult for readers to determine the status of the article and which parts may be relied upon.

Similarly, if only a small section of an article (e.g. a few sentences in the discussion) is plagiarised, editors should consider whether readers (and the plagiarised author) would be best served by a correction (which could note the fact that text was used without appropriate acknowledgement) rather than retracting the entire article which may contain sound, original data in other parts.

Retraction should usually be reserved for publications that are so seriously flawed (for whatever reason) that their findings or conclusions should not be relied upon.

If redundant publication has occurred (i.e. authors have published the same data or article in more than one journal without appropriate justification, permission or crossreferencing) the journal that first published the article may issue a notice of redundant publication but should not retract the article unless the findings are unreliable. Any journals that subsequently publish a redundant article should retract it and state the reason for the retraction.

If an article is submitted to more than one journal simultaneously, and is accepted and published in both journals (either electronically or in print) at the same time, precedence may be determined by the date on which a licence to publish or a copyright transfer agreement was signed by the authors.

In cases of partial overlap (i.e. when authors present some new findings in an article that also contains a substantial amount of previously published information) editors need to consider whether readers are best served if the entire article is retracted or whether it would be best to issue a notice of redundant publication clarifying which aspects had been published previously and providing appropriate cross-references to the earlier work. This will depend on the amount of overlap. Editors should bear in mind that the main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave.

Only published items can be retracted. Guidelines on dealing with redundant publications identified in submitted manuscripts can be found in the relevant COPE flowchart [http://publicationethics.org/files/u2/01A_Redundant_Submitted.pdf]. Posting a final version on a website constitutes publication even if an article has not appeared (or will not appear) in print. If an article is retracted before it appears in the print version of a journal, the electronic version should be retained on the journal's website with a clear notice of retraction and it should be included on bibliographic databases (e.g. with a digital object identifier [doi] or other permanent citation that will locate it) even if it does not appear in the printed journal and therefore does not receive a page allocation. This is because electronic versions may already have been accessed and cited by researchers who need to be alerted to the fact that the article has been retracted.



Who should issue the retraction?

Articles may be retracted by their author(s) or by the journal editor. In some cases, retractions are issued jointly or on behalf of the journal's owner (e.g. a learned society or publisher). However, since responsibility for the journal's content rests with the editor s/he should always have the final decision about retracting material. Journal editors may retract publications (or issue expressions of concern) even if all or some of the authors refuse to retract the publication themselves.

When should a publication be retracted?

Publications should be retracted as soon as possible after the journal editor is convinced that the publication is seriously flawed and misleading (or is redundant or plagiarised). Prompt retraction should minimize the number of researchers who cite the erroneous work, act on its findings or draw incorrect conclusions, such as from 'double counting' redundant publications in meta-analyses or similar instances.

If editors have convincing evidence that a retraction is required they should not delay retraction simply because the authors are not cooperative. However, if an allegation of misconduct related to a potential retraction results in a disciplinary hearing or institutional investigation, it is normally appropriate to wait for the outcome of this before issuing a retraction (but an expression of concern may be published to alert readers in the interim – see below).

What should editors do in the face of inconclusive evidence about a publication's reliability?

If conclusive evidence about the reliability of a publication cannot be obtained (e.g. if authors produce conflicting accounts of the case, authors' institutions refuse to investigate alleged misconduct or to release the findings of such investigations, or if investigations appear not to have been carried out fairly or are taking an unreasonably long time to reach a conclusion) editors should issue an expression of concern rather than retracting the publication immediately.

Such expressions of concern, like retraction notices, should be clearly linked to the original publication (i.e. in electronic databases and by including the author and title of the original publication as a heading) and should state the reasons for the concern. If more conclusive evidence about the publication's reliability becomes available later, the expression of concern should be replaced by a notice of retraction (if the article is shown to be unreliable) or by an exonerating statement linked to the expression of concern (if the article is shown to be reliable and the author exonerated).

Should retraction be applied in cases of disputed authorship?

Authors sometimes request that articles are retracted when authorship is disputed after publication. If there is no reason to doubt the validity of the findings or the reliability of the data it is not appropriate to retract a publication solely on the grounds of an authorship dispute. In such cases, the journal editor should inform those involved in the dispute that s/he cannot adjudicate in such cases but will be willing to publish a correction to the author/contributor list if the authors/contributors (or their institutions) provide appropriate proof that such a change is justified.

(For authorship disputes occurring before publication, see the relevant COPE flowcharts. http://publicationethics.org/files/u2/04A_Author_Add_Submitted.pdf and http://publicationethics.org/files/u2/04B_Author_Remove_Submitted.pdf)

Can authors dissociate themselves from a retracted publication?

If retraction is due to the actions of some, but not all, authors of a publication, the notice of retraction should mention this. However, most editors consider that authorship entails some degree of joint responsibility for the integrity of the reported research so it is not appropriate for authors to dissociate themselves from a retracted publication even if they were not directly culpable of any misconduct.

Are there grounds for legal proceedings if an author sues a journal for retracting, or refusing to retract, a publication?

Authors who disagree with a retraction (or whose request to retract a publication is refused) sometimes threaten journal editors with legal action. Concern over litigation can make editors reluctant to retract articles, especially in the face of opposition from authors.

Journals' instructions for authors should explain the retraction procedure and describe the circumstances under which articles might be retracted. This information should be incorporated (e.g. by references) into any publishing agreements and brought to the authors' attention. However, even if the publishing agreement or journal instructions do not set out specific conditions for retraction, authors usually would not have grounds for taking legal action against a journal over the act of retraction if it follows a suitable investigation and proper procedures.

However, legal advice may be helpful to determine appropriate wording for a notice of retraction or expression of concern to ensure that these are not defamatory or libellous. Nevertheless, retraction notices should always mention the reason(s) for retraction to distinguish honest error from misconduct.

Whenever possible, editors should negotiate with authors and attempt to agree a form of wording that is clear and informative to readers and acceptable to all parties. If authors consent to the wording of a retraction statement, this provides defence against a libel claim. However, prolonged negotiations about wording should not be allowed to delay the publication of a retraction unreasonably and editors should publish retractions even if consensus cannot be reached.

Further reading

ICMJE guidelines: http://www.icmje.org/publishing_2corrections.html

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