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Director, National Library of Medicine

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Library Selection Technical Review Committee

National Library of Medicine
National Institutes of Health
8600 Rockville Pike
Bethesda MD 20894 USA

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[Detailed contact information of signatories available upon request]

Dear Director Lindberg, Deputy Director Humphreys, Associate Director Kotzin, and members of the Literature Selection Technical Review Committee,

We, the undersigned, respectfully request that the journal *Medical Hypotheses* be reviewed for MEDLINE deselection at the earliest convenience of the Literature Selection Technical Review Committee (LSTRC). *Medical Hypotheses* does not appear to meet the standards for MEDLINE listing as established by the National Library of Medicine,ⁱ and recent publications in the journal are inconsistent with the stated missions of the National Library of Medicineⁱⁱ and the National Institutes of Health.ⁱⁱⁱ We outline our reasons in detail below.

1. Articles in *Medical Hypotheses* are not subject to peer review or traditional editorial review, compromising the journal's quality. According to the LSTRC Journal Selection Factsheet,^{iv} MEDLINE-indexed journals should show evidence of quality editorial oversight, including "features that contribute to the objectivity, credibility, and quality" of the journal's contents. In the scientific literature, peer review and editorial oversight are the arbiters of quality. The "Aims and Scope" of *Medical Hypotheses*^v reveal explicitly that peer review is not practiced by this journal in any form and that changes to submitted articles are not made; instead, articles are accepted or rejected by a single editor who views himself as a "'chooser' not a 'changer.'"^{vi} There is no evidence of editorial oversight in the traditional sense of suggesting changes and revisions to ensure or improve quality. The journal's quality may also be negatively affected by unusual authorship patterns.^{vii}

2. *Medical Hypotheses* has undergone "major changes in ... scientific quality or editorial process" during the past six years, satisfying the NLM's criteria for a review and possible deselection.^{viii} Since 2003 (when the current editor, Bruce G. Charlton, was appointed), the number

of *Medical Hypotheses* publications per year and per issue has doubled.^{ix} Concomitantly, the median time between article submission and acceptance has declined from about three months to *three days*.^x A dramatic increase in quantity, combined with a precipitous decline in time allotted for reading submissions, cannot be conducive to maintenance of journal quality, particularly in the absence of a peer review process. Since some articles are accepted on the day of submission or the following day, it is unlikely that all submissions are read thoroughly prior to acceptance. More than doubling the number of articles that could be cited in other publications has had a predictably inflationary effect on the journal's Impact Factor, which rose from 0.6 to 1.3 during the current editor's first three years with the journal.^{xi} Under Charlton, the number of *Medical Hypotheses* articles citing other *Medical Hypotheses* publications has more than doubled.^{xii} These major changes appear to have been pursued to raise the journal's impact factor without regard for scientific quality.

3. *Medical Hypotheses* publications do not generally fit into any of the seven publication types sought by the LSTRC.^{xiii} Currently, *Medical Hypotheses* contains two types of publications: editorials and letters to the editor. This classification is appropriate, since the published works represent only the opinions of the authors, as chosen for publication by one editor. A journal consisting entirely of editorials and correspondence does not appear to satisfy the NLM criteria for MEDLINE inclusion.

4. *Medical Hypotheses* has developed a reputation for publishing trivial and occasionally offensive articles with no obvious relation to genuine medical research.^{xiv}

5. *Medical Hypotheses* has become a tool for the legitimization of at least one pseudoscientific movement with aims antithetical to the public health goals of the NIH and the NLM. AIDS denialism questions the existence of the Human Immunodeficiency Virus (HIV) and/or its role in causing AIDS.^{xv} The public health consequences of this movement have been dire, particularly in South Africa, where several hundred thousand people are estimated to have died because availability of treatments was delayed due to the influence of AIDS denialists.^{xvi} *Medical Hypotheses*, with its lack of peer review and careful editorial oversight, has published numerous articles advancing AIDS denialism,^{xvii} allowing individual denialists, none of whom has ever published original research on HIV, to claim legitimacy as HIV researchers because their work has, after all, appeared in a "scientific" journal. In the most recent of these articles,^{xviii} two prominent denialists, David Rasnick and Peter Duesberg, along with several co-authors, claim ludicrously that HIV and AIDS have had no significant effect on public health in Africa and that antiviral medication has had no effect on AIDS mortality in North America and Europe. The authors make these claims by selectively quoting and misquoting the legitimate scientific literature in a manner that even the most cursory editorial oversight could not allow. We conclude that the false claims in this paper were not vetted by the editor of *Medical Hypotheses* and that the journal, by publishing this and similar papers, has contributed significantly to the spread of medical misinformation and loss of life and wellbeing.

In conclusion, we submit that *Medical Hypotheses* is a journal of low quality, lacking the proper oversight of peer review or even responsible editorial review. The journal's publications are of limited if any value to medical research, including articles not only with complete irrelevance to medicine, but also with potentially negative consequences for public health and the goals of the

NIH. We urge the LSTRC to review *Medical Hypotheses* in light of this information and to deselect this journal from MEDLINE listing.

Thank you,

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Notes

ⁱ <http://www.nlm.nih.gov/pubs/factsheets/jsel.html#>

ⁱⁱ <http://www.nlm.nih.gov/about/functstatement.html> The “advancement of medical and related sciences” is not served by the non-peer-reviewed publication of misinformation and deliberate misrepresentations of peer-reviewed science, nor can such misinformation be considered “information important to the progress of medicine and health.”

ⁱⁱⁱ <http://www.nih.gov/about/#mission> Pseudoscientific hoaxes, misinformation, and editorial fringe hypotheses do not “expand the knowledge base in medical and associated sciences,” nor do they “exemplify and promote the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science.”

^{iv} <http://www.nlm.nih.gov/pubs/factsheets/jsel.html#>

^v http://www.elsevier.com/wps/find/journaldescription.cws_home/623059/description#description

“Medical Hypotheses takes a deliberately different approach to review: the editor sees his role as a ‘chooser’, not a ‘changer’, choosing to publish what are judged to be the best papers from those submitted. The Editor sometimes uses external referees to inform his opinion on a paper, but their role is as an information source and the Editor’s choice is final. The papers chosen may contain radical ideas, but may be judged acceptable so long as they are coherent and clearly expressed. The authors’ responsibility for the integrity, precision and accuracy of their work is paramount.”

^{vi} *ibid.*

^{vii} *Medical Hypotheses* appears to include a disproportionate number of articles with a single author and/or authors who publish only or mostly in *Medical Hypotheses* itself. This observation holds as well for the editor-in-chief and several members of the editorial board, who have publication records consisting mainly of *Medical Hypotheses* pieces and letters to the editor or commentaries in other journals. (More detailed analysis is available on request.) The single author observation is disturbing: since *Medical Hypotheses* practices no peer review or traditional editorial review, its authors are solely responsible for article content. Without even the suggestions of co-authors, a sole author may write whatever he or she chooses, without regard for quality or validity.

^{viii} http://www.nlm.nih.gov/pubs/factsheets/j_sel_faq.html#a11 “Titles may be brought to LSTRC for review for possible deselection through a comprehensive subject review, extremely late publication patterns, major changes in the scientific quality or editorial process, etc.”

^{ix} The current Editor of *Medical Hypotheses*, Bruce G. Charlton, became editor-in-chief in late 2003 and wrote his inaugural editorial in 2004. In the ten years prior to his tenure, *Medical Hypotheses* contained, on average, 226 publications per year. In 2004, 395 publications appeared, an increase of over 40% compared with 2003; 561 followed in 2005 (another 40% increase); then 618 in both 2006 and 2007. Thus, in Charlton’s first four years at the helm, *Medical Hypotheses* accepted approximately as many articles as had been published in the entire decade before Charlton’s arrival.

^x In contrast with the period before current editor-in-chief Charlton’s tenure (see below), *Medical Hypotheses* submissions are now accepted almost immediately, with no evidence of any changes suggested or required. We analyzed the submission and acceptance dates of the 48 articles in the most recent issue of *Medical Hypotheses* (September, 2009). The median number of calendar days between submission and acceptance was *three*. Since this includes weekends and holidays, and since several of the articles were accepted in one day or less, we question whether published articles are even read in their entirety, much less thoroughly vetted, by the Editor before acceptance.

For comparison, in a randomly selected issue from 2001, the median time between submission and acceptance was 103 days. In a second random issue, from 2003, the median interval is 79 days. In both of these issues, a clustering of acceptance dates is also in evidence, indicating orderly review, collaboration between different editors, and possibly a collective decision; we did not observe any such pattern in the journal today. Because the turnaround time has fallen precipitously under the current editor—from about three months per paper to three days—we conclude that whatever editorial oversight may have been practiced in the past is now absent, leading inevitably to a decline in quality.

^{xi} Charlton, BG. “Medical Hypotheses 2006 impact factor rises to 1.3—a vindication of the ‘editorial review’ system for revolutionary science.” *Med Hypotheses*. 2007;69(5):967-9.

^{xii} The number of *Medical Hypotheses* articles citing other *MH* articles increased from 85 pre-Charlton (2003) to 143 in 2004, 164 (2005), 212 (2006), and 207.

^{xiii} <http://www.nlm.nih.gov/pubs/factsheets/jsel.html#> “Journals whose contents consist of one or more of the following types of information will be considered for indexing:

1. Reports of original research
2. Original clinical observations accompanied by analysis and discussion
3. Analysis of philosophical, ethical, or social aspects of the health professions or biomedical sciences
4. Critical reviews
5. Statistical compilations
6. Descriptions of evaluation of methods or procedures
7. Case reports with discussions”

^{xiv} The following are several examples of *Medical Hypotheses* articles that do not appear to have the “validity, importance, ... and contribution to the coverage of the field” that the NLM expects in listed journals. Some of the most popular *Medical Hypotheses* articles appear to be sought out (or written) for entertainment value rather than scientific enquiry, while others are socially offensive in a manner that has no conceivable purpose for medical research.

- An article arguing that the term “mongolism” is appropriate for individuals with Down’s syndrome because, according to the authors, “Down subjects” and “Oriental population” (sic) exhibit “a very particular twinning.” Mafrica, F. and Fodale, V. “Down subjects and Oriental population share several specific attitudes and characteristics.” *Med Hypotheses*. 2007;69(2):438-40. This article is profiled by science columnist Ben Goldacre of *The Guardian*: <http://www.badscience.net/2007/08/observations-on-the-classification-of-idiots/> and: <http://www.badscience.net/2007/08/am-i-misunderstanding-something-or-is-this-paper-both-stupid-and-racist/>
- A 2004 article proposes that heeled shoes cause schizophrenia. (Flensmark J. “Is there an association between the use of heeled footwear and schizophrenia?” *Med Hypotheses*. 2004;63(4):740-7.) See also: <http://neurocritic.blogspot.com/2008/03/journal-of-truly-truly-outrageous.html> , <http://layscience.net/?q=node/75> The author recently proposed “flat shoes” as a treatment for neurological disorders (*Med Hypotheses*. 2009 Aug;73(2):130-2).
- An editorial by a *Medical Hypotheses* editor asked, “Why do gentlemen prefer blondes?” Ramachandran, V.S. “Why do gentlemen prefer blondes?” *Med Hypotheses*. 1997 Jan;48(1):19-20.
- An apparent hoax “argument” between two authors from Tabriz, Iran over whether masturbation is an effective and safe treatment of nasal congestion. Zarrintan, S.

“Ejaculation as a potential treatment of nasal congestion in mature males.” *Med Hypotheses*. 2008 Aug;71(2):308., and a response, Fakhree, M.A. “Ejaculation as a treatment for nasal congestion in men is inconvenient, unreliable and potentially hazardous.” *Med Hypotheses*. 2008 Nov;71(5):809. It is difficult to believe that an editor could have read these two submissions and not considered them an elaborate, coordinated hoax. The “Bad Science” column of *The Guardian* also discusses these publications:

<http://www.badsience.net/2008/10/more-crap-journals/>

- Among the top five *Medical Hypotheses* article downloads as of July, 2009, is an editorial claiming that milk consumption is the cause of all chronic disease (Melnik, BC. “Milk – The promoter of chronic Western diseases.” *Med Hypotheses*. 2009;72(6):631-9.).
- In its April Fool’s Day edition, *New Scientist* profiled a *Medical Hypotheses* investigation into the author’s own navel lint: <http://www.newscientist.com/article/dn16877-scientist-spends-four-years-studying-navel-fluff.html> The author of the profiled investigation is quoted, “This paper had no serious background at all.” As of late July, 2009, the navel fluff article was the fifth most downloaded publication from *Medical Hypotheses*. Humor, including spoofs and hoaxes, has its place, but that place might not be in the medical research publications indexed by the National Library of Medicine.

These recent examples are by no means an exhaustive list of the humorous or offensive but ultimately medically irrelevant publications that continue to find a place on MEDLINE and PubMed as a result of the listing of *Medical Hypotheses*.

^{xv} For comprehensive information on AIDS denialism, its proponents, and its consequences, see AIDStruth.org, <http://www.aidstruth.org> See also: Kalichman, S. “Denying AIDS: Denialism, Pseudoscience, and Human Tragedy.” Springer, 2009. 0387794751.; Natrass N., “Mortal Combat: AIDS Denialism and the Struggle for Antiretrovirals in South Africa.” University of KwaZulu-Natal Press, 2007. 1869141326.; and Smith TC, Novella SP, “HIV denial in the Internet era.” *PLoS Med*. 2007 Aug;4(8):e256.

^{xvi} Natrass, N. 2008. ‘AIDS and the Scientific Governance of Medicine in Post-Apartheid South Africa’, in *African Affairs*, 107 (427); 157-176. and Chigwedere P, Seage GR 3rd, Gruskin S, Lee TH, Essex M. “Estimating the Lost Benefits of Antiretroviral Drug Use in South Africa.” *J Acquir Immune Defic Syndr*. 2008 Oct 16. [Epub ahead of print]

^{xvii} Recent *Medical Hypotheses* publications by AIDS denialists include:

- Ruggiero M, Prayer Galletti M, Pacini S, Punzi T, Morucci G, Gulisano M. “Aids denialism at the ministry of health.” *Med Hypotheses*. 2009 Jul 6. The authors state that epidemiological data in Italy do not support HIV as the cause of AIDS and that “the Italian Ministry of Health appears to be convinced that HIV is not the (sole) cause of AIDS.”
- Broxmeyer L, Cantwell A. “AIDS: “it's the bacteria, stupid!”” *Med Hypotheses*. 2008 Nov;71(5):741-8. The authors state that “molecular biologist and virologist Duesberg, who originally defined retroviral ultrastructure, has made it clear that HIV is not the cause of AIDS” and hypothesize that AIDS is caused by mycobacteria, not a virus. The first author has published 11 of his 12 PubMed articles in *Medical Hypotheses*, arguing that mycobacteria are the true cause of most medical problems, including AIDS, cancer, heart disease, and spongiform encephalopathies.
- Papadopulos-Eleopulos E, Page BA, Causer D, Turner VF, Papadimitriou JM, Alfonso H. “Would Montagnier please clarify whether HIV or oxidation by the risk factors is the

primary cause of AIDS?” *Med Hypotheses*. 2006;67(3):666-8. Wherein the authors demand a response from Luc Montagnier.

- Papadopulos-Eleopulos E, Turner VF, Papadimitriou J, Page B, Causer D, Alfonso H, Mhlongo S, Miller T, Maniotis A, Fiala C. “A critique of the Montagnier evidence for the HIV/AIDS hypothesis “ *Med Hypotheses*. 2004;63(4):597-601. The authors dispute the very existence of HIV and propose that AIDS is caused by lifestyle factors leading to changes in oxidative state.

In addition to publishing AIDS denialist articles, *Medical Hypotheses* has given space to all manner of bizarre and, in most cases, scientifically unsupported theories about HIV and AIDS, often written by single authors who have no academic affiliation or medical/scientific training. These articles variously claim that HIV has existed for millennia and would be harmless were it not for the introduction of anti-malarial drugs; that HIV causes AIDS by removing vitamins from the body; that a lack of dietary algae has caused the high prevalence of HIV infection in some African countries; and that homosexuals should be identified by measuring the length of their fingers and singled out for special “education and condom supply.”

^{xviii} Duesberg PH, Nicholson JM, Rasnick D, Fiala C, Bauer HH. “HIV-AIDS hypothesis out of touch with South African AIDS - A new perspective.” *Med Hypotheses*. 2009 Jul 18.