

IN RECOGNITION OF THE CONTRIBUTIONS OF THE MEMBERS AND DONORS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Rush Holt, Chief Executive Officer and Executive Publisher, Science

invites you to join him for a

AAAS MEMBER TOWN HALL MEETING

Reception to follow Tuesday, 6 October 2015 5:15 - 7:30 PM

Los Angeles Airport Marriott 5855 West Century Blvd, Suite C Los Angeles, CA 90045

R.S.V.P. by 1 October (202) 326-8704 or cmanders@aaas.org

First Name James Last Name Enstrom	
First Name Tames Email jenstrom @ ucla.edu Kyes, I would like to hear about AAAS's future initiatives.	
Affiliation with AAAS (check all the boxes that apply)	
□ Fellow ■ Member □ Donor □ Board/Committee Member	
□ Prospective Member □ Other	
Question for Rush Can AAAS Bogrd Members undertake an	
Question for Rush Can AAAS Boged Members undertake an assessment of the concerns of many screntists regarding	
a distinct bias of Science magazine a certain	
contronersoid areas, like climate scrence and	
envoonmental regulatory policy?	
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE	

ADVANCING SCIENCE, SERVING SOCIETY From: jfahrenkamp@science-int.co.uk Sent: Monday, August 24, 2015 3:42 AM To: jenstrom@ucla.edu Cc: jfahrenkamp@science-int.co.uk Subject: Decision on your Science Manuscript aad2566

24-Aug-2015 Retired Research Faculty University of California Los Angeles Jonathan and Karin Fielding School of Public Health Los Angeles CA 90024-2905

Dear Dr. Enstrom,

Manuscript number: aad2566

Thank you for submitting your manuscript "Particulate Matter Does Not Cause Premature Deaths" to Science. Because your manuscript was not given a high priority rating during the initial screening process, we have decided not to proceed to in-depth review. The article is a resubmission of manuscript aad0615 ("Transparent Science is Necessary for EPA Regulations"), which we returned to you on 3 August; the two submissions are very similar in substance, and we have reexamined and confirmed the basis for our earlier decision. It is simply a fact that every day we reject many research and commentary submissions because of stringent space requirements and the need to keep the journal to a manageable size. Furthermore, most articles in our Perspectives section are invited, leaving limited room for uninvited contributions. In the context of other articles under consideration we did not find your submission to be competitive. I am sorry to disappoint you again.

We wish you every success when you submit the paper elsewhere.

Sincerely,

Julia Fahrenkamp-Uppenbrink, Ph.D. Senior Editor Science August 17, 2015

Julia Fahrenkamp-Uppenbrink, Ph.D. Senior Editor & Perspectives Editor Education: Ph.D., University of Cambridge Areas: Perspectives in physical sciences and ecology, chemistry, climate, science policy, history of science jfahrenkamp@science-int.co.uk

Dear Dr. Fahrenkamp-Uppenbrink,

I am submitting the attached manuscript "Particulate Matter Does Not Cause Premature Deaths" for consideration as a *Science* Perspective. The Abstract for this manuscript is:

"A 2014 *Science* Policy Forum stated: "With the estimated benefits of PM reductions playing such a central role in regulatory policy, it is critical to ensure that the estimated health benefits are based on the best available evidence." We challenge the "\$1.7 trillion" claim that EPA's fine particulate matter (PM_{2.5}) regulations are beneficial because they prevent thousands of "premature deaths" annually. We present strong evidence that PM_{2.5} does not *cause* premature deaths in the U.S.: the major increase in U.S. life expectancy since 1970 is not due to reductions in PM_{2.5}; there is no established etiologic mechanism by which PM_{2.5} causes premature death; misrepresentation (falsification) of PM_{2.5}–death findings has undermined their credibility; prominently cited American Cancer Society "secret science" data cannot be independently analyzed. Transparent science, as required by the Secret Science Reform Act, is as essential for determining the value of EPA regulations as it is for the research published by *Science*."

For a full understanding of this submission, it is important that you read the manuscript and this cover letter. In addition, we have provided Supplementary Material, which contains one publication by each of the nine co-authors, in co-author order (71 total pages). These nine publications are all relevant to the contents and background of the manuscript. The names, email addresses, and websites for the co-authors are shown below.

As I explained in my August 10, 2015 email message to Editor-in-Chief McNutt (see below), *Science* has extensively covered the importance of $PM_{2.5}$ -related deaths (references 3, 4, 14, 15, and more dating back to 1997), but it has never published a critique of the $PM_{2.5}$ -death relationship. We make a very strong case that there is no *causal* relationship and that scientific misconduct (falsification and unethical use of data) has occurred. The misconduct dates back at least to 2000 and involves the willful collaboration of several EPA-favored scientists. The extensive irrefutable evidence we have presented (particularly in references 10, 12, and 13) is certainly worthy of peer review by *Science*.

The first two co-authors (Enstrom and Young) are primarily responsible for the writing of the manuscript and we are both long-term AAAS members. I am a 40-year AAAS member, who was once nominated to be an AAAS Fellow, and Dr. Young is an AAAS Fellow. The other co-authors, some of whom have a history as AAAS members, provided input from seven different perspectives and we all support the contents of the manuscript. We are a diverse group of experienced, accomplished, and independent scientists and physicians. We have expertise in the

following relevant disciplines: epidemiology, statistics, toxicology, medicine, environmental economics, environmental law, environmental physics, particle physics, and anthropology. The first five authors have recently spoken and/or written on the subject of this Perspective (see Reference 10 and elsewhere).

We are sure that most AAAS members support transparent science in the way we do and we hope that our viewpoint on PM2.5-related deaths and the need for transparent science can be published in Science. We are willing to clarify any aspect of this manuscript that you do not understand and we are willing to make modifications that improve it.

Thank you very much for your consideration.

Sincerely yours,

James E. Enstrom

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute 914 Westwood Boulevard #577 Los Angeles, CA 90024-2905 http://www.scientificintegrityinstitute.org/ jenstrom@ucla.edu (310) 472-4274

cc:

Stan Young <stan.young@omicsoft.com> John Dunn <jddmdjd@web-access.net> http://junkscience.com/ Charles Battig <chas2rm2.va@embargmail.com> http://www.climateis.com/ William Briggs <matt@wmbriggs.com> http://wmbriggs.com/ Edward Calabrese <edwardc@schoolph.umass.edu> http://dose-response.org/ Alan Carlin <alan.carlin@gmail.com> http://www.carlineconomics.com/ Laurence Gould <LGOULD@hartford.edu> http://uhaweb.hartford.edu/LGOULD/ Peter Wood <pwood@nas.org> <u>http://nas.org/</u>

From: Marcia McNutt <mmcnutt@aaas.org>
Sent: Monday, August 10, 2015 12:29 PM
To: James E. Enstrom <jenstrom@ucla.edu>
Subject: Re: Reconsider Decision on Science Manuscript aad0615

Dear Dr. Enstrom:

I looked into the history of this submission and discussed it with the Editor. As you can perhaps appreciate, we need to be consistent in how we handle various types of content that we receive. In the case of your submission, on one hand the essay was presented as an alternative view to the Rosenberg et al. PF. We have already published quite a few letters to the editor that express alternate viewpoints and support for the Secret Science Act. If you have additional points that have not already been made in any of the letters we have already published, our Letters editor would be pleased to consider publishing an additional letter from you.

On the other hand, there were some elements of your policy forum submission that were only marginally connected to the Rosenberg piece, and were instead discussing the public health impacts of PM2.5. That issue needs to be submitted as a research article and reviewed as such, rather than as a policy forum. That would be a rather different sort of submission.

I hope this explanation helps you decide in what direction to take your manuscript.

Marcia McNutt

From: "James E. Enstrom" <jenstrom@ucla.edu>
Date: Monday, August 10, 2015 at 5:59 AM
To: Marcia McNutt <<u>mmcnutt@aaas.org</u>>
Subject: Reconsider Decision on Science Manuscript aad0615

August 10, 2015

Marcia K. McNutt, Ph.D. Editor-in-Chief, *Science* mmcnutt@aaas.org

Dear Editor-in-Chief McNutt,

I request that you reconsider the August 3, 2015 rejection by Editor Brad Wible of the July 20, 2015 *Science* Policy Forum Manuscript aad0615 "Transparent Science is Necessary for EPA Regulations". Because of the strength of the evidence that it contains, I request that the manuscript undergo full in-depth review. If you have not done so, I request that you briefly examine the manuscript itself (<u>http://www.scientificintegrityinstitute.org/PFPaper072015.pdf</u>), the detailed cover letter (<u>http://www.scientificintegrityinstitute.org/PFLetter072015.pdf</u>), the 71-page supplement (<u>http://www.scientificintegrityinstitute.org/PFSupp072015.pdf</u>), my June 4, 2015 email message to you (<u>http://www.scientificintegrityinstitute.org/McNuttWSJ060415.pdf</u>), and the outstanding credentials of the nine co-authors (as stated on their personal websites).

Reference 10 of the manuscript contains overwhelming and indisputable evidence of scientific misconduct (falsification) by major investigators who have published key epidemiologic research on the relationship between PM2.5 and mortality. Reference 12 contains clear evidence that the research of these same investigators has violated a 1982 ACS confidentiality statement to CPS II research subjects. This evidence warrants in-depth peer review by *Science*.

For the record, *Science* has never published a major article which challenges the claim the air pollution (particularly PM2.5) currently *causes* "premature death" in the United States, particularly in California. However, *Science* has published several major articles which promote the dangers of air pollution, including the August 21, 1970 article on "Air Pollution and Human Health" (<u>http://www.sciencemag.org/content/169/3947/723.full.pdf</u>), the February 14, 1992 article on "Valuing the Health Benefits of Clean Air" (<u>http://www.sciencemag.org/content/255/5046/812.full.pdf</u>), the April 18, 2014 Policy Forum on "Particulate Matter Matters" (<u>http://www.sciencemag.org/content/344/6181/257.full.pdf</u>), and the May 29, 2015 Policy Forum on "Congress's Attacks on Science-based Rules" (<u>http://www.sciencemag.org/content/348/6238/964.full.pdf</u>).

In the interest of objectivity and integrity regarding an environmental science issue of national significance, *Science* should peer review this manuscript. Please let me know your decision.

Thank you very much.

Sincerely yours,

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute <u>http://www.scientificintegrityinstitute.org/</u> jenstrom@ucla.edu (310) 472-4274

Particulate Matter Does Not Cause Premature Deaths

James E. Enstrom, Ph.D., M.P.H., FACE, AAAS 40-year Member UCLA and Scientific Integrity Institute

> S. Stanley Young, Ph.D., FASA, FAAAS Raleigh, NC

> > John Dale Dunn, M.D., J.D. JunkScience.com

Charles G. Battig, M.D., M.S. VA Scientists & Engineers for Energy & Environment

> William M. Briggs, Ph.D. wmbriggs.com

Edward J. Calabrese, Ph.D. University of Massachusetts, Amherst, MA

> Alan Carlin, Ph.D. CarlinEconomics.com

Laurence I. Gould, Ph.D. University of Hartford, CT

Peter W. Wood, Ph.D., AAAS Member National Association of Scholars

August 17, 2015

An extensive 2011 U.S. Environmental Protection Agency (EPA) cost-benefit report estimates the annual costs required to meet 1990 Clean Air Act (CAA) Amendment regulations to be about \$65 billion in 2020. The annual economic benefits of these regulations are estimated to be about \$2 trillion in 2020, based primarily on EPA-projected reductions in air pollution-related premature deaths and illness (1). This report has been challenged because the benefits are unproven and depend upon several questionable and unverified assumptions. Among these are assumptions that a linear, no-threshold, *causal* relation exists between fine particulate air pollution (PM_{2.5}) and total mortality and that additional life expectancy gained at a median age of about 80 years should be valued at about \$80,000 per month. These assumptions are essential because \$1.7 trillion (85%) of the \$2.0 trillion total benefit estimate is attributable to reductions in premature deaths due to reductions in PM_{2.5}. Using discrete uncertainty analysis with plausible alternative assumptions, Cox found that the costs of CAA amendments actually exceed their benefits (2). Dominici et al. have stated: "With the estimated benefits of PM reductions playing such a central role in regulatory policy, it is critical to ensure that the estimated health benefits are based on the best available evidence. If the estimates are biased upward (downward), then the regulations may be too stringent (lenient)." (3). Because of the urgent need to verify the health benefits of EPA regulations, Congress is enacting the Secret Science Reform Act (SSRA) (4). The SSRA would "prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible."

Based on the data and research findings that are currently available without the SSRA, we challenge the validity of the annual \$1.7 trillion health benefit attributed to reductions in PM_{2.5}. Specifically, we present four types of evidence that PM_{2.5} does not *cause* premature deaths.

1) The major increase in U.S. life expectancy since 1970 is not due to reduction in $PM_{2.5.}$ In 2009 Pope claimed that from 1980 to 2000 a decrease of 10 μ g/m³ of PM_{2.5} was associated nationally with a 0.61 year increase in life expectancy based on a correlation involving 51 U.S. metropolitan areas (USMAs) (5). This association was vigorously contested by four independent analyses because the underlying data was available, as would be required by the SSRA. Enstrom found no association whatsoever in 11 California counties (5). Krstic found that the national association claimed by Pope lost statistical significance with the removal of one USMA (Topeka, KS) and that the correlation between changes in PM_{2.5} and life expectancy had so much scatter that it explained almost none of the association (6). Young showed that there was no association in the Western U.S., thereby supporting Enstrom, and showed that the national association was much stronger with income than with $PM_{2.5}$ (7). Cox found no significant association between reductions in PM2.5 and total mortality rate between 2000 and 2010 in 483 counties in the 15 most populated states, including California (8). The inconsistencies and weaknesses found in the association means that Pope did not prove the hypothesis that a reduction in PM_{2.5} causes an increase in life expectancy. However, since 1970, the year that EPA was established, healthrelated factors other than air pollution have had a major impact on increasing the longevity of Americans. The total annual age-adjusted death rate in the U.S. has declined by 40% from 12.226 deaths/1000 in 1970 to 7.319 deaths/1000 in 2013. The death rate in California has declined by 45% from 11.370 deaths/1000 in 1970 to 6.301 deaths/1000 in 2013. Life expectancy from birth has increased from 70.8 years in 1970 to 78.8 years in 2013 in the U.S. and from 71.7 years in 1970 to 80.8 years in 2013 in California (9).

2) No plausible etiologic mechanism by which $PM_{2.5}$ *causes* premature death is established. It is implausible that a never-smoker's death could be *caused* by inhalation over an 80 year lifespan of about one teaspoon (~5 grams) of invisible fine particles as a result of daily exposure to 15 µg/m³. This level of exposure is equivalent to smoking about 100 cigarettes over a lifetime or 0.004 cigarettes per day, which is the level often used to define a never-smoker. The notion that $PM_{2.5}$ *causes* premature death becomes even more implausible when one realizes that a person who smokes 0.2 cigarettes/day has a daily exposure of about 750 µg/m³. If a 10 µg/m³ increase in $PM_{2.5}$ actually *caused* a 0.61 year reduction in life expectancy, equivalent to the claim of Pope, then a 0.2 cigarettes/day smoker would experience about a 45-year reduction in life expectancy. In actuality, never-smokers and smokers of 0.2 cigarettes/day do not experience any increase in

total death rate or decrease in life expectancy, in spite of a 50-fold greater exposure to PM_{2.5} (10). Furthermore, hundreds of toxicology experiments on both animals and humans have not proven that PM_{2.5} at levels up to 750 μ g/m³ *causes* death. Finally, the small relative risks of death and other biases and weaknesses of the PM_{2.5} epidemiologic studies do not meet the standards of causality set by the 2011 Federal Judicial Center Reference Manual on Scientific Evidence (11). The legal standard for causality in epidemiologic studies is a large relative risk (RR \geq 2.0), not the small relative risk (RR \sim 1.1) typically found in PM_{2.5}-mortality studies.

3) Misrepresentation of $PM_{2.5}$ -death findings has harmed the credibility of epidemiology. The PM_{2.5}-mortality relationship has been contested since 1993 because this small risk could be due to well-known biases, such as, confounding variables and the ecological fallacy. In spite of these biases, several major PM_{2.5} investigators continue to assert that selected positive findings prove that PM_{2.5} causes death and they continue to ignore or dismiss null PM_{2.5} results. Enstrom prepared a detailed November 15, 2013 document (5000 words of text with 77 URLs) which describes many misrepresentations and exaggerations (12). In particular, Pope and others have ignored null PM_{2.5} findings in California. Serious concerns about the PM_{2.5}-mortality relationship in California were expressed at a February 26, 2010 Symposium on "Estimating Premature Deaths from Long-term Exposure to PM2.5" by the California Air Resources Board (CARB). Vastly different viewpoints were expressed by scientists like Enstrom and Pope. Although this Symposium could have led to better understanding and cooperation among PM_{2.5} investigators, it did not. For instance, three Symposium attendees (Pope, Jerrett, and Krewski), published extensive findings in their October 28, 2011 CARB report showing that there was an overall null relationship between PM_{2.5} and mortality in California, if one averaged the results from all nine of their models. This null finding agrees exactly with the null findings of Enstrom and others. However, in their subsequent September 1, 2013 AJRCCM paper, "Air Pollution and Mortality in California," they selectively published the positive findings found in one model, but omitted the null findings of the eight other models in their 2011 report.

4) The American Cancer Society actively supports "secret science" PM_{2.5} epidemiology. Since 1995 ACS has repeatedly allowed its 1982 Cancer Prevention Study (CPS II) data to be selectively used for PM_{2.5} epidemiology research. However, ACS has refused to release the CPS II data or allow analysis that addresses the legitimate concerns raised by qualified critics of this "secret science" research. ACS is well aware of the scientific controversy generated by the original 1995 Pope AJRCCM paper and subsequent papers that have been used by EPA as a primary justification for its PM_{2.5} regulations. The demand for CPS II data access has increased as PM_{2.5}-related regulations have gotten stricter, more expensive, and more implausible. While ACS refuses any independent access to its CPS II data, because of alleged concerns about subject confidentiality, it has repeatedly allowed Pope and his collaborators to violate a confidentiality pledge made to CPS II subjects. When personal questionnaire data was collected from CPS II subjects upon enrollment in late 1982, ACS informed them with this exact sentence: "We will never release information about any particular person and will not release addresses to any agency for any purpose, whatsoever" (13). Both the September 1, 2013 AJRCCM paper and the new January 2, 2015 Circulation Research paper by Pope include findings based on linking the home address of each study subject to a geographically estimated PM2.5 concentration, in violation of the 1982 agreement.

Our evidence that PM_{2.5} does not *cause* premature deaths invalidates the \$1.7 trillion annual benefit that EPA attributes to reductions in PM_{2.5} and supports Cox's findings that the economic costs of EPA CAA Amendment regulations exceed the resulting health benefits. Because the scientific and economic stakes are high for America, there is an urgent need for transparency and reproducibility in the science and data underlying EPA regulations, as required by the SSRA. The data access requirement in the SSRA is very similar to the one *Science* has for its research papers and to the one recently recommended by the editors of 30 major journals, including *Science* (14). Even an environmental organization that objects to the SSRA, the Union of Concerned Scientists, realizes that "public trust in science increases when we all have access to the same base of evidence" (15).

References

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- 5. J. E. Enstrom. Response to Pope "Fine-particulate air pollution and life expectancy in the United States," May 27, 2009 CARB Comment (<u>http://www.arb.ca.gov/lists/gmove09/1-carb_enstrom_comments_re_pm2.5_and_life_expectancy_052709.pdf</u>)
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- 12. J. E. Enstrom. Public Comments to EPA on Clean Power Plan, December 1, 2014 (http://www.scientificintegrityinstitute.org/JEECPP120114.pdf)
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OPINION

REVIEW & OUTLOOK

Scientific Fraud and Politics

press release from the Union of Con- non-findings at Science magazine. cerned Scientists recently hit our desk titled "Science Leaders Decry Congres-

sional Attacks on Science and Science-Based Policy." It flagged an op-ed in the journal Science that laments "a growing and troubling assault on the use of credible scientific knowledge."

Hmmm. Is this about science, or politics?

Since the scientists brought it up, which is the greater threat to their enterprise: the Republicans who run Congress, or the most spectacular scientific fraud in a generation, which was published and then retracted by the journal Science?

Last year UCLA political science grad student and maybe soon-to-be Princeton professor Michael LaCour released stunning findings from a field trial on gay marriage called "When Contact Changes Minds." He found that a 20-minute conservation with a houseto-house canvasser could convert huge numbers of opponents into supporters, at least if the canvassers explained they were gay and told personal stories.

The study quickly became a media sensation, the most talked-about poli-sci paper in years, and it led gay-rights activists including some working on the Ireland referendum to retool their voter outreach.

The problem is that Mr. LaCour stands accused of faking everything from start to finish. Ph.D. candidates at Berkeley David Broockman and Josh Kalla tried but failed to replicate Mr. LaCour's results. They then noticed unusual statistical irregularities in Mr. LaCour's survey panel. He now says he pulled a Hillary Clinton and deleted his raw data. But the canvassing firm he claimed to have employed has never heard of the project-and there is no proof anyone was ever contacted, much less changed their minds.

Mr. LaCour denies wrongdoing and in a response paper assailed the motives of Messrs. Broockman and Kalla, whose violations of academic decorum include their decision to go public and "bypass the peer-review process." That would be the same process that failed to catch Mr. LaCour's

Look who is lecturing **Republicans about** scientific truth.

The larger question is why anyone invested Mr. LaCour's paper with the authority

of "science." Experience and common sense suggest that persuading people to reconsider their opinions is difficult. An uninvited nag carrying on about politics on the front porch sounds like

one of the less successful approaches.

Then again, the study flattered the ideological sensibilities of liberals, who tend to believe that resistance to gay marriage can only be the artifact of ignorance or prejudice, not moral or religious conviction. Mr. La-Cour's purported findings let them claim that science had proved them right.

Similar bias contaminates inquiries across the social sciences, which often seem to exist so liberals can claim that "studies show" some political assertion to be empirical. Thus they can recast stubborn political debates about philosophy and values as disputes over facts that can be resolved by science. President Obama is a particular aficionado of this bait and switch.

As for those supposedly "anti-science" Republicans, they stand accused by Science magazine of trying to introduce more transparency and accountability to federal science grants. The House GOP is also guilty of attempting to spend more on the harder sciences, passing a bill last month that allocates money for the National Science Foundation by directorate-for example, boosting engineering spending by 13.2% over 2015 and biology by 12.6%. Money for the social and behavioral sciences declines by 44.9%.

Scientific misconduct does seem to be mercifully rare, but a lesson of the LaCour retraction is to show more humility amid the illusion of scientific omniscience and to be more skeptical of studies that carry heavy political freight. That goes for the profusion of foods that are purported to cause or prevent cancer. and macroeconomic literature that claim to document a stimulus "multiplier."

Meanwhile, Science magazine editors who rebuke politicians might have more authority if their own science wasn't so political.

From: Marcia McNutt <mmcnutt@aaas.org> To: "James E. Enstrom" <jenstrom@ucla.edu> Subject: Re: Request to Discuss AAAS & SSRA & PM2.5 Misconduct Date: Fri, 5 Jun 2015 15:37:39 +0000

Dear Dr. Enstrom:

You would need to contact the AAAS office of Public Policy to reverse the AAAS position on the Secret Science bill. I have no control over that. It is not part of the journal *Science*. You would need to contact the AAAS Board of Directors to ask them to conduct such an assessment. I do not sit on the Board. I have never heard of them conducting an assessment of this sort, ever. I do not believe that they have the mechanism or resources to do it. The NAS would be your best bet.

Sincerely,

Marcia McNutt

From: "James E. Enstrom" <<u>jenstrom@ucla.edu</u>> Date: Friday, June 5, 2015 at 12:38 AM To: Marcia McNutt <<u>mmcnutt@aaas.org</u>> Subject: Request to Discuss AAAS & SSRA & PM2.5 Misconduct

June 5, 2015

Dear Dr. McNutt,

I appreciate your quick response to my email message. However, I do not want the editors at Science to consider another retraction equivalent to the LaCour and Green retraction. First, I want that AAAS/Science to reconsider its objections to the Secret Science Reform Act and to take a clear position in favor of access to the data underlying the PM2.5-mortality relationship, a subject that Science has written about since 1997. Second, I want the AAAS Board of Directors to assess my evidence of scientific misconduct in PM2.5 epidemiology, much of which involves

the University of California. Third, I want to make clear that the points made in the April 11, 2015 Lancet Comment apply to PM2.5 epidemiology. Ideally, I would like to briefly discuss these three important issues with you, either in person or over the phone, when I am in Washington, DC, next week. Please let me know if a discussion is possible.

Thank you very much for your consideration.

Sincerely yours,

Jim Enstrom (310) 210-7145

At 02:47 PM 6/4/2015, you wrote:

Dear Dr. Enstrom:

If you would like the editors at *Science* to consider a retraction, could you please provide us with the citation for the paper you believe needs to be retracted, the report from the university where the research was conducted requesting retraction, or a request from the study's senior author(s) requesting retraction? Thank you.

Sincerely,

Marcia McNutt

From: "James E. Enstrom" <<u>jenstrom@ucla.edu</u>> Date: Thursday, June 4, 2015 at 5:19 PM To: Marcia McNutt <<u>mmcnutt@aaas.org</u>> Cc: Geri Richmond <<u>richmond@uoregon.edu</u>>, "Carlos J.Bustamante" <<u>carlosb@berkeley.edu</u>>, Michael Gazzaniga <<u>michael.gazzaniga@psych.ucsb.edu</u>>, "Elizabeth F.Loftus" <<u>eloftus@uci.edu</u>>, Chris Carter <<u>chris.carter@ucdc.edu</u>> Subject: Important Request re AAAS & 'Secret Science Reform' June 4, 2015

Marcia K. McNutt, Ph.D. Editor-in-Chief, Science mmcnutt@aaas.org

Dear Editor-in-Chief McNutt,

On May 28, 2015, <u>Science retracted</u> the December 12, 2014 paper by Michael LaCour and Donald Green because, in part, the underlying data is not available to independently confirm the paper's findings. Science requires <u>Data and Materials Availability</u> for the papers that it publishes. Science has written extensively between <u>July 25, 1997</u> and <u>August 9, 2013</u> about the use of the relationship between fine particulate air pollution (PM2.5) and mortality to justify costly EPA regulations and the lack of access to the data underlying this relationship.

Because this 'secret science' data has never been available for independent analysis, Congress has introduced the <u>Secret Science Reform Act</u> to "prohibit the Environmental Protection Agency from proposing, finalizing, and disseminating regulations or assessments that are based upon science that is not transparent or reproducible." However, <u>AAAS</u> has written at least three letters to Congress raising objections to an act which requires access to underlying data. I request that AAAS reconsider its objections to this act and take a clear position in favor of access to the data underlying the PM2.5-mortality relationship. During the past ten years I have assembled extensive evidence that scientific misconduct has occurred in PM2.5 epidemiology and on December 1, 2014, I submitted <u>65 pages</u> of such evidence to EPA (<u>http://www.scientificintegrityinstitute.org/JEECPP120114.pdf</u>). On February 17, 2015, I submitted <u>72 pages</u> of similar evidence to the UCLA Vice Chancellor for Research (<u>http://www.scientificintegrityinstitute.org/Economou021715.pdf</u>). My evidence is far more extensive than the <u>27 pages</u> of evidence that supported the retraction of the LeCour and Green paper.

I request that you and the AAAS Board of Directors examine my evidence, much of which involves UCLA Professor <u>Michael Jerrett</u>, who is at the same university as LaCour. The stakes are high for both scientific integrity and the U.S. economy. The PM2.5-mortality relationship is currently being used as a major justification for many major EPA regulations, most recently EPA's Clean Power Plan. The CPP has been estimated to cost up to \$479 billion over the next 15 years and a strong case can be made that it is not scientifically or economically justified. I will be giving a talk about "EPA's Clean Power Plan and PM2.5-related Co-benefits" on June 11, 2015 at the <u>Tenth International Conference on Climate Change</u> in Washington, DC. You and others from Science and AAAS are welcome to attend my presentation.

Last Friday I sent the email message below to most of the scientists involved with PM2.5 epidemiology misconduct and no one has yet responded. I hope that Science and AAAS will take my evidence of misconduct seriously. In any case, I am going to use this evidence to support the April 11, 2014 Lancet Comment of Editor Richard Horton, who stated, in part, "The case against science is straightforward: much of the scientific literature, perhaps half, may simply

be untrue science has taken a turn towards darkness."

Thank you very much for your consideration of this important matter.

Sincerely yours,

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute <u>http://www.scientificintegrityinstitute.org/</u> jenstrom@ucla.edu

Date: Fri, 29 May 2015 11:00:16 -0700 To: "James E. Enstrom" <<u>jenstrom@ucla.edu</u>> From: "James E. Enstrom" <<u>jenstrom@ucla.edu</u>> Subject: Important Request re ICCC-10 & PM2.5 Premature Deaths

May 29, 2015

Dear EPA-related Scientist,

I am giving a June 11, 2015 talk entitled "EPA's Clean Power Plan and PM2.5-related Cobenefits" at the Tenth International Conference on Climate Change in Washington, DC (http://climateconference.heartland.org/). I am going to present evidence of scientific misconduct by you of the type described in the April 11, 2015 Lancet Comment by Editor Richard Norton on "A lot of what is published is incorrect" (http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(15)60696-1.pdf). My evidence is described in the Clean Power Plan comments that I submitted to EPA on December 1, 2014 (http://www.scientificintegrityinstitute.org/JEECPP120114.pdf).

I am sending this message in order to give you an opportunity to respond to my above evidence, either by attendance at my talk or by an email message to me before my talk. At least let me know your answer (YES or NO) to these two questions: 1) do you believe that PM2.5 currently causes premature deaths in the U.S.? and 2) do you believe that EPA should continue to defy the Secret Science Reform Act of the U.S. Congress? Unless you respond otherwise, I will assume that your answer to both questions is YES. Finally, please let me know if you are concerned about the Lancet Comment.

Thank you very much for your consideration.

Sincerely yours,

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute <u>http://www.scientificintegrityinstitute.org/</u> jenstrom@ucla.edu