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December 1, 2008

To: Bruce Alberts, Editor in Chief, *Science*:
cc: Alan Leshner, CEO, AAAS

On May 4, 1984 your journal published four papers by a group led by Dr. Robert Gallo. We are writing to express our serious concerns with regard to the integrity and veracity of the lead paper among these four of which Dr. Mikulas Popovic is the lead author.[1] The other three are also of concern because they rely upon the conclusions of the lead paper.[2][3][4]

In the early 1990s, several highly critical reports on the research underlying these papers were produced as a result of governmental inquiries working under the supervision of scientists nominated by the National Academy of Sciences and the Institute of Medicine. The Office of Research Integrity of the US Department of Health and Human Services concluded that the lead paper was "fraught with false and erroneous statements," and that the "ORI believes that the careless and unacceptable keeping of research records...reflects irresponsible laboratory management that has permanently impaired the ability to retrace the important steps taken."^[5] Further, a Congressional Subcommittee on Oversight and Investigations led by US Representative John D. Dingell of Michigan produced a staff report on the papers which contains scathing criticisms of their integrity.^[6]

Despite the publically available record of challenges to their veracity, these papers have remained uncorrected and continue to be part of the scientific record.

What prompts our communication today is the recent revelation of an astonishing number of previously unreported deletions and unjustified alterations made by Gallo to the lead paper. There are several documents originating from Gallo's laboratory that, while available for some time, have only recently been fully analyzed. These include a draft of the lead

paper typewritten by Popovic which contains handwritten changes made to it by Gallo.[7] This draft was the key evidence used in the above described inquiries to establish that Gallo had concealed his laboratory's use of a cell culture sample (known as LAV) which it received from the Institut Pasteur.

These earlier inquiries verified that the typed manuscript draft was produced by Popovic who had carried out the recorded experiment while his laboratory chief, Gallo, was in Europe and that, upon his return, Gallo changed the document by hand a few days before it was submitted to *Science* on March 30, 1984. According to the ORI investigation, "Dr. Gallo systematically rewrote the manuscript for what would become a renowned LTCB [Gallo's laboratory at the National Cancer Institute] paper." [5]

This document provided the important evidence that established the basis for awarding Dr. Luc Montagnier and Dr. Francoise Barré-Sinoussi the 2008 Nobel Prize in Medicine for the discovery of the AIDS virus by proving it was their samples of LAV that Popovic used in his key experiment. The draft reveals that Popovic had forthrightly admitted using the French samples of LAV renamed as Gallo's virus, HTLV-III, and that Gallo had deleted this admission, concealing their use of LAV.

However, it has not been previously reported that on page three of this same document Gallo had also deleted Popovic's unambiguous statement that, "Despite intensive research efforts, the causative agent of AIDS has not yet been identified," replacing it in the published paper with a statement that said practically the opposite, namely, "That a retrovirus of the HTLV family might be an etiologic agent of AIDS was suggested by the findings."

It is clear that the rest of Popovic's typed paper is entirely consistent with his statement that the cause of AIDS had not been found, despite his use of the French LAV. Popovic's final conclusion was that the culture he produced "provides the possibility" for detailed studies. He claimed to have achieved nothing more. At no point in his paper did Popovic attempt to prove that any virus caused AIDS, and it is evident that Gallo concealed these key elements in Popovic's experimental findings.

It is astonishing now to discover these unreported changes to such a seminal document. We can only assume that Gallo's alterations of Popovic's conclusions were not highlighted by earlier inquiries because the focus at the time was on establishing that the sample used by Gallo's lab

came from Montagnier and was not independently collected by Gallo. In fact, the only attention paid to the deletions made by Gallo pertains to his effort to hide the identity of the sample. The questions of whether Gallo and Popovic's research proved that LAV or any other virus was the cause of AIDS were clearly not considered.

Related to these questions are other long overlooked documents that merit your attention. One of these is a letter from Dr. Matthew A. Gonda, then Head of the Electron Microscopy Laboratory at the National Cancer Institute, which is addressed to Popovic, copied to Gallo and dated just four days prior to Gallo's submission to *Science*.[8] In this letter, Gonda remarks on samples he had been sent for imaging because "Dr Gallo wanted these micrographs for publication because they contain HTLV." He states, "I do not believe any of the particles photographed are of HTLV-I, II or III." According to Gonda, one sample contained cellular debris, while another had no particles near the size of a retrovirus. Despite Gonda's clearly worded statement, *Science* published on May 4, 1984 papers attributed to Gallo et al with micrographs attributed to Gonda and described unequivocally as HTLV-III.

In another letter by Gallo, dated one day before he submitted his papers to *Science*, Gallo states, "It's extremely rare to find fresh cells [from AIDS patients] expressing the virus... cell culture seems to be necessary to induce virus," a statement which raises the possibility he was working with a laboratory artifact. [9]

Included here are copies of these documents and links to the same. The very serious flaws they reveal in the preparation of the lead paper published in your journal in 1984 prompts our request that this paper be withdrawn. It appears that key experimental findings have been concealed. We further request that the three associated papers published on the same date also be withdrawn as they depend on the accuracy of this paper.

For the scientific record to be reliable, it is vital that papers shown to be flawed, or falsified be retracted. Because a very public record now exists showing that the Gallo papers drew unjustified conclusions, their withdrawal from *Science* is all the more important to maintain integrity. Future researchers must also understand they cannot rely on the 1984 Gallo papers for statements about HIV and AIDS, and all authors of papers that previously relied on this set of four papers should have the

opportunity to consider whether their own conclusions are weakened by these revelations.

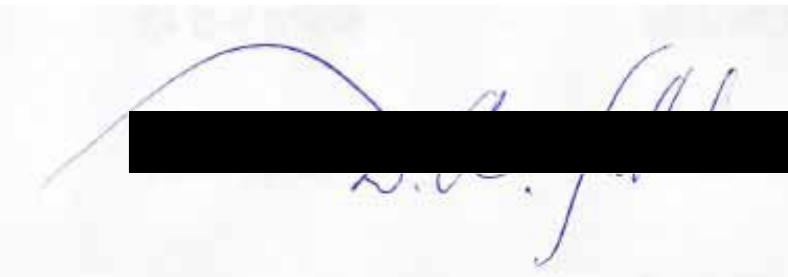
Respectfully,

- Mohammed A. Al-Bayati, PhD, DABT, DABVT. Toxicologist & Pathologist, Toxi-Health International, Dixon, CA.



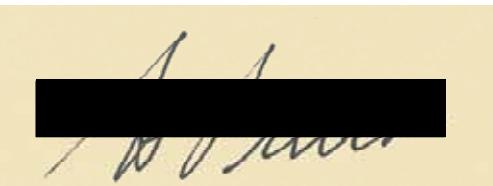
A redacted signature in black ink, appearing to be "Mohammed A. Al-Bayati".

- David A. Ballok, PhD, Department of Surgery, Division of Neurosurgery and Neurosciences, McMaster University, Canada.



A redacted signature in blue ink, appearing to be "David A. Ballok".

- Henry H. Bauer, PhD, Dean Emeritus of Arts & Sciences, Professor Emeritus of Chemistry & Science Studies, Virginia Polytechnic Institute & State University.



A redacted signature in black ink, appearing to be "Henry H. Bauer".

- André-Pierre Benguerel, PhD, Professor Emeritus, University of British Columbia, Vancouver, Canada.



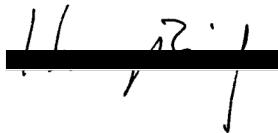
A redacted signature in black ink, appearing to be "André-Pierre Benguerel".

- Terry Bennett, MD, MPH.



A redacted signature in black ink, appearing to be "Terry Bennett".

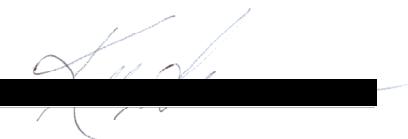
- Harvey Bialy, PhD, founding scientific editor of Nature Biotechnology, author of Oncogenes, Aneuploidy and AIDS: A Scientific Life & Times of Peter H. Duesberg.

A handwritten signature in black ink, appearing to read "Harvey Bialy".

- Christopher Black, Barrister, International Criminal Lawyer, Lead Counsel, Rwanda War Crimes Tribunal.

A handwritten signature in black ink, appearing to read "Christopher Black".

- Kelly Brennan-Jones, PhD, Associate Professor of Psychology, SUNY Brockport, New York, USA.

A handwritten signature in black ink, appearing to read "Kelly Brennan-Jones".

- Darin Brown, PhD, Mathematics.

A handwritten signature in black ink, appearing to read "Darin Brown".

- Gordon Burns, PhD, Professor of Cancer Research, The University of Newcastle, Australia.

A handwritten signature in black ink, appearing to read "Gordon Burns".

- Jennifer L. Craig, BSN, MA, PhD.

A handwritten signature in black ink, appearing to read "Jennifer L. Craig".

Javier Cruz Gómez, PhD, Professor of Chemistry, National Autonomous University of Mexico.

A handwritten signature in black ink, appearing to read "Javier Cruz Gómez".

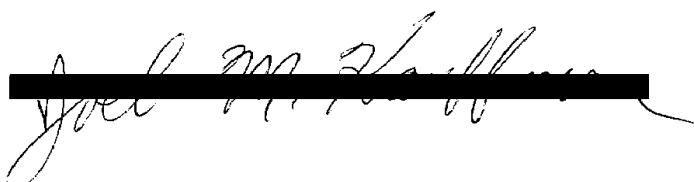
- Etienne de Harven, MD, Professor Emeritus, University of Toronto.
Signature available on request.
- Andrea G. Drusini, MD, PhD, Medical Anthropologist, Professor of Anthropology, Department of Medico-Diagnostic Sciences and Special Therapies, University of Padova, Italy.

A handwritten signature in black ink, appearing to read "Etienne de Harven". The signature is somewhat fluid and cursive, with some loops and variations in letter form.

- Charles Geshekter, PhD, Professor Emeritus of History, Chair, History of Science Section, AAAS/Pacific Division (1990-95). California State University, Chico.
Signature available on request.
- Roberto Giraldo, MD, Specialist in internal medicine, infectious and tropical diseases. Member of the Department of Integral Psychosomatic Medicine, International Society of Analytical Trilogy, São Paulo, Brazil.
Signature available on request.
- Pablo L. E. Idahosa, PhD, Professor, Social Science Program Director, African Studies Graduate Program, International Development Studies Founders College, York University, Canada.
Signature available on request.
- Matt Irwin, MD, MSW, Private practice, Alexandria, Virginia.

A handwritten signature in black ink, appearing to read "Roberto Giraldo". The signature is cursive and includes a small "MD" at the end.

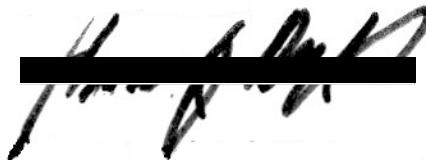
- Joel M. Kauffman, Professor of Chemistry Emeritus, University of the Sciences in Philadelphia, Medical Writer.

A handwritten signature in black ink, appearing to read "Joel M. Kauffman". The signature is cursive and includes a small "MD" at the end.

- Claus Koehnlein, MD, Specialist in internal medicine, Dept. of Oncology, Univ. of Kiel, Germany (1983 -1993). Since 1993, in private practice increasingly treating HIV-positive people who decline antiviral drugs. Member of South Africa Presidential AIDS Advisory Panel.

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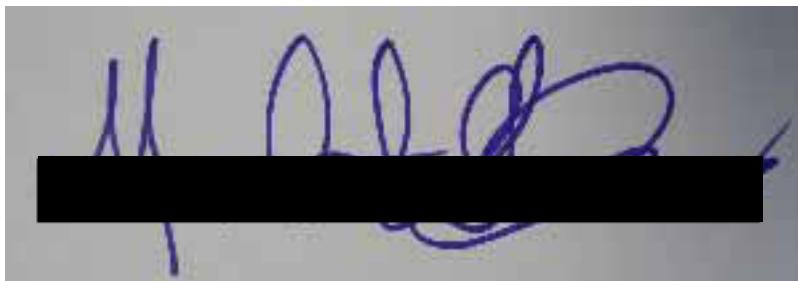
- Hans J. Kugler, PhD, President, International Academy of Anti-Aging Medicine.

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- Helen Lauer, PhD, Associate Professor, Philosophy Department Head, University of Ghana.

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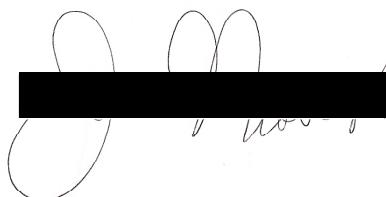
- Herbert G. Lebherz, PhD, Professor of Chemistry and Biochemistry (Emeritus). San Diego State University, USA.

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- Stoffer Loman, BSc, MSc, PhD.

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- Ahmed Makata, Dip (clin medicine-TZ), MD (USSR), certificate (Tropical pathology-Japan), PhD (Path-Japan), DFM (Path-RCPA-Australia), Forensic Consultant, Histopathologist, Head of Forensic Unit, Ministry of Health, Tanzania.
Signature available on request.
- Andrew Maniotis, PhD, University of Illinois at Chicago.
Signature available on request.
- Jonas Moses, PhD, PA, Former US Army clinician (in Ophthalmology), cancer biologist in the Dept. of Pathology, Univ. of Illinois – Chicago (2002-2007), and consulting cell and tissue engineer.



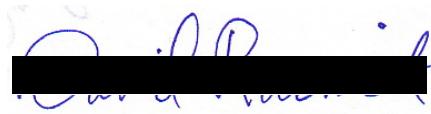
A handwritten signature in black ink, appearing to read "Jonas Moses". The signature is fluid and cursive, with a large loop on the left and smaller loops on the right.

- Paul Olisa Adaka Ojeih, PhD, MD, Medical Director, Iris Medical Foundation, Lagos, Nigeria.



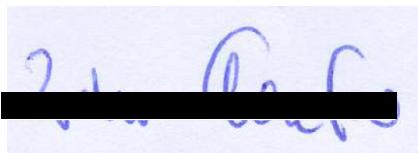
A handwritten signature in blue ink, appearing to read "Paul Olisa Adaka Ojeih". The signature is cursive and includes a small red mark or flourish above the first name.

- Nikitah Okembe-RA Imani, Associate Professor of Sociology and African Studies, James Madison University.
Signature available on request.
- Philippe Packard, PhD, MPH.
Signature available on request.
- David Rasnick, PhD, Biochemist, Protease Inhibitor Developer, Chief Scientific Officer, Chromosome Diagnostics, LLC.



A handwritten signature in blue ink, appearing to read "David Rasnick". The signature is cursive and includes a small red mark or flourish above the first name.

- Prof. Dr. med. Jochen Schaefer, Director, International Institute for Theoretical Cardiology, Kiel, Germany.



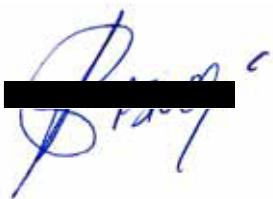
A handwritten signature in blue ink, appearing to read "Jochen Schaefer". The signature is cursive and includes a small red mark or flourish above the first name.

- Hugo Stenström, MD, Senior interventional radiologist, Department of Radiology, Linkoping University Hospital, Sweden.



A handwritten signature in blue ink, appearing to read "Hugo Stenström". The signature is somewhat stylized and includes a small drawing of a heart or cross-like shape at the end.

- Gordon T. Stewart, MD. Emeritus Professor of Public Health, University of Glasgow, and consultant physician (epidemiology and preventive medicine), NHS, UK. Former consultant to New York City, WHO and to other health authorities in Europe, North America, Africa and Asia on AIDS and related matters. Emeritus Fellow, Infectious Diseases Society of America and former member of the editorial board of the Journal of Infectious Diseases.
Signature available on request.
- Roberto P. Stock, PhD. Research Scientist Instituto de Biotecnología – UNAM, Mexico.



A handwritten signature in blue ink, appearing to read "Gordon T. Stewart". The signature is written in a cursive style with a large, prominent 'G'.

- Jean Umber, Professeur agrégé (Organic Chemistry), Académie de Nancy-Metz, Lorraine, France.



A handwritten signature in black ink, appearing to read "Jean Umber". The signature is written in a cursive style with a large, prominent 'J'.

- Rudolf Werner, Professor, Dept. of Biochemistry & Molecular Biology Univ. of Miami School of Medicine.



A handwritten signature in black ink, appearing to read "Rudolf Werner". The signature is written in a cursive style with a large, prominent 'R'.

- Chun Xu, MD, PhD, VP Global Clinical Services, Venturepharm Lab. Beijing, China.



A handwritten signature in black ink, appearing to read "Chun Xu". The signature is written in a cursive style with a large, prominent 'C'.

References:

- [1] Popovic M et al. Detection, Isolation, and Continuous Production of Cytopathic Retroviruses (HTLV-III) from Patients with AIDS and Pre-AIDS. *Science*. 1984 May 4; 224: 497-500.
- [2] Sarngadharan MG et al. Antibodies Reactive with Human T-Lymphotropic Retroviruses (HTLV-III in the Serum of Patients with AIDS). *Science*. 1984 May 4; 224: 506-8.
- [3] Gallo RC et al. Frequent Detection and Isolation of Cytopathic Retroviruses (HTLV-III) from Patients with AIDS and at Risk for AIDS. *Science*. 1984 May 4; 224: 500-3.
- [4] Schüpbach J et al. Serological Analysis of a Subgroup of Human T-Lymphotropic Retroviruses (HTLV-III) Associated with AIDS. *Science*. 1984 May 4; 224: 503-505.
- [5] ""Offer of Proof", Office of Research Integrity, US Department of Health and Human Services, 1993.
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- [6] Staff Report. Subcommittee on Oversight and Investigations. Dingell Committee on Energy and Commerce, House of Representatives. 1994. Archived at: <http://healrtoronto.com/gallodocs.html>
- [7] Draft of M. Popovic's May 4 1984 Science article. http://sciencefictions.net/pdfdocs/draft_of_m_popovic_05.04.84_science_article_undated.pdf
- [8] Letter from Dr. M. Gonda to Dr. M. Popovic (cc R. Gallo). 1984 Mar 26. http://sciencefictions.net/pdfdocs/Letter_from_M_Gonda_to_M_Popovic_03.26.84.pdf
- [9] Gallo RC. Letter to Jun Minowada, MD. Personal Correspondence. 1984 Mar 29.

http://sciencefictions.net/pdfdocs/Letter_from_R_Gallo_to_J_Minowada_03.29.84.pdf