

Jahrling

Matt Meselson

From: Jahrling, Peter B Dr USAMRIID [Peter.Jahrling@us.army.mil]
Sent: Monday, December 16, 2002 6:27 PM
To: 'Matthew S. Meselson'; David FRANZ
Subject: RE: From Ken Alibek

Matt and Dave,

I hope your Email server doesn't filter out big files. I am attaching 4 here. Please promise me that you will not re-transmit them. I am sharing them with you since I want to give you a flavor of what we thought we saw in the early days of the investigation. All of this was described by MG Parker in his testimony to Congress in late October 2001, in which these pictures were displayed. Bear in mind that the question at the time was whether the Daschle material and the cruder stuff that went to the New York Post resembled the product from Iraq collected in 1995. Thus the emphasis on the presence of an additive and its nature.

File "untitl~2" is a scanning EM (SEM) of the Daschle material. Note that it is spores and nothing else. By contrast, see "uni7B9~1", which is the NY Post stuff, with far fewer spores and lots more extraneous debris (or additive?) It was this debris which contained lots and lots of silicon; by contrast, the spores themselves contained far less silicon, as did the spores in the more pure Daschle material. The file labeled "Media anthrax" is a transmission EM (TEM) of the same NY Post material, containing spores and unidentified debris, and lots of holes, probably representative of some water-soluble factor removed by processing. Finally, "un38B1~1" is the famous fried egg, a negative stained prep of the Daschle powder. If you play with the contrast in Photoshop, you can resolve the presence of a spore in the "yoke" of the egg. Our interpretation of this was that we had caught a coating in the act of diffusing away from the spores in these hastily (improperly washed) spore preparations. We further speculated that the perpetrator was experimenting with an additive, and used far more of it in the NY Post prep than in the more refined material. In the Daschle material, all the silicon was associated with the spores; at the time, we didn't ask whether the association was on the surface or was internalized. If in fact it is the latter, it argues against the silicon being an additive, but we didn't test with that level of precision.

If there was an additive, (and the NY Post certainly seemed to), it was clearly different from the Iraqi formulation. (There was no aluminum, a hallmark of Iraqi bentonite). The debris or filler that was so excessive in the NY Post material was loaded with silica. There was little to none of this left in the Daschle material, save the diffusing material detected by negative stain EM in the "fried egg." I understand the FBI has done a lot of testing and has attempted to duplicate the Daschle material, presumably without success, but I don't really know. At this point, just when I thought I understood the nature of this material, all my assumptions are cast into doubt.

Please let me know what conclusions, if any, you draw from these photos. I value your critical judgment.

Peter

-----Original Message-----

From: Matthew S. Meselson [mailto:mmsm@wjh.harvard.edu]
Sent: Tuesday, December 10, 2002 2:08 PM
To: David FRANZ
Cc: Dr. Peter B. JAHRLING
Subject: From Ken Alibek

Dear Dave and Peter,

12/18/2002.

Here is the cover letter Ken sent to the Washington Post along with our joint Letter to the Editor that the Post subsequently published.

As you will see, I wanted to make sure that Ken had no objection to my sharing his cover letter with you.

I agree with him that much has been said to the public about aerosols, spores, "infective doses" and other matters that is technically misleading or sometimes just flat wrong. His idea for a small meeting of experts that might produce a joint primer on these things is worth considering. What do you think?

Soon JAMA will have an article by Weis et al. about what they call "reaerosolization". While it is useful and interesting, it is not clear that what they measured is actual reaerosolization. What they fail to consider is the important possibility that the airborne spores they detected originated from clumps of spores that settled in the Hart building, not from particles small enough to qualify as aerosol particles. In that case, reaerosolization would not be what they have detected.

Peter, I am on the lookout for the EMs you mentioned.

Good seeing you both.

Matt.

Matthew Meselson
Department of Molecular and Cellular Biology
Harvard University
7 Divinity Avenue
Cambridge, MA 02138 USA
email: <msm@wjh.harvard.edu>
telephone: (617) 495-2264
telefax: (617) 496-2444

----- Forwarded message -----
Date: Tue, 10 Dec 2002 09:36:40 -0500
From: Ken Alibek <Ken.Alibek@analex.com>
To: 'Matthew S. Meselson' <msm@wjh.harvard.edu>
Subject: RE: Franz and Jahrling

Dear Matt, It is perfectly fine to send it to them. I would say even more. I am totally shocked with a severe misunderstanding in the analysis of the anthrax powder, with inappropriate use of the word "weaponized" when the anthrax powder is described, the wrong opinions about electric charge and

12/18/2002

particle size, and so on and so forth. In my opinion, there is a necessity to have a scientific meeting inviting all experts to discuss what could be right or wrong in all these analyses.

Best regards,
Ken

P.S. If you wish, you can send this information as well.

-----Original Message-----

From: Matthew S. Meselson [<mailto:msm@wjh.harvard.edu>]

Sent: Monday, December 09, 2002 11:44 PM

To: Ken Alibek

Subject: RE: Franz and Jahrling

Dear Ken,

I was discussing observations of the letter anthrax with David Franz and Peter Jahrling in Washington last week and would like to pass on to them your comment in your "DEar Editor" letter below. May I have your permission to do so? Or would you rather communicate with them directly? If the latter, please copy your email to me.

David FRANZ <franz@sri.org>,
Dr. Peter B. JAHRLING <peter.jahrling@det.amedd.army.mil>

Best regards,

Matt

Matthew Meselson
Department of Molecular and Cellular Biology
Harvard University
7 Divinity Avenue
Cambridge, MA 02138 USA
email: <msm@wjh.harvard.edu>
telephone: (617) 495-2264
telefax: (617) 496-2444

On Sat, 2 Nov 2002, Ken Alibek wrote:

12/18/2002

Date: Sat, 2 Nov 2002 10:01:36 -0500
From: Ken Alibek <Ken.Alibek@analex.com>
To: letters@washpost.com
Cc: 'Matthew S. Meselson' <msm@wjh.harvard.edu>
Subject: RE: Proposed letter to the Washington Post (fwd)

Dear Editor, I never supported the opinion that the anthrax powder sent to Sen. Daschle was sophisticated. But in the article "FBI's Theory on Anthrax is Doubted", my name was mentioned (even though in some other context) that gave some people a wrong understanding of my support of this theory. I disagree with many things described in the article, but I understand that it is absolutely senseless to argue without having any strong scientific evidence. In this specific case, I fully support the professor Meselson's opinion (actually it is our joint opinion) and ask to publish our letter.

Best regards,

Ken Alibek
Center for Biodefense
George Mason University
10900 University Blvd, MS 1A8
Manassas, VA 20110
Email: kalibek@gmu.edu
Tel: 703-993-8545
Fax: 703-993-8447
Home address: 9909 Solitary Pl., Bristow, VA 20136
Home telephone: 703-396-8241

The Washington Post
Tuesday, November 5, 2002; Page A24

The Oct. 28 front-page article "FBI's Theory on Anthrax Is Doubted" reported that silica enabled anthrax spores sent through the mail last fall to become airborne. The article quoted unnamed sources as saying that the spores had been formulated with a product called fumed silica, which, under an electron microscope, "would look like cotton balls strung together into strands that branch out in every direction."

Both of us have examined electron micrographs of the material in the anthrax letter sent to Sen. Tom Daschle, but we saw no evidence of such balls or strands. In July 1980, the Journal of Bacteriology reported an "unexpectedly high concentration of silicon" to be naturally present in the outer spore coat of bacillus cereus, a close relative of bacillus anthracis. Is it possible that the unnamed sources misinterpreted silicon naturally concentrated in spore coats as something that was artificially added?

12/18/2002

Until knowledgeable government investigators announce their results, statements attributed to anonymous sources or from persons who have not examined the actual evidence should be greeted with caution.

MATTHEW MESELSON

Department of Molecular and Cellular Biology

Harvard University

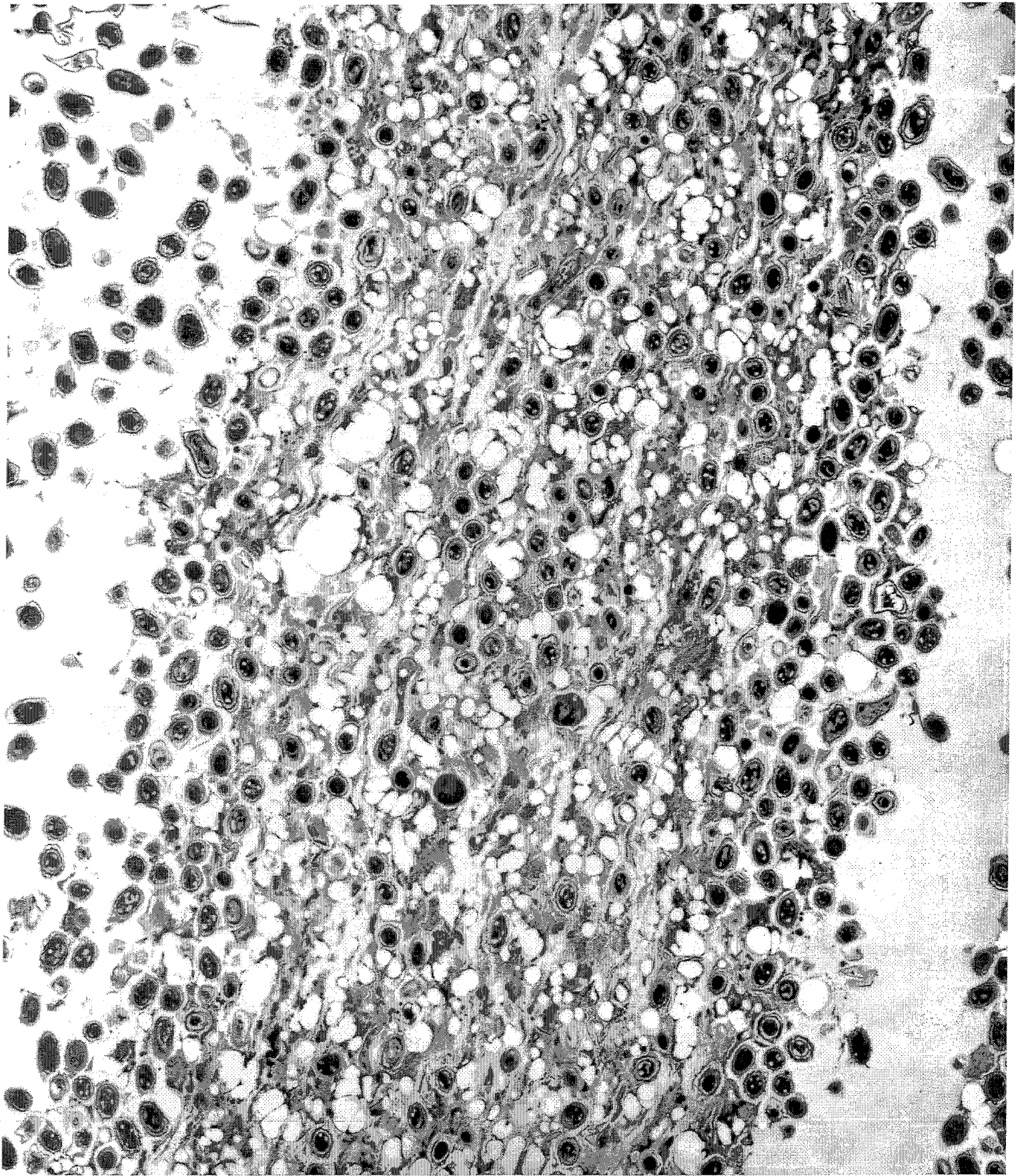
Cambridge, Mass.

KEN ALIBEK

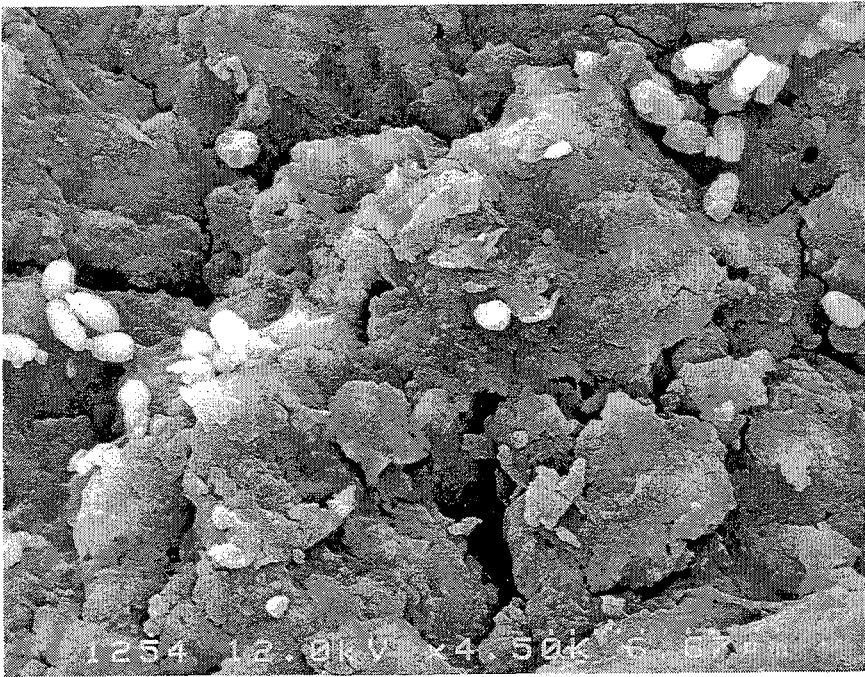
Center for Biodefense

George Mason University

Manassas, VA



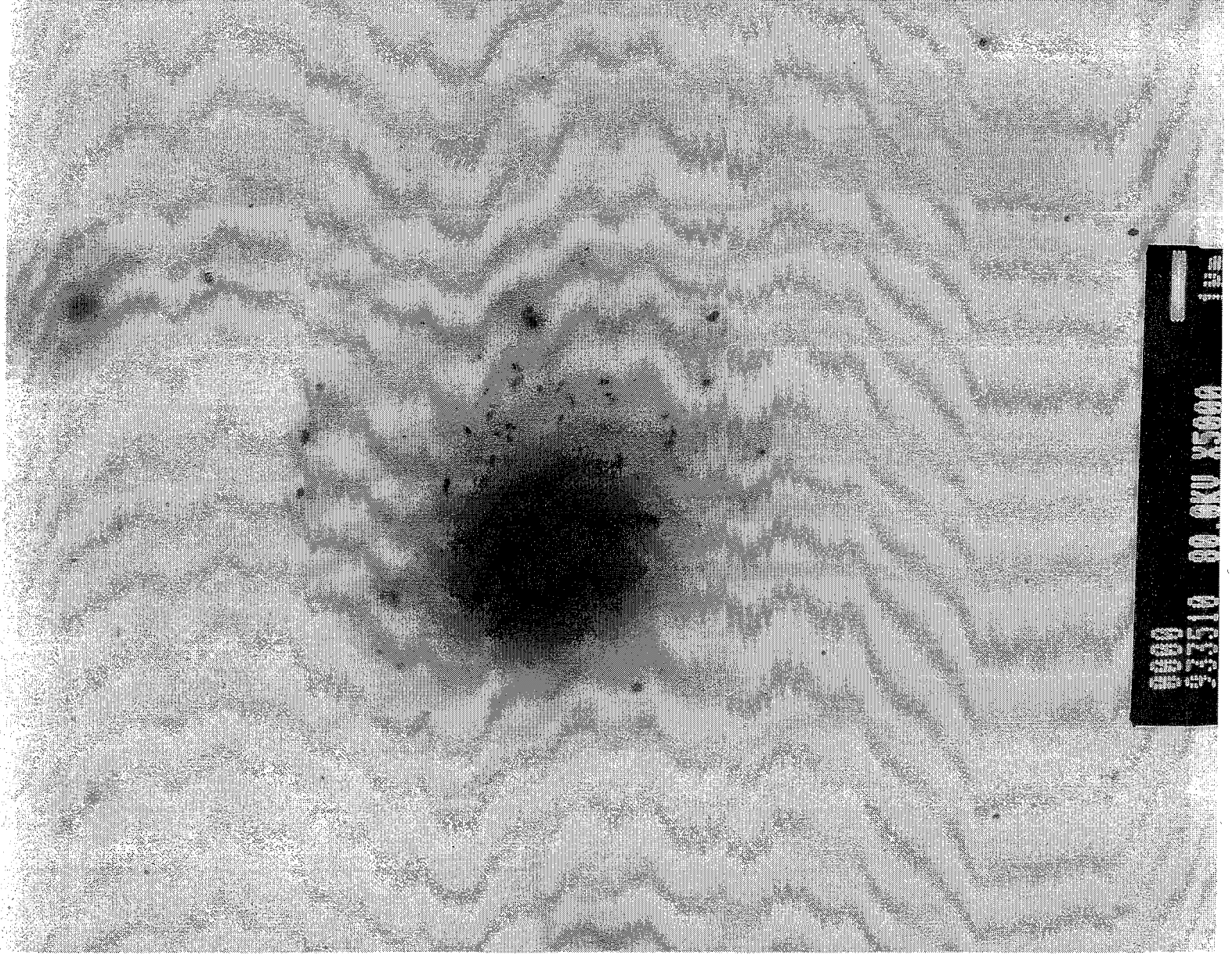
Media anthrax TEM-1pg



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NY Post
much Si in debris
for less in spores

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