

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** Calibration inventories (UNCLASSIFIED)  
**Date:** Monday, March 26, 2007 9:17:58 AM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, March 23, 2007 8:57 AM  
**To:** (b) (6)

Ivins, Bruce E Dr USAMRIID;

(b) (6)

**Subject:** Calibration inventories (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

My apologies for sending these late. If previous editions were sent, please compare anyway, as some of your maintenance techs have been going through. Some Pis were not 'in country' as it were, and hence no updated inventory sheet. If you have any other questions, you can reach me by e-mail or phone.

(b) (6)

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** Calibration inventories (UNCLASSIFIED)  
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**Attachments:** [REDACTED]

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-bruce

Bruce Ivins

(b) (6)

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

From: (b) (6)

Sent: Friday, March 23, 2007 8:57 AM

To: (b) (6)

Ivins, Bruce E Dr USAMRIID;

(b) (6)

Subject: Calibration inventories (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

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(b) (6)

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** LD 50 with SA 793 (VaxGen spores) - Deaths (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 9:33:46 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Deaths	Day 2	Day 3	Day 4	Day 5
Day 6	Day 7			
Group A - 220 spores injected	4			
Group B - 61.2 spores injected	0			
Group C - 20.8 spores injected	0			
Group D - 8.4 spores injected	0			
Group E - 2.4 spores injected	0			

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#) (b) (6)  
**Subject:** LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Thursday, April 12, 2007 11:03:23 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - ~ 900 spores injected		4				
Group B - ~ 270 spores injected		0				
Group C - 88.4 spores injected		0				
Group D - 23.8 spores injected		0				
Group E - 9.4 spores injected		0				

-bruce

Bruce Ivins  
(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)  
**Date:** Saturday, March 24, 2007 8:51:03 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 188

10 mice in each group injected with spores in 0.2 ml, IP

Spores injected	Deaths as of Day 2	Deaths as of Day 3	Deaths as of Day 4	Deaths as of Day 5	Deaths as of Day 6
1600 spores	2	5			
480 spores	1	3			
165 spores	0	1			
37 spores	0	1			
16 spores	0	0			

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)  
**Date:** Saturday, March 24, 2007 8:51:03 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 188

10 mice in each group injected with spores in 0.2 ml, IP

Spores injected	Deaths as of Day 2	Deaths as of Day 3	Deaths as of Day 4	Deaths as of Day 5	Deaths as of Day 6
1600 spores	2	5			
480 spores	1	3			
165 spores	0	1			
37 spores	0	1			
16 spores	0	0			

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** Mouse TTD challenge - Vollum 1B spores - 7 APR 07 (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 11:32:17 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse TTD challenge on Tuesday, 7 APR 07 . The injections will be intraperitoneal, 0.2 ml.

SA# 188 (Vollum 1B) - 10 mice per group

Group 1 - 1 X 10<sup>5</sup> spores in 0.2 ml - IP - inject between 1600 and 1700

Group 2 - 1 X 10<sup>4</sup> spores in 0.2 ml - IP - inject between 1200 and 1300

5 X 10<sup>6</sup>/ml in a tube

1.0 ml into 9.0 ml to give 5 X 10<sup>5</sup>/ml - Group 1

1.0 ml into 9.0 ml to give 5 X 10<sup>4</sup>/ml - Group 2

0.1 ml into 19.9 ml to give 2.5 X 10<sup>2</sup>/ml - plate out

The mice receiving 10<sup>5</sup> spores should die the next day ( Thursday ) beginning about 8 am.

The mice receiving 10<sup>4</sup> spores should die the next day ( Thursday ) beginning late morning.

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** TTD determinations - 19/20 APR 07 - SA# 12469 (NSM + added CaCl2) (UNCLASSIFIED)  
**Date:** Thursday, April 19, 2007 3:25:25 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 12469 - (NSM + added CaCl2)  
Challenge on 19 APR 07

10 mice injected with ????? X 10e4 spores in 0.2 ml, IP

10 mice injected with ????? X 10e5 spores in 0.2 ml, IP

\*\*\*\*\*

TTD - ????? X 10e4

1. hr
2. hr
3. hr
4. hr
5. hr
6. hr
7. hr
8. hr
9. hr
10. hr

\*\*\*\*\*

TTD - ????? X 10e5

1. hr
2. hr
3. hr
4. hr
5. hr
6. hr
7. hr
8. hr
9. hr
10. hr

\*\*\*\*\*

-bruce

Bruce Ivins

(b) (6)  
[Redacted signature block]

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** AIBS 2003 talk (UNCLASSIFIED)  
**Date:** Tuesday, March 27, 2007 11:18:43 AM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

-bruce

Bruce Ivins

(b) (6) [REDACTED]

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** AIBS 2003 talk (UNCLASSIFIED)  
**Date:** Tuesday, March 27, 2007 11:18:43 AM  
**Attachments:** 

---

Classification: UNCLASSIFIED  
Caveats: FOUO

-bruce

Bruce Ivins

(b) (6) 

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** Change in TTD experiment on 10 APR 07 (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 11:24:39 AM

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Classification: UNCLASSIFIED

Caveats: FOUO

We will be doing Vollum 1B instead of the VaxGen spores for the TTD.

-bruce

Bruce Ivins

(b) (6)

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**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, April 06, 2007 10:19 AM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Cc:** (b) (6)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse TTD challenge on Tuesday, 10 APR 07 . The injections will be intraperitoneal, 0.2 ml.

SA# 793 (Old "VaxGen" spores) - 10 mice per group

Group 1 - 1 X 10e4 spores in 0.2 ml - IP - inject between 1200 and 1300

Group 2 - 1 X 10e5 spores in 0.2 ml - IP - inject between 1600 and 1700

5.5 X 10<sup>6</sup>/ml in a tube  
1.0 ml into 10.0 ml to give 5 X 10<sup>5</sup>/ml - Group 1  
1.0 ml into 9.0 ml to give 5 X 10<sup>4</sup>/ml - Group 2  
0.1 ml into 19.9 ml to give 2.5 X 10<sup>2</sup>/ml - plate out  
(Should be about 25 colonies per plate)

The mice receiving 10<sup>5</sup> spores should die the next day ( Thursday ) beginning about 8 am.

The mice receiving 10<sup>4</sup> spores should die the next day ( Thursday ) beginning late morning.

-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** Concentration of Purified Ames spores made in NSM + added CaCl2 (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 2:33:53 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

I purified on Hypaque tonight the Ames spores made in NSM + added CaCl2. They looked extremely clean, with hardly any interface material at all. The spores were all creamy-beige, and easily suspended. I plated them out after purification, washing 2X in WFI, and resuspending in 1% phenol, and (b) (6) will read the plates Monday afternoon. We'll do a TTD and an LD50 this week on them. They look as good and resuspend as well as any spores we've ever made and purified. I hope they're really virulent. If so, then we can plug the data into some of the data of our other spores and soon share it with (b) (6) and (b) (6)

The concentration of the spores in the flask (about 40 ml) is  $7.16 \times 10^9$  per ml.

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO

Classification: UNCLASSIFIED

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**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
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**Date:** Monday, April 16, 2007 2:33:53 PM

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The concentration of the spores in the flask (about 40 ml) is  $7.16 \times 10^9$  per ml.

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Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6)  
**Subject:** Electronic calendar archives requested - SSEP 01 and OCT 01 (UNCLASSIFIED)  
**Date:** Tuesday, April 10, 2007 11:57:36 AM

---

Classification: UNCLASSIFIED  
Caveats: FOUO//IMPORTANT!!!

Hi, (b) (6)

I need my MS Outlook electronic calendar entries for the months of September 2001 and October 2001. Can you please retrieve them for me or tell me how I can get them. It's really important. Thanks!!!

Also, Could I get copies of emails sent and received during those same months? Thanks!

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO//IMPORTANT!!!

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** FW: action items from (b) (6) meeting (UNCLASSIFIED)  
**Date:** Wednesday, April 18, 2007 3:07:44 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

This is what I have, (b) (6) and (b) (6) You can check it with your lists.

1. Get pXO1 and pXO2 ratios from (b) (6) to (b) (6)
2. Send formulation of media to (b) (6) and (b) (6)
3. Send microscope and pertinent procedures to (b) (6)
4. Try adding more nutrients to NSM + CaCl<sub>2</sub> to try to get more spores.]
5. Test the 3 classes of media for virulence (3-6 preps altogether).
6. Tell (b) (6) and (b) (6) where NSM medium components come from.
7. Put together a GANTT chart of who will do what and when.
8. What are the proteins on the spore coat?
9. Look into a germination index determination that isn't a microscopic method.
10. Look into methods of quantitation of heat resistance.
11. Look into genomic or proteomic tests of spores and spore products at RIID.

That's what I have.

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
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That's what I have.

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** FW: eRA Commons: eRA Commons: IAR Reviewer Invitation for meeting 2007/05 ZA11 BLG-M (M1) (1) - Clinical Trials (U01) Password and UserID (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 12:23:26 PM

---

Classification: UNCLASSIFIED

Caveats: NONE

-bruce

Bruce Ivins

(b) (6)

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

From: (b) (6)

Sent: Monday, April 16, 2007 10:02 AM

To: Ivins, Bruce E Dr USAMRIID

Subject: eRA Commons: eRA Commons: IAR Reviewer Invitation for meeting 2007/05 ZA11 BLG-M (M1) (1) - Clinical Trials (U01)

Dear Reviewer:

This is a system-generated invitation to the (b) (6) eRA Commons Internet Assisted Review (IAR) website in connection with your participation on Special Emphasis Panel/Scientific Review Group 2007/05 ZA11 BLG-M (M1) (1) meeting, scheduled for 05/04/2007-05/04/2007.

To submit your preliminary written reviews electronically, you will need to log on to the (b) (6) eRA Commons Internet Assisted Review (IAR) web site with a user name and password. Our records indicate that you have previously established an Internet Assisted Review user account.

Your user name is (b) (6)

Your pass word is (b) (6)

Please open your Web browser and go to the (b) (6) eRA Commons URL

(b) (6) (You can copy and paste this address into the "Location" window of your browser, and press Enter. If the url doesn't work, make sure it is complete and hasn't been broken over multiple lines. If the url spans more than one line make sure you are entering all of it in the location window of your browser.) Follow the instructions on the screen to log in to Commons. After successfully logging on, click on Internet Assisted Review in the blue menu bar.

If you have questions or encounter problems accessing Internet Assisted Review, please call or email the (b) (6).

Thank you for your time and effort.

Sincerely,

(b) (6)

(b) (6)



Classification: UNCLASSIFIED

Caveats: NONE

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** FW: eRA Commons: eRA Commons: IAR Reviewer Invitation for meeting 2007/05 ZA11 BLG-M (M1) (1) - Clinical Trials (U01) Password and UserID (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 12:23:26 PM

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Classification: UNCLASSIFIED

Caveats: NONE

-bruce

Bruce Ivins

(b) (6)

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

From: (b) (6)

Sent: Monday, April 16, 2007 10:02 AM

To: Ivins, Bruce E Dr USAMRIID

Subject: eRA Commons: eRA Commons: IAR Reviewer Invitation for meeting 2007/05 ZA11 BLG-M (M1) (1) - Clinical Trials (U01)

Dear Reviewer:

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To submit your preliminary written reviews electronically, you will need to log on to the (b) (6) eRA Commons Internet Assisted Review (IAR) web site with a user name and password. Our records indicate that you have previously established an Internet Assisted Review user account.

Your user name is (b) (6)

Your pass word is (b) (6)

Please open your Web browser and go to the (b) (6) eRA Commons URL

(b) (6) (You can copy and paste this address into the "Location" window of your browser, and press Enter. If the url doesn't work, make sure it is complete and hasn't been broken over multiple lines. If the url spans more than one line make sure you are entering all of it in the location window of your browser.) Follow the instructions on the screen to log in to Commons. After successfully logging on, click on Internet Assisted Review in the blue menu bar.

If you have questions or encounter problems accessing Internet Assisted Review, please call or email the (b) (6)

Thank you for your time and effort.

Sincerely,

(b) (6)

(b) (6)



Classification: UNCLASSIFIED

Caveats: NONE

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: Given to (b) (6) for Irradiation (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 1:36:42 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Here is the record for the sterility check. Ten percent of the total material was plated out onto SBA and it was all negative for growth. The plates, incubated over the weekend, remained negative.

-bruce

Bruce Ivins

(b) (6)

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**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, November 03, 2006 9:44 AM  
**To:** (b) (6)  
**Subject:** FW: Given to (b) (6) for Irradiation

The spores were irradiated on October 30. On November 2, (b) (6) plated out 10% of each of the preps onto SBA plates. All were negative for growth 24 hours later. They will be incubated over the weekend.

Bruce Ivins

(b) (6)

The following spore preps were given to (b) (6) for irradiation (4 Mega Rads):

1. Ames, Select Agent # 1749, made at USAMRIID in Leighton and Doi medium in shaker flasks, then purified
2. Ames, Select Agent # 11886, made at USAMRIID on SBA plates, not purified
3. Ames, Select Agent # 489, made at (b) (6) in Leighton and Doi medium in fermentors, not purified
4. Ames, Select Agent # 11600, made at (b) (6) in Leighton and Doi medium in fermentors, then purified
5. Delta Sterne Spores - made in shaker flasks in G medium, then purified - "clean" material (separated from dirty debris)

6. Delta Sterne Spores - made in shaker flasks in G medium, then purified - "dirty" material (separated from "clean" spores above)

7. Delta Sterne Spores - made on SBA plates, purified - "clean"

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: Given to (b) (6) for Irradiation (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 7:52:59 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Hey, (b) (6) - who were these spores for?

-bruce

Bruce Ivins

(b) (6)

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, March 30, 2007 1:37 PM  
**To:** (b) (6)  
**Subject:** FW: Given to (b) (6) for Irradiation (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Here is the record for the sterility check. Ten percent of the total material was plated out onto SBA and it was all negative for growth. The plates, incubated over the weekend, remained negative.

-bruce

Bruce Ivins

(b) (6)

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, November 03, 2006 9:44 AM  
**To:** (b) (6)  
**Subject:** FW: Given to (b) (6) for Irradiation

The spores were irradiated on October 30. On November 2, (b) (6) plated out 10% of each of

the preps onto SBA plates. All were negative for growth 24 hours later. They will be incubated over the weekend.

Bruce Ivins

(b) (6)

The following spore preps were given to (b) (6) for irradiation (4 Mega Rads):

1. Ames, Select Agent # 1749, made at USAMRIID in Leighton and Doi medium in shaker flasks, then purified
2. Ames, Select Agent # 11886 , made at USAMRIID on SBA plates, not purified
3. Ames, Select Agent # 489, made at (b) (6) in Leighton and Doi medium in fermentors, not purified
4. Ames, Select Agent # 11600, made at (b) (6) in Leighton and Doi medium in fermentors, then purified
5. Delta Sterne Spores - made in shaker flasks in G medium, then purified - "clean" material (separated from dirty debris)
6. Delta Sterne Spores - made in shaker flasks in G medium, then purified - "dirty" material (separated from "clean" spores above)
7. Delta Sterne Spores - made on SBA plates, purified - "clean"

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6) [D](#)  
**Subject:** FW: IRRADIATED SPORES (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 1:49:40 PM  
**Attachments:** [REDACTED]

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Classification: UNCLASSIFIED  
Caveats: FOUO

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, March 30, 2007 1:55 PM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Cc:** Ivins, Bruce E Dr USAMRIID  
**Subject:** IRRADIATED SPORES

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre Pro.

Sent by: (b) (6) Number of Images: 1 Attachment File Type: PDF

WorkCentre Pro Location: unknown  
Device Name: (b) (6)

For more information on Xerox products and solutions, please visit <http://www.xerox.com>

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: Meeting On April 12, 2007 (UNCLASSIFIED)  
**Date:** Thursday, March 29, 2007 3:47:25 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

I'd like both of you to come to this meeting if possible. We'll be discussing the (b) (6) work involving optimization of spore conditions.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Thursday, March 29, 2007 3:39 PM  
**To:** (b) (6); Ivins, Bruce E Dr  
USAMRIID; (b) (6)  
**Subject:** Meeting On April 12, 2007 (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Hi Everyone,

It looks as though Thursday, 12 April 2007 will work for everyone. USAMRIID will come up with an agenda and then send it out to everyone by early next week for comments.

Thanks!

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** FW: New PIN Number Issue for Biocontainmnet (UNCLASSIFIED)  
**Date:** Tuesday, March 27, 2007 11:29:58 AM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Mine is (b)(2)

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Tuesday, March 27, 2007 10:02 AM  
**To:** (b) (6)  
**Subject:** FW: New PIN Number Issue for Biocontainmnet (UNCLASSIFIED)

This message only applies to personnel which have electronic access (keypads) to biocontainment suites. Please stop by the front security desk of Building (b)(2) to receive your new PIN (personal identification number) as required by Army regulation. PIN numbers must now be changed every 12 months. See enclosed schedule for uninterrupted access.

Thank you,

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: NSM (New Sporulation Medium) formulation - broth (UNCLASSIFIED)  
**Date:** Monday, March 26, 2007 8:27:11 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

	Amount per liter
1. Tryptone	3 grams
2. Yeast extract	3 grams
3. Peptone	5 grams
4. Lab-Lemco powder (not agar)	3 grams
5 . MnCl2-4H2O (1% solution)	1 ml
6 . Deionized water	1000 ml

Add 250 ml to each Two-liter flask and autoclave for 15 minutes

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: Power Point and Agenda (UNCLASSIFIED)  
**Date:** Thursday, April 12, 2007 8:04:57 AM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Here you are!

-bruce

Bruce Ivins

(b) (6)  
[REDACTED]

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

**From:** (b) (6)  
**Sent:** Thursday, April 12, 2007 7:55 AM  
**To:** (b) (6) Ivins, Bruce E Dr USAMRIID  
**Subject:** Power Point and Agenda (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Finally!

I have a lap top and projector (plus donuts). No coffee though--I was here at 6am and it would have been cold by now.

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** FW: Select Agent 1749 - USAMRIID Spores (JAN 06-MAR 06) (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 1:39:52 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

So far for the SA# 1749 Spores:

Purity - 100%  
Encapsulation - 100%  
Uniformity - >99%  
Viability -  $3.81 \times 10^{10}/\text{ml}$   
Volume - 107 ml  
Total counts -  $4.1 \times 10^{12}$  CFU  
0% Vegetative cells  
0% Non-refractile spores  
0% Debris  
Petroff-Hausser count -  $2.6 \times 10^{10}/\text{ml}$

Spores will be given to (b) (6) for endotoxin determination, (b) (6) for FA, and (b) (6) for spray efficiency determination.

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Information for (b) (6) (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 4:32:01 PM  
**Attachments:** [Redacted]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

This is information that was requested by (b) (6) and (b) (6) at the meeting last week. Please send it to them.

-bruce

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Latest results on medium study (UNCLASSIFIED)  
**Date:** Wednesday, April 11, 2007 2:36:52 PM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Here you go!!

-bruce

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Latest results on medium study (UNCLASSIFIED)  
**Date:** Wednesday, April 11, 2007 2:36:52 PM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Here you go!!

-bruce

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** LD 50 with SA 793 (VaxGen spores) (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 1:30:03 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Group A - 220 spores injected

Group B - 61.2 spores injected

Group C - 20.8 spores injected

Group D - 8.4 spores injected

Group E - 2.4 spores injected

-bruce

Bruce Ivins  
(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** Medium studies (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 2:42:27 PM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Here you are, (b) (6)

-bruce

Bruce Ivins  
(b) (6)  
[REDACTED]

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6) ; [Ivins, Bruce E Dr USAMRIID](#)  
**Cc:** (b) (6)  
**Subject:** Meeting this morning - Tuesday, 27 MAR 07 (UNCLASSIFIED)  
**Date:** Tuesday, March 27, 2007 2:16:50 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Our meeting this morning dealt with the following issues (I think....):

1) IAA Workplan B.9 (Bacillus anthracis Spore Process Development for GLP Animal Efficacy Studies)

- (b) (6) will work on setting up a meeting in the late April - early May timeframe. The meeting should include people from (b) (6) USAMRIID and (b) (6)

- (b) (6) and (b) (6) will work on an agenda for the meeting. Suggestions for the agenda include
- 1) Purpose of the plan and scope of work, and what RIID and (b) (6) set out to do.
  - 2) Accomplishments so far: a) (b) (6) accomplishments; b) RIID accomplishments on spore production (Bruce); c) RIID accomplishments on animal models and virulence studies (b) (6)
  - 3) Problems thus far encountered with the work.
  - 4) Future work, including what (b) (6) can do, what RIID can do, and whether funding for work may be extended into FY08 (to enable (b) (6) to carry out fermentation studies.)

2) Spores that (b) (6) is supposed to provide RIID. How many shipments do they currently owe us, and when do they think we'll get them? Here is a record of the last shipments they sent us:

Run of 16 JAN 06, Received on 2 FEB 06  
Run of 24 FEB 06, Received on 15 MAR 06  
Run of 23 MAR 06, Received on 6 APR 06  
Run of 18 MAY 06, Received on 3 AUG 06  
Run of 25 MAY 06, Received on 3 AUG 06

3) Spores (different strains) that we are producing for various customers on various media, harvested and purified various ways. How much are we going to charge for "small" batches? We are currently making some for (b) (6) Exactly what will be required for the Certificate of Analysis of these spores? (Viability, encapsulation, etc.)

4. We still need to work out how much formalin treatment is needed to ensure 100% sterility in a spore preparation. A "killing curve" could be used to predict how fast spores are inactivated in certain concentrations of formalin.

5. It was suggested that bridging studies should be done with respect to the old endotoxin assay and the new handheld, FDA-approved device. Perhaps we could get some archived preps for which the old assay was done and test them in the new system(?) This would prevent having to go back and repeat the old methodology, when we've been having a lot of problems with it.

-bruce

Bruce Ivins

(b) (6)  
[Redacted signature block]

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** Mouse LD50 challenge - SA#793 (Old "VaxGen" spores) - Tuesday, 10 APR 07 - REPEAT (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 10:12:19 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse LD50 challenge on Tuesday, 10 APR. The injections will be intraperitoneal, 0.2 ml.

SA# 793 (Old "VaxGen" spores) - 10 mice per group

Group A - 1000 spores in 0.2 ml - IP

Group B - 300 spores in 0.2 ml - IP

Group C - 100 spores in 0.2 ml - IP

Group D - 30 spores in 0.2 ml - IP

Group E - 10 spores in 0.2 ml - IP

5.5 X 10<sup>6</sup>/ml in a tube

0.1 ml into 10.9 ml to give 5 X 10<sup>4</sup>/ml

1.0 ml into 9.0 ml to give 1,000 per 0.2 ml - - Group A

4.5 ml into 10.5 ml to give 300 per 0.2 ml - - Group B

6.0 ml into 12.0 ml to give 100 per 0.2 ml - - Group C

4.5 ml into 10.5 ml to give 30 per 0.2 ml - - Group D

6.0 ml into 12.0 ml to give 10 per 0.2 ml - - Group E

Plate out 0.2 ml of E and D - should get 10 and 30 colonies per plate

Plate out 50 microliters of C - should get 25 colonies per plate

-bruce

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** Mouse LD50 challenge on 19 APR 07 - SA#12469 (NSM + added CaCl2) (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 3:51:00 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse LD50 challenge on Thursday, 19 APR 07 . The injections will be intraperitoneal, 0.2 ml.

SA# 12469 - 10 mice per group

Group A - 1000 spores in 0.2 ml - IP

Group B - 300 spores in 0.2 ml - IP

Group C - 100 spores in 0.2 ml - IP

Group D - 30 spores in 0.2 ml - IP

Group E - 10 spores in 0.2 ml - IP

7.0 X 10<sup>5</sup>/ml in a tube (This is a 10<sup>-4</sup> dilution of the original stock.)

1.0 ml into 13 ml to give 5 X 10<sup>4</sup>/ml

1.0 ml into 9.0 ml to give 1,000 per 0.2 ml - - Group A

4.5 ml into 10.5 ml to give 300 per 0.2 ml - - Group B

6.0 ml into 12.0 ml to give 100 per 0.2 ml - - Group C

4.5 ml into 10.5 ml to give 30 per 0.2 ml - - Group D

6.0 ml into 12.0 ml to give 10 per 0.2 ml - - Group E

Plate out 0.2 ml of C, D, and E - should get 100, 30 and 10 colonies per plate , respectively.

-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6)  
**Subject:** Notebook subpoena (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 10:38:50 AM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

(b) (6)

I've gathered all of my subpoenaed notebooks and will be happy to bring them up to the (b) (6) DOJ is aware that requests for interviews with me, personal materials, and materials in my possession should go through my attorney, (b) (6) (b) (6) need to see the part of the subpoena that pertains to me and materials in my possession.

Thanks.

-bruce

\*\*\*\*\*

Bruce,  
Per (b) (6) request, please copy anything you might need from the following notebooks and bring the original notebooks to the (b) (6) by noon on Mon., 4/9/07:

- #1511
- 1748
- 1844
- 1914
- 2013
- 2064
- 3080
- 3114b
- 3167
- 3209
- 3233
- 3234
- 3269
- 3464
- 3465
- 3563
- 3655
- 3685
- 3716
- 3745
- 3760
- 3921
- 3945
- 4000
- 4010
- 4037
- 4103
- 4237
- 4240
- 4241

(b) (6)

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** NSM broth - repeat (UNCLASSIFIED)  
**Date:** Wednesday, April 04, 2007 2:38:41 PM  
**Attachments:** [REDACTED]

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Classification: UNCLASSIFIED  
Caveats: FOUO

Here are the data for the latest run - NSM broth and Ames spores.

-bruce

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Purified Ames spores made in NSM + added CaCl2 (UNCLASSIFIED)  
**Date:** Sunday, April 15, 2007 11:16:58 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

I purified on Hypaque tonight the Ames spores made in NSM + added CaCl2. They looked extremely clean, with hardly any interface material at all. The spores were all creamy-beige, and easily suspended. I plated them out after purification, washing 2X in WFI, and resuspending in 1% phenol, and (b) (6) will read the plates Monday afternoon. We'll do a TTD and an LD50 this week on them. They look as good and resuspend as well as any spores we've ever made and purified. I hope they're really virulent. If so, then we can plug the data into some of the data of our other spores and soon share it with (b) (6) and (b) (6)

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Deaths (UNCLASSIFIED)  
**Date:** Sunday, April 01, 2007 9:38:33 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

Deaths 6	Day 7	Day 2	Day 3	Day 4	Day 5	Day
Group A - 220 spores injected		4	4	4		
Group B - 61.2 spores injected		0	1	2		
Group C - 20.8 spores injected		0	1	2		
Group D - 8.4 spores injected		0	0	0		
Group E - 2.4 spores injected		0	0	0		

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Deaths (UNCLASSIFIED)  
**Date:** Saturday, March 31, 2007 9:19:10 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

Deaths	Day 2	Day 3	Day 4	Day 5	Day
6 Day 7					
Group A - 220 spores injected	4	4			
Group B - 61.2 spores injected	0	1			
Group C - 20.8 spores injected	0	1			
Group D - 8.4 spores injected	0	0			
Group E - 2.4 spores injected	0	0			

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Deaths (UNCLASSIFIED)  
**Date:** Wednesday, April 04, 2007 9:23:42 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

Deaths	Day 7	Day 2	Day 3	Day 4	Day 5	Day
6						
Group A - 220 spores injected		4	4	4	4	
4	4					
Group B - 61.2 spores injected		0	1	2	4	
4	4					
Group C - 20.8 spores injected		0	1	2	2	
2	2					
Group D - 8.4 spores injected		0	0	0	0	
0	0					
Group E - 2.4 spores injected		0	0	0	0	
0	0					

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 2:24:54 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

Thanks to (b) (6) for doing the PM check on the animals

-bruce

Bruce Ivins

(b) (6)

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**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Sunday, April 15, 2007 11:04 PM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - ~ 900 spores injected		4	5	6	6	7
Group B - ~ 270 spores injected		0	1	1	1	1
Group C - 88.4 spores injected		0	1	2	2	2
Group D - 23.8 spores injected		0	1	1	1	1
Group E - 9.4 spores injected		0	0	0	0	0

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Sunday, April 15, 2007 11:03:45 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - ~ 900 spores injected		4	5	6	6	
Group B - ~ 270 spores injected		0	1	1	1	
Group C - 88.4 spores injected		0	1	2	2	
Group D - 23.8 spores injected		0	1	1	1	
Group E - 9.4 spores injected		0	0	0	0	

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Saturday, April 14, 2007 9:23:18 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - ~ 900 spores injected		4	5	6		
Group B - ~ 270 spores injected		0	1	1		
Group C - 88.4 spores injected		0	1	2		
Group D - 23.8 spores injected		0	1	1		
Group E - 9.4 spores injected		0	0	0		

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Friday, April 13, 2007 5:23:56 PM

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Classification: UNCLASSIFIED

Caveats: FOUO

-bruce

Bruce Ivins

(b) (6)

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**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Thursday, April 12, 2007 11:03 PM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A -	~ 900 spores injected	4	5			
Group B -	~ 270 spores injected	0	1			
Group C -	88.4 spores injected	0	1			
Group D -	23.8 spores injected	0	1			
Group E -	9.4 spores injected	0	0			

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Friday, April 13, 2007 5:23:56 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

-bruce

Bruce Ivins

(b) (6)

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**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Thursday, April 12, 2007 11:03 PM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - ~ 900 spores injected		4	5			
Group B - ~ 270 spores injected		0	1			
Group C - 88.4 spores injected		0	1			
Group D - 23.8 spores injected		0	1			
Group E - 9.4 spores injected		0	0			

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD 50 with SA 793 (VaxGen spores) - Repeat (UNCLASSIFIED)  
**Date:** Thursday, April 19, 2007 8:08:14 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

From the SA 793 (Vax Gen) spores on April 10:

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A - 7	~ 900 spores injected 7	4	5	6	6	7
Group B - 1	~ 270 spores injected 2	0	1	1	1	1
Group C - 2	88.4 spores injected 2	0	1	2	2	2
Group D - 1	23.8 spores injected 1	0	1	1	1	1
Group E - 0	9.4 spores injected 0	0	0	0	0	0

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: LD 50 with SA# 12469 spores (NSM + added CaCl2) - April 19, 2007 (UNCLASSIFIED)  
**Date:** Friday, April 20, 2007 11:39:02 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

This will be repeated on Tuesday, 24 APRIL, 2007.

Day 7	Day 8	Day 2	Day 3	Day 4	Day 5	Day 6
Group A -						
Group B -						
Group C -						
Group D -						
Group E -						

-bruce

Bruce Ivins

(b) (6)



Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)  
**Date:** Monday, March 26, 2007 3:58:55 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 188

10 mice in each group injected with spores in 0.2 ml, IP

Spores injected	Deaths as of Day 2	Deaths as of Day 3	Deaths as of Day 4	Deaths as of Day 5	Deaths as of Day 6
1600 spores	2	5	6	7	
480 spores	1	3	4	4	
165 spores	0	1	2	4	
37 spores	0	1	1	2	
16 spores	0	0	1	1	

-bruce

Bruce Ivins  
(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)  
**Date:** Sunday, March 25, 2007 8:47:18 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Attention, everyone:

I was doing the nighttime mouse survival counts on Sunday night, day 4. The caretaker had put down that as of today, 3 mice had died from the 165-spores-injected group. When I counted the number left, there were 8 mice, so 3 mice couldn't possibly have died in that group. I made that adjustment as reflected below, which says that only 2 mice have died in that group. If we have a lot more LD50 determinations to do (as opposed to just TTD determinations), we may wish to consider injecting on Monday or Friday, to maximize the number of animals that die during the workweek, instead of on the weekend.

-bruce

Bruce Ivins

(b) (6)

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Saturday, March 24, 2007 8:51 PM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 188

10 mice in each group injected with spores in 0.2 ml, IP

Spores injected	Deaths as of Day 2	Deaths as of Day 3	Deaths as of Day 4	Deaths as of Day 5	Deaths as of Day 6
-----------------	--------------------	--------------------	--------------------	--------------------	--------------------

1600 spores	2	5	6
480 spores	1	3	4
165 spores	0	1	2
37 spores	0	1	1
16 spores	0	0	1

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the line "(b) (6)" and extending to the right and down.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: LD50 determinations - March 21 Vollum 1B challenge - Survival data (UNCLASSIFIED)  
**Date:** Tuesday, March 27, 2007 10:49:11 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Select Agent # 188

10 mice in each group injected with spores in 0.2 ml, IP

Spores injected	Deaths as of Day 2	Deaths as of Day 3	Deaths as of Day 4	Deaths as of Day 5	Deaths as of Day 6
1600 spores 7	2 7	5	6		
480 spores 4	1 4	3	4		
165 spores 4	0 4	1	2		
37 spores 2	0 2	1	1		
16 spores 1	0 1	0	1		

-bruce

Bruce Ivins  
(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** RE: Mouse TTD challenge - Vollum 1B spores - 7 APR 07 - Correction (UNCLASSIFIED)  
**Date:** Saturday, April 07, 2007 6:54:27 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse TTD challenge on Tuesday, 7 APR 07 . The injections will be intraperitoneal, 0.2 ml.

SA# 188 (Vollum 1B) - 10 mice per group

Group 1 - 1 X 10<sup>5</sup> spores in 0.2 ml - IP - inject between 1600 and 1700

Group 2 - 1 X 10<sup>4</sup> spores in 0.2 ml - IP - inject between 1200 and 1300

5.5 X 10<sup>6</sup>/ml in a tube  
1.0 ml into 10.0 ml to give 5 X 10<sup>5</sup>/ml - Group 1  
1.0 ml into 9.0 ml to give 5 X 10<sup>4</sup>/ml - Group 2  
0.1 ml into 19.9 ml to give 2.5 X 10<sup>2</sup>/ml - plate out

The mice receiving 10<sup>5</sup> spores should die the next day ( Thursday ) beginning about 8 am.

The mice receiving 10<sup>4</sup> spores should die the next day ( Thursday ) beginning late morning.

Bruce Ivins

(b) (6)

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Agenda for (b) (6) Meeting (UNCLASSIFIED)  
**Date:** Thursday, April 05, 2007 4:18:45 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

I'd like to present what I've done so far as far as spore production optimization. I have a good deal of data. I think it would be good if (b) (6) talked some about the animal model development. My talk would probably be a minimum of 20 minutes and a maximum of about 40 or 45, depending on how much detail I go into.

I don't know if (b) (6) has anything they want to present.

Topics to cover:

- 1) What we and (b) (6) set out to do
- 2) What we and (b) (6) have done so far
- 3) What we and (b) (6) intend to do in the future
- 4) Time issues (extensions? Moving money from FY07 to FY08?)
- 5) Money issues
- 6) Concerns and comments by (b) (6) about the work.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Thursday, April 05, 2007 4:06 PM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** Agenda for (b) (6) Meeting (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Hi,

Have you come up with a list of items or ideas you want to bring up at the meeting? For example: Bruce, do you have a list of the data you want to present?

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Agenda for (b) (6) Meeting (UNCLASSIFIED)  
**Date:** Thursday, April 05, 2007 4:18:45 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

I'd like to present what I've done so far as far as spore production optimization. I have a good deal of data. I think it would be good if (b) (6) talked some about the animal model development. My talk would probably be a minimum of 20 minutes and a maximum of about 40 or 45, depending on how much detail I go into.

I don't know if (b) (6) has anything they want to present.

Topics to cover:

- 1) What we and (b) (6) set out to do
- 2) What we and (b) (6) have done so far
- 3) What we and (b) (6) intend to do in the future
- 4) Time issues (extensions? Moving money from FY07 to FY08?)
- 5) Money issues
- 6) Concerns and comments by (b) (6) about the work.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Thursday, April 05, 2007 4:06 PM  
**To:** Ivins, Bruce E Dr USAMRIID (b) (6)  
**Subject:** Agenda for (b) (6) Meeting (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Hi,

Have you come up with a list of items or ideas you want to bring up at the meeting? For example: Bruce, do you have a list of the data you want to present?

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Clinical Trial Pre-Review Teleconf: April 9, 2:00 Eastern time (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 1:59:53 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Thanks, (b) (6) My phone number is (b) (6).

-bruce

Bruce Ivins

(b) (6)

---

From: (b) (6)

Sent: Friday, March 30, 2007 8:25 AM

To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)

(b) (6)

Subject: Clinical Trial Pre-Review Teleconf: April 9, 2:00 Eastern time

Importance: High

Dear All,

The best time I could find for the pre-review teleconference is April 9 at 2:00 pm, Eastern time. I am sorry that this does not fit with some of your schedules, but we are going to record it, and I can send you a CD that you can listen to. I will be sending a few materials via email prior to that review.

Our teleconferencing service (probably Premier) will be calling you about 10 minutes before 2:00 pm. I will also be sending you information on a phone number to call in case you do not get called.

Please email me the phone number at which you want to be called at that time.

If you are not able to attend, let me know that you would like a CD.

Also, as I will mention, since this is a clinical trial review, the appendix is considered a necessary part of

the application and does need to be reviewed.

Thanks very much,

(b) (6)

(b) (6)

Important Notice: Are you ready for electronic submission and (b) (6) new grant application forms? PAPER NO MORE, USE 424! Go to (b) (6) to find out. Information for registering for electronic submission is available at (b) (6).

Disclaimer: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The (b) (6) shall not accept liability for any statement made that are the sender's own and not expressly made on behalf of the (b) (6) by one of its representatives.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Clinical Trial Pre-Review Teleconf: April 9, 2:00 Eastern time (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 2:05:33 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

By the way, (b) (6) - I won't need a hotel room, but I will need to know where the meeting will be so that I can drive there and park. Thanks.

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Friday, March 30, 2007 8:25 AM  
**To:** (b) (6); Ivins, Bruce E Dr USAMRIID; (b) (6)

**Subject:** Clinical Trial Pre-Review Teleconf: April 9, 2:00 Eastern time  
**Importance:** High

Dear All,

The best time I could find for the pre-review teleconference is April 9 at 2:00 pm, Eastern time. I am sorry that this does not fit with some of your schedules, but we are going to record it, and I can send you a CD that you can listen to. I will be sending a few materials via email prior to that review.

Our teleconferencing service (probably Premier) will be calling you about 10 minutes before 2:00 pm. I will also be sending you information on a phone number to call in case you do not get called.

Please email me the phone number at which you want to be called at that time.

If you are not able to attend, let me know that you would like a CD.

Also, as I will mention, since this is a clinical trial review, the appendix is considered a necessary part of the application and does need to be reviewed.

Thanks very much,

(b) (6)

(b) (6)

Important Notice: Are you ready for electronic submission and (b) (6) new grant application forms? PAPER NO MORE, USE 424! Go to (b) (6) to find out. Information for registering for electronic submission is available at (b) (6)

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Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: COR request (UNCLASSIFIED)  
**Date:** Wednesday, April 04, 2007 10:02:34 AM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Hi, (b) (6) I took the class, which required a total of about 10 hours, not 1 hour. Enclosed is the training certificate.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Monday, April 02, 2007 1:13 PM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: COR request (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Dr. Ivins: Per our conversation, attached is a copy of (b) (6) preproposal for your files. As soon as we receive their full proposal through the (b) (6) BAA, I'll forward it to you for review.

Also, if (b) (6) (b) (6) is not able to help you with the COR training requirement, please let me know. Thank you for your help.

v/r,

(b) (6)

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

**From:** (b) (6)  
**Sent:** Wednesday, March 28, 2007 1:25 PM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Cc:** (b) (6)  
**Subject:** FW: COR request (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Dr. Ivins:

Thank you for volunteering to be the Contracting Officer's Representative (COR) for the full proposal to be submitted by (b) (6) in response to an Army FY07 congressional add entitled: "Anthrax Skin Patch Vaccine." I suspect that (b) (6) provided you a copy of their preproposal, but if not,

please let me know and I'll forward a copy to you for your files.

FYI, on 27 Feb 07 (see attached letter - (b) (6) ), (b) (6) requested that the (b) (6) submit a full proposal within 90 days through the (b) (6) Broad Agency Announcement (BAA). As soon as we receive (b) (6) full proposal through the BAA, I'll forward you a copy to review and complete an in-house review template, which I'll forward to you along with the full proposal document. Our office will also request an external review of the proposal by the (b) (6) as well, which is required by (b) (6)

At your convenience, could you please email (b) (6) or fax (b) (6) me a copy of your COR training certificate so that I can include in the proposal package to be sent to (b) (6) for processing?

In addition, (b) (6) recently issued (13 Mar 07) the attached Procurement Advisory Notice (PAN) 07-0 guidance stating that no contracts, orders, or grants may be awarded until the assigned COR/TOCOR/ GOR has taken the (b) (6) learning module CLC 106, entitled "COR with a Mission Focus." The link to the (b) (6) website is (b) (6) > . Before you may take the class which should take less than one hour, you'll need to pre-register and obtain a UserID and Password. Once you have successfully taken the course, please send me a copy of your course certificate and I will include with your COR training certificate to provide to the (b) (6) contracting officer.

If you have any questions, please let me know. Thanks again for your help.

v/r,  
(b) (6)

[Redacted signature block]

-----Original Message-----  
From: (b) (6)  
Sent: Monday, March 05, 2007 12:21 PM  
To: (b) (6)  
Subject: Fw: COR request

(b) (6)  
As requested.

(b) (6)  
-----Original Message-----  
From: (b) (6)  
To: (b) (6)  
Sent: Fri Mar 02 16:13:20 2007  
Subject: COR request

(b) (6)  
Dr. Bruce Ivins has volunteered to be the COR for the ERMS07052002 UID 000106557.  
Sorry that I couldn't send the whole email thread.... it is on my non-networked computer.

Thanks,

(b)  
(c)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: NONE

Attachment Classification: UNCLASSIFIED  
Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6)  
**Subject:** RE: HR Transfer (UNCLASSIFIED)  
**Date:** Monday, March 26, 2007 9:14:22 AM

---

Classification: UNCLASSIFIED  
Caveats: NONE

I'll approve at this end, (b) (6)

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Monday, March 26, 2007 9:14 AM  
**To:** (b) (6)  
**Cc:** (b) (6); Ivins, Bruce E Dr USAMRIID  
**Subject:** HR Transfer (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

(b) (6),

Could you please transfer:

Branson 2200 ultrasonic cleaner  
MMCN: D2821  
Located in (b) (2)

from (b) (6) hr ( R9J ) to Bruce Ivins hr ( R1K ).

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: NONE

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Letter of Support (UNCLASSIFIED)  
**Date:** Wednesday, April 18, 2007 10:58:36 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Thanks, (b) (6) and (b) (6). It's really busy here. I have some news for you with respect to the MPL+TDM+CWS adjuvant that Ribic/Corixa used to make. It's now being offered by Sigma:

(b) (6)

It's quite potent, and even though it won't be used in humans, it allows researchers to test their vaccine candidates with a very powerful adjuvant that basically will tell them if their antigens (and other components) are protective and will engender a good immune response. If the vaccine doesn't work with a strong adjuvant, then they know they have to go back to the drawing board with their vaccine.

(b) (6) is a very good person to work with, and the data that was generated between our two laboratories (with respect to anthrax vaccination) was very promising.

Good luck in all of your work, and I hope The Little One is doing well!!!

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Thursday, March 29, 2007 11:54 PM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** Letter of Support

Bruce,

Hope things are going well for you. (b) (6) and I are keeping busy trying to move things along. Thank

you for introducing us to (b) (6) (b) (6) is a very good (b) (6) and (b) (6) has agreed to help us with our vaccine by providing us with some CpG Oligio's to use. This will be very helpful in our studies.

We just got back our comments today for the grant from (b) (6) SBIR program that we submitted back in December. We got 3 reviewers, which means that 1 person said yes and the 2nd said no. Unfortunately, the third person said no. Thus, we feel strongly that we will get it next time around, especially since we did not have any of the new animal data in the grant. So, we would like to include a new letter of support from you, if possible, since the reviewers did not like the wording of the original letter. I have attached a new letter of support and if you can sign it and send it back to us on a letterhead, then great!!! If not, then no worries. The grant is not due until next Thursday, so hopefully this will be enough time to get a letter.

(b) (6) and I are planning on starting the next animal model in a few weeks and we will have two new adjuvants o use. The CpG Oligio's from (b) (6) and also some alpha2-Macroglobulin (a2M), from a small company called SynerVax out of (b) (6) Below is a quick paragraph about their technology that I thought you might find interesting regarding long-term storage issues of vaccines.

SynerVax is based on a natural protein, alpha2-Macroglobulin (a2M), which contains two cage-like structures. We encapsulate immunogens into the two cage-like stuctures using a relatively simple process. The number of antigens that can be encapsulated into each molecule of a2M varies, depending on the physical properties of the immunogen: we've ranged from an average of 0.5:1 (for streptokinase) to as high as 8:1 (I can't recall which immunogen this was). Once the immunogen is encapsulated, it is protected from protease attack, etc. These complexes are also very stable. In the attached paper we demonstrated that HBsAg - a2M complexes in solution could be heated at 42C for 8 weeks (longest time tested) without coming apart or could be lyophilized and left at RT for the same time with no effect. Thus we can eliminate or greatly reduce the need for refrigeration of vaccines.

Thanx Again,

(b) (6)

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Mouse st50 (UNCLASSIFIED)  
**Date:** Wednesday, March 28, 2007 1:03:19 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

All the TTD mice died - is that what you mean?

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Wednesday, March 28, 2007 10:21 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** Mouse st50 (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Bruce,  
Did all the ST50 mice from the 21 March experiment (Vollum 1B) die?

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Mouse st50 (UNCLASSIFIED)  
**Date:** Wednesday, March 28, 2007 3:50:28 PM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Yeah, they all died. When we start doing the "real" batches, not just testing the system, we'll have to say that the mice need to be checked until at least half of the group have died, therefore guaranteeing a median value.

-bruce

Bruce Ivins

(b) (6)

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

From: (b) (6)  
Sent: Wednesday, March 28, 2007 3:03 PM  
To: Ivins, Bruce E Dr USAMRIID  
Subject: RE: Mouse st50 (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO//HAVE A NICE DAY!

Yes

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

From: Ivins, Bruce E Dr USAMRIID  
Sent: Wednesday, March 28, 2007 1:03 PM  
To: (b) (6)  
Subject: RE: Mouse st50 (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

All the TTD mice died - is that what you mean?

-bruce

Bruce Ivins

(b) (6)

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

From: (b) (6)  
Sent: Wednesday, March 28, 2007 10:21 AM  
To: Ivins, Bruce E Dr USAMRIID  
Subject: Mouse st50 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Bruce,  
Did all the ST50 mice from the 21 March experiment (Vollum 1B) die?

(b) (6)

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO//HAVE A NICE DAY!

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 11:03:03 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

What other strain do you want the TTD done on, then? Or do you want to skip the TTD and just do the LD50?

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Friday, April 06, 2007 11:02 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

\*NOTICE: Message body content downgraded from previous markings UNCLASSIFIED//FOUO by (b) (6)

I don't think that they have to be conducted at the same time. To have both sets of information is what we want. Don't you think?

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, April 06, 2007 10:59 AM  
**To:** (b) (6)  
**Cc:** (b) (6); Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

They're fine for the TTD, but didn't you want to do TTD and LD50 at the same time?

-bruce

Bruce Ivins

(b) (6)

---

From: (b) (6)

Sent: Friday, April 06, 2007 10:56 AM

To: Ivins, Bruce E Dr USAMRIID

Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

\*NOTICE: Message body content downgraded from previous markings UNCLASSIFIED//FOUO by (b) (6)

Bruce,

Aren't the results from the TTD for 793 ok from 28 March?

(b) (6)

---

From: Ivins, Bruce E Dr USAMRIID

Sent: Friday, April 06, 2007 10:19 AM

To: Ivins, Bruce E Dr USAMRIID; (b) (6)

Cc: (b) (6)

Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

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(Should be about 25 colonies per plate)

The mice receiving  $10^5$  spores should die the next day ( Thursday ) beginning about 8 am.

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-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 10:58:44 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

They're fine for the TTD, but didn't you want to do TTD and LD50 at the same time?

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Friday, April 06, 2007 10:56 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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(b) (6)

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**Sent:** Friday, April 06, 2007 10:19 AM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Cc:** (b) (6)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

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-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 10:18:55 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

We're going to do a mouse TTD challenge on Tuesday, 10 APR 07 . The injections will be intraperitoneal, 0.2 ml.

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5.5 X 10<sup>6</sup>/ml in a tube  
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(Should be about 25 colonies per plate)

The mice receiving 10<sup>5</sup> spores should die the next day ( Thursday ) beginning about 8 am.

The mice receiving 10<sup>4</sup> spores should die the next day ( Thursday ) beginning late morning.

-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** (b) (6); [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 11:12:11 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Pleaser reply to all during these correspondences! (b) (6) and (b) (6) need to know what is to be done!

We can do Vollum 1b again.

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Friday, April 06, 2007 11:08 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

\*NOTICE: Message body content downgraded from previous markings UNCLASSIFIED//FOUO by (b) (6)

Let's try repeating 188 Vollum 1B to get the times without being kicked out of the lab!

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Friday, April 06, 2007 11:03 AM  
**To:** (b) (6)  
**Cc:** (b) (6); Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

What other strain do you want the TTD done on, then? Or do you want to skip the TTD and just do the LD50?

-bruce

Bruce Ivins

(b) (6)

---

From: (b) (6)  
Sent: Friday, April 06, 2007 11:02 AM  
To: Ivins, Bruce E Dr USAMRIID  
Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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From: Ivins, Bruce E Dr USAMRIID  
Sent: Friday, April 06, 2007 10:59 AM  
To: (b) (6)  
Cc: (b) (6); Ivins, Bruce E Dr USAMRIID  
Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

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-bruce

Bruce Ivins

(b) (6)

---

From: (b) (6)  
Sent: Friday, April 06, 2007 10:56 AM  
To: Ivins, Bruce E Dr USAMRIID  
Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

\*NOTICE: Message body content downgraded from previous markings UNCLASSIFIED//FOUO by (b) (6)

Bruce,  
Aren't the results from the TTD for 793 ok from 28 March?  
(b) (6)

---

From: Ivins, Bruce E Dr USAMRIID  
Sent: Friday, April 06, 2007 10:19 AM  
To: Ivins, Bruce E Dr USAMRIID; (b) (6)  
Cc: (b) (6)  
Subject: RE: Mouse TTD challenge correction - SA# 793 (Old "VaxGen" spores) - 10 APR 07 -REPEAT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

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1.0 ml into 10.0 ml to give 5 X 10<sup>5</sup>/ml - Group 1

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(Should be about 25 colonies per plate)

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Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: NONE

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Notebooks (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 9:25:40 AM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Also notebook 4282, correct, (b) (6) Thanks.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, April 06, 2007 8:08 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** Notebooks (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Bruce,

Per (b) (6) request, please copy anything you might need from the following notebooks and bring the original notebooks to the (b) (6) by noon on Mon., 4/9/07:

#1511  
1748  
1844  
1914  
2013  
2064  
3080  
3114b  
3167  
3209  
3233  
3234  
3269  
3464  
3465  
3563  
3655  
3685  
3716  
3745  
3760  
3921  
3945  
4000  
4010  
4037  
4103

4237  
4240  
4241

(b) (6) [REDACTED]

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Packages and Teleconference (UNCLASSIFIED)  
**Date:** Wednesday, March 28, 2007 12:27:37 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Herre you are, (b) (6) Thanks.

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Tuesday, March 27, 2007 10:31 AM  
**To:** (b) (6)  
(b) (6)

**Subject:** Packages and Teleconference

Dear All,

By now you should have received your packages via FedEx. (Canada may take a little longer). Attached is a new cover letter and Meeting FACT sheet since we now have a hotel. I will post the revised documents on the RSS site.

I realized after I saw the calendar returns for the 1 hour pre-review teleconference, that the week of April 2 is a bad week with many holidays. So, I am sorry, to have you look again, but please indicate your availability for the week of April 9 on the table below.

Availability for 1 hour teleconference

12:00 noon Eastern Time

1:00 pm ET

2:00 pm ET

3:00 pm ET

4:00 pm ET

April 9

OK

OK

OK

OK

No

April 10

OK

OK

OK

OK

No

April 11

OK

OK

OK

OK

No

April 12

OK

OK

OK

OK

No

April 13

No

OK

OK

OK

No

April 14

No

No

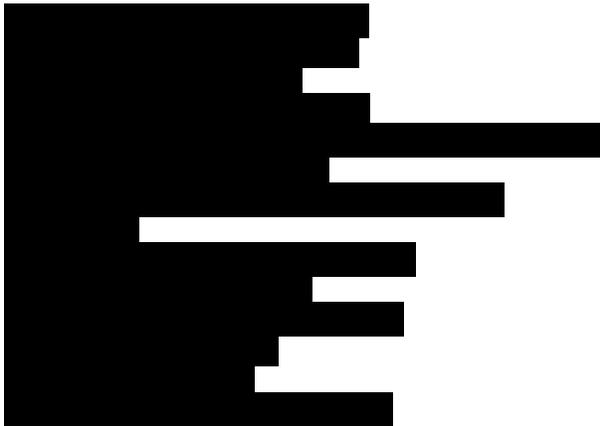
No

No

No

Thank you,

(b) (6)



Important Notice: Are you ready for electronic submission and (b) (6) new grant application forms? PAPER NO MORE, USE 424! Go to (b) (6) to find out. Information for registering for electronic submission is available at (b) (6)

Disclaimer: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The (b) (6) shall not accept liability for any statement made that are the sender's own and not expressly made on behalf of the (b) (6) by one of its representatives.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Panel Information and documents (UNCLASSIFIED)  
**Date:** Monday, March 26, 2007 3:50:48 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Brenda,

Please see my acceptable teleconference times below. Thanks!

-bruce

Bruce Ivins

(b) (6)

---

**From:** (b) (6)  
**Sent:** Monday, March 19, 2007 3:52 PM  
**To:** (b) (6)  
**Subject:** Panel Information and documents  
**Importance:** High

Dear All,

I have posted most of the documents you will receive for the May 4 meeting on the RSS site. I am also including my cover letter here as well as on the site.

I will be sending you a CD on Friday with all of these documents as well as a hard copy of the applications and appendices.

We have not chosen a hotel, but I will let you know as soon as we have finalized that.

As I mention in the cover letter, I would like to have a 1 hour pre-review teleconference early in April to make sure that everyone is on the same page as they review the applications. You do not have to had read the applications by then, but it would be helpful to glance through them to make sure you do not pick up any new conflicts of interest.

Please let me know your availability for a 1 hour teleconference for:

Availability for 1 hour teleconference

12:00 noon Eastern Time

1:00 pm ET

2:00 pm ET

3:00 pm ET

4:00 pm ET

April 2

Yes

Yes

Yes

Yes

Yes

April 3

Yes

Yes

Yes

No

No

April 4

Yes

Yes

Yes

Yes

Yes

April 5

Yes

Yes

Yes

Yes

Yes

April 6

Yes

Yes

Yes

Yes

Yes

April 9

Yes

Yes

Yes

Yes

Yes

Again, thank you very much for your participation in this review.

Regards,

(b) (6)

(b) (6)

Important Notice: Are you ready for electronic submission and (b) (6) new grant application forms? PAPER NO MORE, USE 424! Go to (b) (6) to find out. Information for registering for electronic submission is available at (b) (6).

Disclaimer: The information in this e-mail and any of its attachments is confidential and may contain sensitive information. It should not be used by anyone who is not the original intended recipient. If you have received this e-mail in error please inform the sender and delete it from your mailbox or any other storage devices. The (b) (6) shall not accept liability for any statement made that are the sender's own and not expressly made on behalf of the (b) (6) by one of its representatives.

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** RE: Returned notebooks (UNCLASSIFIED)  
**Date:** Friday, April 20, 2007 10:17:43 AM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Thanks, (b) (6) I'm still missing 3655, 3716, 3760, 3945, 4010, 4037, 4240, 4241 and 4282.

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, April 20, 2007 7:38 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** Returned notebooks (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Bruce,

The following notebooks have been returned and are ready for pickup in the (b) (6)

1511, 1748, 1844, 1914, 2013, 2064, 3080, 3114b, 3167, 3209, 3233, 3234, 3269, 3464, 3465, 3563, 3685, 3745, 3921, 4000, 4103, 4237

(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
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**Subject:** RE: Returned notebooks (UNCLASSIFIED)  
**Date:** Friday, April 20, 2007 10:17:43 AM

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Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, April 20, 2007 7:38 AM  
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**Subject:** Returned notebooks (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

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(b) (6)

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: Spores received from me in September and October of 2001 (UNCLASSIFIED)  
**Date:** Wednesday, April 18, 2007 2:52:02 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Thanks for looking into it, (b) (6) An email would be great!

-bruce

Bruce Ivins

(b) (6)

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Wednesday, April 18, 2007 11:31 AM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** RE: Spores received from me in September and October of 2001 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Hey (b) (6) Did you get this? If you could get me the information I'd really appreciate it.

-bruce

Bruce Ivins

(b) (6)

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

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Tuesday, April 17, 2007 8:10 AM  
**To:** (b) (6)  
**Subject:** Spores received from me in September and October of 2001 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

(b) (6)

Could you please email me the dates in September and October of 2001 that I gave you spores. I need to give that information to the Grand Jury. Thanks.

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** RE: Spores received from me in September and October of 2001 (UNCLASSIFIED)  
**Date:** Wednesday, April 18, 2007 11:31:29 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

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-bruce

Bruce Ivins

(b) (6)

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

From: Ivins, Bruce E Dr USAMRIID

Sent: Tuesday, April 17, 2007 8:10 AM

To: (b) (6)

Subject: Spores received from me in September and October of 2001 (UNCLASSIFIED)

Classification: UNCLASSIFIED

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**From:** [Ivins, Bruce E Dr USAMRIID](#)  
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(b) (6)

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(b) (6)

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**Sent:** Wednesday, April 18, 2007 11:31 AM  
**To:** Ivins, Bruce E Dr USAMRIID; (b) (6)  
**Subject:** RE: Spores received from me in September and October of 2001 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Hey (b) (6) Did you get this? If you could get me the information I'd really appreciate it.

-bruce

Bruce Ivins

(b) (6)

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

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Tuesday, April 17, 2007 8:10 AM  
**To:** (b) (6)  
**Subject:** Spores received from me in September and October of 2001 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

(b) (6)

Could you please email me the dates in September and October of 2001 that I gave you spores. I need to give that information to the Grand Jury. Thanks.

-bruce

Bruce Ivins

(b) (6)

A large black rectangular redaction box covers the majority of the text in this section, starting from the "(b) (6)" label and extending to the right and downwards.

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: Subpoena (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 9:07:47 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

Thanks, (b) (6)

-bruce

Bruce Ivins

(b) (6)

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

**From:** (b) (6)  
**Sent:** Friday, April 06, 2007 8:42 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** Subpoena (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Bruce,

Please contact (b) (6) Staff Judge Advocate concerning your request for a copy of the subpoena: (b) (6)

(b) (6)

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: W81XWH-06-C-0006 (UNCLASSIFIED)  
**Date:** Friday, April 20, 2007 3:25:38 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

I'll approve, (b) (6) Thanks very much, and have a beautiful weekend!!!!

-bruce

Bruce Ivins

(b) (6)

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**From:** (b) (6)  
**Sent:** Tuesday, April 17, 2007 7:52 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** FW: W81XWH-06-C-0006 (UNCLASSIFIED)  
**Importance:** High

Classification: UNCLASSIFIED

Caveats: NONE

Good Morning Dr. Ivins,

Please see attached invoice for approval. If everything meets your requirements please let me know and I will forward for payment.

Thank you,

(b) (6)

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**From:** (b) (6)  
**Sent:** Friday, April 13, 2007 10:05 AM  
**To:** (b) (6)  
**Cc:** (b) (6)  
**Subject:** W81XWH-06-C-0006

Dear (b) (6)

Attached please find Invoice # 15 for goods and services performed by Vital Probes, Inc. in the amount of \$24,834.00 during the period of Mar. 14, 2007 – Apr. 13, 2007. This invoice pertains to contract # W81XWH-06-C-0006 and contract modification # P00001 and P00002.

If you have any questions, please don't hesitate to contact me.

(b) (6)



Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** RE: W81XWH-06-C-0006 Vital Probes Invoice and Report (UNCLASSIFIED)  
**Date:** Thursday, April 05, 2007 10:19:15 AM

---

Classification: UNCLASSIFIED  
Caveats: FOUO

Hi, (b) (6) I thought I had sent my approval for payment. I guess not. Sorry. I do approve payment for the period of Feb 14 07 to MAR 13 07.

Have a fine Easter!!

-bruce

Bruce Ivins

(b) (6)

>  
>From: (b) (6)  
>Sent: Thursday, March 29, 2007 9:37 AM  
>To: Ivins, Bruce E Dr USAMRIID  
>Subject: W81XWH-06-C-0006 Vital Probes Invoice and Report (UNCLASSIFIED)  
>Importance: High

>  
>Classification: UNCLASSIFIED  
>Caveats: NONE

>  
> << File: (b) (6)

>Good Morning Dr. Ivins,

>  
>I just wanted to check on the status of attached report and invoice for your review and approval. If everything meets your requirements and approval please let me know so that I can forward for payment.

>  
>Thank you,

>  
>(b) (6)

>  
>  
>(b) (6)

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>  
>  
>  
>  
>  
>Classification: UNCLASSIFIED  
>Caveats: NONE

>

>Classification: UNCLASSIFIED

>Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** Spores received from me in September and October of 2001 (UNCLASSIFIED)  
**Date:** Tuesday, April 17, 2007 8:10:10 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

(b) (6)

Could you please email me the dates in September and October of 2001 that I gave you spores. I need to give that information to the Grand Jury. Thanks.

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** Subpoena of laboratory notebooks (UNCLASSIFIED)  
**Date:** Friday, April 06, 2007 9:36:46 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO//LETTER TO ATTORNEY

\* (b) (6)

This morning I was informed that over 130 notebooks from USAMRIID investigators were being subpoenaed by the grand jury. Before I turned all of the notebooks over I asked for a copy of the subpoena for my attorney. I was referred to (b) (6) at the Staff Judge Advocate at (b) (6). When I called (b) (6) (b) (6) informed me that (b) (6) would need to talk to you, rather than me, with respect to obtaining a copy of the subpoena.

\* Thank you very much for your help in this matter.

\*

\* Bruce Ivins, (b) (6)

(b) (6)

\*\*\*\*\*

Bruce,

Per (b) (6) request, please copy anything you might need from the following notebooks and bring the original notebooks to the (b) (6) by noon on Mon., 4/9/07:

- #1511
- 1748
- 1844
- 1914
- 2013
- 2064
- 3080
- 3114b
- 3167
- 3209
- 3233
- 3234
- 3269
- 3464
- 3465
- 3563
- 3655
- 3685
- 3716
- 3745
- 3760
- 3921
- 3945
- 4000
- 4010
- 4037
- 4103
- 4237
- 4240
- 4241

(b) (6)

A large black rectangular redaction covers the majority of the page's content. The redaction is composed of several overlapping horizontal bars of varying lengths, all starting from the left margin. The longest bar extends across most of the page width. Below it, a shorter bar is positioned further down. To the right of the main redaction, a long horizontal bar extends across the page. Below that, another shorter bar is positioned further down. The bottom-most bar is the shortest and is positioned furthest down.

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO//LETTER TO ATTORNEY

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Subject:** Tri-Mix adjuvant (formerly by Ribic/Corixa) is becoming available (UNCLASSIFIED)  
**Date:** Wednesday, April 18, 2007 9:59:06 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

For the benefit of researchers who want to use a powerful adjuvant without the reactogenicity of Freund's adjuvant, there is some good news. Sigma will begin selling the "Tri-Mix" adjuvant (MPL + TDM + CWS). It's been off the market for awhile, but due to many researchers asking it to be reinstated for animal studies, It's now coming back online.

<http://www.sigmaaldrich.com/catalog/search/ProductDetail/SIGMA/M6661>  
<<http://www.sigmaaldrich.com/catalog/search/ProductDetail/SIGMA/M6661>>

-bruce

Bruce Ivins

(b) (6)

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**From:** (b) (6)  
**Sent:** Wednesday, April 18, 2007 9:46 AM  
**To:** Ivins, Bruce E Dr USAMRIID  
**Subject:** RE: M6536, MPL + TDM ADJUVANT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Yah, it's already on the Sigma web site with CWS, but price and availability date are currently unavailable.  
<http://www.sigmaaldrich.com/catalog/search/ProductDetail/SIGMA/M6661>

---

**From:** Ivins, Bruce E Dr USAMRIID  
**Sent:** Wednesday, April 18, 2007 8:51 AM  
**To:** (b) (6)  
**Subject:** RE: M6536, MPL + TDM ADJUVANT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

That's good news. Will it also have CWS in it?

-bruce

Bruce Ivins

(b) (6)

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From: (b) (6)  
Sent: Tuesday, April 17, 2007 5:33 PM  
To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)  
Subject: FW: M6536, MPL + TDM ADJUVANT (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sigma plans to make Ribi beginning sometime this summer.

(b) (6)

(b) (6)

---

From: (b) (6)  
Sent: Tuesday, April 17, 2007 3:58 PM  
To: (b) (6)  
Subject: M6536, MPL + TDM ADJUVANT

Hello (b) (6)

Thank you for contacting Sigma-Aldrich Technical Service and your interest in this product. The former supplier, as of March 2007, has relented to pressure and has decided Sigma will be able to produce and market a research grade of this product. We have received the technical knowledge and are in the process of acquiring the equipment and materials necessary to produce the material. We hope to have a product this summer.

Regards,

(b) (6)

webhelp  
Sent by: (b) (6)

04/17/2007 01:09 PM  
Please respond to (b) (6)

To: (b) (6)  
cc:  
Subject: (b) (6)

Please assist with the email below.

Thank you,

(b) (6)

(b) (6)

(b) (6)

To  
(b) (6)  
cc  
Subject  
Internet Survey -

Internet Survey -

Internet\_Survey\_\_comments\_: I would like you to sell M6536 again.  
Internet\_Survey\_\_email\_address\_: (b) (6)  
Internet\_Survey\_\_contact\_you\_: Yes  
Internet\_Survey\_\_Name: (b) (6)  
Internet\_Survey\_Phone:  
haht\_form\_name: InternetSurvey  
referr\_page: Expand  
page\_link: (b) (6)

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Subject:** TTD determinations for SA 188 (Vollum 1B) spores - repeat (UNCLASSIFIED)  
**Date:** Thursday, April 12, 2007 10:55:25 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

9.0 X 10e3 spores injected - death times:

1. 23.5 hr
2. 26 hr
3. 28.5 hr
4. 31 hr
5. 32 hr
- 6 - 10. >34 hours

9.0 X 10e4 spores injected - death times:

1. 23.5 hr
2. 24 hr
3. 24.5 hr
4. 24.5 hr
5. 24.5 hr
6. 27 hr
7. 29 hr
- 8 - 10. >30 hr

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** TTD determinations for SA 793 spores ("VaxGen" spores) (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 8:26:30 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

1.08 X 10e4 spores injected - death times:

1. 23 hr
2. 23.5 hr
3. 24 hr
4. 24 hr
5. 24.5 hr
6. 26 hr
7. 26 hr
8. 27 hr
9. 27 hr
10. >27.5 hr

1.08 X 10e5 spores injected - death times:

1. 17.5 hr
2. 19.5 hr
3. 20.5 hr
4. 20.5 hr
5. 22 hr
6. 22 hr
7. 22.5 hr
8. 24 hr
9. >24.5 hr
10. >24.5 hr

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** (b) (6)  
**Cc:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** TTD determinations for SA 793 spores ("VaxGen" spores) (UNCLASSIFIED)  
**Date:** Friday, March 30, 2007 8:26:30 AM

---

Classification: UNCLASSIFIED

Caveats: FOUO

1.08 X 10e4 spores injected - death times:

1. 23 hr
2. 23.5 hr
3. 24 hr
4. 24 hr
5. 24.5 hr
6. 26 hr
7. 26 hr
8. 27 hr
9. 27 hr
10. >27.5 hr

1.08 X 10e5 spores injected - death times:

1. 17.5 hr
2. 19.5 hr
3. 20.5 hr
4. 20.5 hr
5. 22 hr
6. 22 hr
7. 22.5 hr
8. 24 hr
9. >24.5 hr
10. >24.5 hr

-bruce

Bruce Ivins

(b) (6)

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#); (b) (6)  
**Cc:** (b) (6)  
**Subject:** TTD experiment on 19 APR 07 - spores from NSM + added CaCl2 - SA# 12469 (UNCLASSIFIED)  
**Date:** Monday, April 16, 2007 3:40:11 PM

---

Classification: UNCLASSIFIED

Caveats: FOUO

For SA# 12469, Ames spores made in NSM + added CaCl2

We're going to do a mouse TTD challenge on Thursday, 19 APR 07. The injections will be intraperitoneal, 0.2 ml.

- 10 mice per group

Group 1 - 1 X 10<sup>4</sup> spores in 0.2 ml - IP - inject between 1200 and 1300

Group 2 - 1 X 10<sup>5</sup> spores in 0.2 ml - IP - inject between 1600 and 1700

7.0 X 10<sup>7</sup>/ml in a tube (This is a 10<sup>-2</sup> dilution from the original material)  
0.1 ml into 13.9 ml to give 5 X 10<sup>5</sup>/ml - Group 1  
1.0 ml into 9.0 ml to give 5 X 10<sup>4</sup>/ml - Group 2  
0.1 ml into 19.9 ml to give 2.5 X 10<sup>2</sup>/ml - plate out  
(Should be about 25 colonies per plate)

The mice receiving 10<sup>5</sup> spores should die the next day ( Thursday ) beginning about 8 am.

The mice receiving 10<sup>4</sup> spores should die the next day ( Thursday ) beginning late morning.

-bruce

Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Tubes of spores (UNCLASSIFIED)  
**Date:** Wednesday, April 04, 2007 3:46:15 PM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

001, 003 and 004 = L&D with standard level of salts and glucose, 8, 16 and 24 grams of NB per liter (left to right)

005 and 006 - left = 24 g/l NB, no glucose, 1 X KCl, 3 X Ca, Mn, Mg and Fe salts  
right = 16 g/l NB, 2 X glucose (1.8 g/l), 1 X KCl, 3 X Ca and Mn salts, 1 X Mg and Fe salts

007 and 008 - left = L&D with glucose  
right = L&D without glucose

009 and 010 - left = YE (2 g/liter) + salts, + glucose  
right = YE (2 G/liter) + salts, minus glucose

011 and 014 - 8 g/liter NB, glucose (0.9 g/liter), MnCl<sub>2</sub> only (no other salts)

012 and 013 - left = NSM broth at 140 rpm  
right = NSM broth 210 rpm

-bruce

Bruce Ivins

(b) (6)

[REDACTED]  
Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO

**From:** [Ivins, Bruce E Dr USAMRIID](#)  
**To:** [Ivins, Bruce E Dr USAMRIID](#)  
**Subject:** Tubes of spores (UNCLASSIFIED)  
**Date:** Wednesday, April 04, 2007 3:46:15 PM  
**Attachments:** [REDACTED]

---

Classification: UNCLASSIFIED  
Caveats: FOUO

001, 003 and 004 = L&D with standard level of salts and glucose, 8, 16 and 24 grams of NB per liter (left to right)

005 and 006 - left = 24 g/l NB, no glucose, 1 X KCl, 3 X Ca, Mn, Mg and Fe salts  
right = 16 g/l NB, 2 X glucose (1.8 g/l), 1 X KCl, 3 X Ca and Mn salts, 1 X Mg and Fe salts

007 and 008 - left = L&D with glucose  
right = L&D without glucose

009 and 010 - left = YE (2 g/liter) + salts, + glucose  
right = YE (2 G/liter) + salts, minus glucose

011 and 014 - 8 g/liter NB, glucose (0.9 g/liter), MnCl<sub>2</sub> only (no other salts)

012 and 013 - left = NSM broth at 140 rpm  
right = NSM broth 210 rpm

-bruce

Bruce Ivins

(b) (6)

[REDACTED]  
Attachment Classification: UNCLASSIFIED

Attachment Caveats: NONE  
Classification: UNCLASSIFIED  
Caveats: FOUO