THE ENTERPRISE REPORT - TheEnterpriseReport.com
is an online investigative news site founded and published by award-winning Producer/Investigative Journalist Eric Longabardi. The site was named Best Online Website by the LA Press Club in 2008.

Eric Longabardi is a national award winning broadcast producer and investigative journalist with a career spanning nearly two decades. Longabardi has reported extensively on a wide variety issues related to the US Defense Department's research into biological and chemical weapons over the years. He has also reported extensively on the FBI 'Amerithrax" investigation of Dr. Bruce Ivins, the Fort Detrick, Maryland biowarfare scientist the U.S. Department of Justice (DOJ) claims was the person responsible for mailing Anthrax letters which killed five people and sickened 17 others in 2001. Longabardi was the first journalist to disclose the movements and detail the "window of opportunity" of Dr. Ivins on the dates the Anthrax letters were mailed and detail his whereabouts at the Fort Detrick Laboratory where he worked during the dates in question.

The nine batches of emails provided to governmentattic.org were obtained under the Freedom of Information Act (FOIA) by journalist Eric Longabardi beginning on January 22, 2009.

All of this material is available at governmentattic.org.

This file is: All below material in one PDF: DrBruceIvinsEmail_All.pdf 6.2 MB

The other available files are:

The Release letter:	DrBruceIvinsEmail_ReleaseLetter.pdf	30 KB
Email Batch One:	DrBruceIvinsEmail_One.pdf	7 MB
Email Batch Two:	DrBruceIvinsEmail_Two.pdf	170 KB
Email Batch Three:	DrBruceIvinsEmail_Three.pdf	264 KB
Email Batch Four:	DrBruceIvinsEmail_Four.pdf	176 KB
Email Batch Five:	DrBruceIvinsEmail_Five.pdf	124 KB
Email Batch Six:	DrBruceIvinsEmail_Six.pdf	130 KB
Email Batch Seven:	DrBruceIvinsEmail_Seven.pdf	145 KB
Email Batch Eight:	DrBruceIvinsEmail_Eight.pdf	221 KB
Email Batch Nine:	DrBruceIvinsEmail_Nine.pdf	329 KB

DEPARTMENT OF THE ARMY
US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND
504 SCOTT STREET
FORT DETRICK, MD 21702-5012

January 22, 2009

Secretary of the General Staff
USAMRMC Ivins Emails, #1
0808007, 0808033, 0808076, 0809049, 0901004

Dear FOIA Requestor:

This is the partial response to your Freedom of Information Act (FOIA) request for copies of the emails of Dr. Bruce Ivins a former civilian research microbiologist at USAMRIID.

The information is released with redactions noted consistent with the privacy concerns under 5 U.S.C. 552, exemption (b)(6).

Fees associated with the processing of your request are waived in this instance.

Sincerely,

for James R. Lenaii

William A. Petrous
Major, US Army
Secretary of the General Staff

[redacted] USAMRMC

From: Bruce Ivins
Sent: Tuesday, June 15, 1999 3:52 PM
To: [redacted]
Cc: [redacted]
Subject: 2001 Anthrax Meeting - visit to Annapolis

Dear [redacted]

I think that the best date for us to visit Annapolis will be the 8th of July. When we arrive on campus, we will go to the Security Office located in Pinkney Hall. [redacted], is located in Pinkney Hall, next to the Security Office. We plan to arrive approximately 10:00 to 10:30 am. I'm sure that you will be looking at specific things. We are interested in such matters as 1) meeting areas; 2) dining facilities and meal arrangements; 3) sleeping/dormitory facilities; 4) facilities for social functions; 5) local transportation; 6) other pertinent matters. Based on the past three international anthrax meetings (which were held in England) I would surmise that there would be a minimum of 200 people in attendance, with a maximum of 350 to 500 people. (If there is not sufficient dormitory/sleeping space for all the attendees, it is no problem, since many individuals will want to stay in nearby hotels.)

We are delighted that the ASM has experience in such things as site selection, marketing strategies, budget development, etc., and we look forward to working with you on the meeting.

If you would like a campus map of St. John's College or directions how to get there, please let me know. If there are other items that we need to discuss before our visit, I hope you will not hesitate in contacting me. My telephone and voice mail number is [redacted]. My FAX number is [redacted]

I look forward to seeing you on July 8th.

Sincerely,

Bruce Ivins

[redacted] USAMRMC

From: Bruce Ivins
Sent: Tuesday, June 15, 1999 8:45 AM
To: [redacted]
Subject: Re[3]: 2001 Anthrax Meeting

Move the time to 2:30 pm on Friday, in the Vet Med Conference Room.

_____ Forward Header _____
Subject: Re[3]: 2001 Anthrax Meeting
Author: Bruce Ivins at USAMRIID4_FTDETRCK
Date: 6/15/99 8:36 AM

2 pm sounds fine. I've reserved the VET MED CONFERENCE ROOM for us. As far as our St. John's College contact and ASM contact are concerned, either July 7th or July 8th is best to go for a visit to Annapolis to "look things over."

SO THAT I CAN GET THE INFORMATION BACK TO ASM AND SJC, PLEASE TELL ME WHICH DAY, IF EITHER, IS ACCEPTABLE. IF BOTH ARE ACCEPTABLE, PLEASE INDICATE THAT ALSO. I WOULD LIKE TO GET BACK TO THEM BY THIS AFTERNOON (TUESDAY).

- Bruce

_____ Reply Separator _____
Subject: Re[2]: 2001 Anthrax Meeting
Author: [redacted] at USAMRIID4_FTDETRCK
Date: 6/14/99 5:05 PM

Bruce, How about a meeting for this Friday afternoon to get an update and formalize who will do what. I'm available all afternoon. How is 2 PM for everyone? Please let Bruce or me know.
[redacted]

Subject: RE: 2001 Anthrax Meeting
From: Bruce Ivins
Date: 6/14/99 4:13 PM

Here is a message from [redacted] of ASM. The person who will be working with us is [redacted] of the ASM.

[redacted] - Do you want to have a meeting to discuss who might do what with respect to this Conference?

It sounds as if July 7 or 8 may be the best date to look around Annapolis.

_____ Forward Header _____
Subject: RE: 2001 Anthrax Meeting
Author: [redacted] at Internet-Mail
Date: 6/14/99 2:12 PM

Bruce Ivans:

I was delighted to hear from you and apologize that we have had a bit of a

lapse of time between our intitial conversations and the present. However we are pleased to now move forward and name an individual on ASM's staff who will collaborate with your group to discuss the site, recommend marketing strategies, develop a meetings budget, receive abstracts, produce the on-site publications, etc., etc.

[redacted], Meetings Manager on ASM's Meetings Department staff, will be your key contact.
She was instrumental in launching the first International Conference on Emerging Infectious Diseases in collaboration with the CDC, will manage the second ICEID in July, 2000, and of late has been finalizing the International Conference on Subsurface Microbiology to be held in August sponsored by the U.S. Geological Survey. Additionally, she is responsible for all on-site logistics for ASM's two annual meetings of 14,000 individuals each. She very much looks forward to providing your organization logistical support for your meeting in 2001.

By copy of this message to [redacted] I have asked her to communciate directly with you as to the visit to Annapolis. However of the dates you suggest, I believe either July 7 or 8 to be her preference. She will e-mail you directly to confirm. I have also shared with her your detailed background of the International Conference on Anthrax as you provided me on March 8.

On a personal note, thank you so very much for your kind words of sympathy in the card you sent me in March on the occasion of my father's death. Although we had just started to work out details of this conference, I am tremendously appreciative for your thougtfulness and taking the time to send that note.

We'll be in touch soon.

[redacted]
American Society for Microbiology

> -----Original Message-----
> From: ivinsb@ftdetrck-ccmail.army.mil
> [SMTP:ivinsb@ftdetrck-ccmail.army.mil]
> Sent: Friday, June 11, 1999 1:44 PM
> [redacted]
> Subject: 2001 Anthrax Meeting
>
>
> [redacted]
>
> Several weeks ago we communicated with you concerning the possible
>
> willingness of the ASM to help with a 2001 International Anthrax
> Meeting in Annapolis, Maryland. We are planning to visit Annapolis
> and
> St. John's College on one of the following days - June 24, June 25,
> July 1, July 2, July 7 or July 8. Would you or any of your staff be
> interested in joining us on our visit? If so, are any of the above
> days especially good or bad for you? I am trying to coordinate our
> visit with [redacted]
> We are most interested in having the ASM work with us on this
> meeting,
> since we have no experience in advertising such meetings, mass
> mailings, fee collection, etc.
>
> Please let me know if you are interested in meeting with us as we
> look over Annapolis and St. John's College.
>

>
> Thank you very much.
>
>
> - Bruce Ivins
>

[redacted] USAMRMC

From: Bruce Ivins
Sent: Monday, June 14, 1999 4:29 PM
To: [redacted]
Subject: RE: Visit to look at facilities for meeting in 2001

Attachments: RFC822.TXT

RFC822.TXT (924 B)

It looks like the 7th and 8th of July may be the best day.

- Bruce

_____ Forward Header _____

Subject: RE: Visit to look at facilities for meeting in 2001
Author: [redacted] at Internet-Mail
Date: 6/14/99 9:23 AM

Dear Mr. Ivins, Thank you for your e-mail regarding your conference in year 2001. I have the dates of July 7 and/or July 8 to visit the campus. Please confirm the date and I will be happy to meet with you again. When you arrive on campus, please go to the Security Office, which is located in Pinkney Hall. I have moved to a temporary located in Pinkney Hall, next to the Security Office. I'll look forward to seeing you again. Sincerely, [redacted] SJC.

> -----Original Message-----
> From: ivinsb@ftdetrck-ccmail.army.mil
> [SMTP:ivinsb@ftdetrck-ccmail.army.mil]
> Sent: Friday, June 11, 1999 1:35 PM
> To: [redacted]u
> Subject: Visit to look at facilities for meeting in 2001
>
>
> Dear [redacted]
> Perhaps you remember my telephone conversation with you a few
> months ago. I told you that we were planning a scientific meeting
> and
> we wanted to hold it in Annapolis. We would like to look at St.
> John's
> College with respect to its facilities. Any of the following
> dates are
> convenient for us. Are any of them inconvenient for you?
>
> June 24, June 25, July 1, July 7, July 8
>
> If any of these dates are not convenient for you, please let
> me
> know. If any of them are especially good, please let me know.
> Then we
> can come and you can help us with our visit to look over the
> college.
>
> Thank you.
>

>
> - Bruce Ivins
>

[redacted] USAMRMC

From: Bruce Ivins
Sent: Thursday, June 10, 1999 2:47 PM
To: [redacted]
Subject: Re[4]: CpG/anthrax/mouse experiment results

Hi [redacted] .

I will write up one more addendum to the mouse experiment with the following groups: 1) control (no CpG oligos); 2) CpG 6 days before challenge; 3) CpG 10 days before challenge. This should be sufficient to confirm the CpG-protective effect.

The mouse is not a very good model for anthrax, so I don't think we need to pursue much anthrax/CpG work in mice after this next experiment. The guinea pig protocol should be completely done by next week. I'll send you a copy of the protocol when it's done and you can add or delete as you deem appropriate.

I will send to you by "snail mail" several articles of ours on anthrax to help you get started on a paper. I see you as first author on the paper, but I will contribute whatever I can to whatever parts. I think the mouse results are exciting, and we should have all the final data in before September (allowing for review of my addendum, ordering time for mice, time to get them in and do the experiment). That means we could be sending out a paper by the end of September or, at the latest, October. If we include guinea pig experiments, we won't get data out until the end of the year, which mean a publication delay of about 6 months total. If you think that we should wait that long for both mice and guinea pigs to be done, OK, but if we want to get something out quickly, perhaps a note on the mice, then a more thorough paper on the guinea pigs might be better. If we wait for the guinea pigs, I'll submit an abstract to the ASM for us on our work.

- Bruce

_____ Reply Separator _____
Subject: RE: Re[2]: CpG/anthrax/mouse experiment results
Author: [redacted].fda.gov> at Internet-Mail
Date: 6/8/99 9:51 AM

Son of a gun.

Terrific data. Naturally, we have to repeat the experiment. But if we can reproducibly protect half the mice - Star City. I'm wondering if we should check a few other time points - maybe 10 or 14 days prior to challenge (the longer we see an effect, the better). Now that we know that 6 days is a good time to challenge, we might also try out higher doses at that specific time point.

I'm synthesizing more ODN as we speak (err, E mail), and can hopefully get them to you by early next week.

If we can do the guinea pig experiment in a timely fashion, I suggest we incorporate the mouse and GP data into a "CpG ODN protect against lethal anthrax" paper. There is already evidence in the ODN field that protection can be conferred against other (less worrisome) agents. A paper on protection against anthrax, with time points and dose titration in mice should be very solid. If accompanied by evidence of protection in GP (which would be the first data showing protection outside of mice), it would be even more impressive. Then we just have to figure out where to send it.

I can get started on a rough draft of the paper. Could you E mail, FAX (496 1810) or mail me any of your earlier publications providing background on the mouse and GP models of anthrax? I assume you're first and I'm senior author, if that's OK.

Terrific data.

[redacted]

-----Original Message-----
From: ivinsb@ftdetrck-ccmail.army.mil
[SMTP:ivinsb@ftdetrck-ccmail.army.mil]
Sent: Tuesday, June 08, 1999 10:28 AM
To: [redacted].fda.gov
Subject: Re[2]: CpG/anthrax/mouse experiment results

[redacted] you're a genius!!
Take a look at the data below and also in the attached EXCEL file:

Groups

1 - Control; no CpG
2 - CpG (50 ug) 6 days before challenge
3 - CpG (50 ug) 3 days before challenge

On the day of challenge all mice received an average of 11.4 virulent B. anthracis Vollum 1B spores (about 2 LD50) subcutaneously. Mice were checked for survival/death 3X daily for 10 days. Total deaths as well as time to death were recorded.

Results: Total deaths: Group 1 Group 2 Group 3
10/10 5/10 8/10

P values vs Group 1: 0.033 for Group 2 and 0.474 for Group 3

Results for mean times to death: Group 1 Group 2 Group 3

96.1 hours 120.4 hours 114.2 hours

Death rate analysis (Life Test procedure): currently being conducted

****

[redacted] I will get to you the rest of the data as soon as I get it back from the statistician and as soon as I can make the graph. These data are VERY IMPRESSIVE!! First, mice are extremely sensitive to B. anthracis infection. The human anthrax vaccine does not protect mice. (It is possible to generate some protection using PA and very strong adjuvants, such as the Ribi Adjuvant System.) To the best of my knowledge, this is the first example of non-antigen-specific protection of mice against anthrax spore challenge. Also of importance is the finding that stimulation of Th1 immune mechanisms is protective in the mouse against anthrax. (In the guinea pig we also find that the best vaccines have adjuvants that are strong stimulators of CMI responses.)

These data should be published!! I'm writing a guinea pig protocol for CpG olionucleotides, but perhaps we should go ahead with these data quickly.

1) If you want to write up a short paper/note just on these results, or include these data with other data in a larger paper, I'll be happy to supply you with B. anthracis information with respect to introduction, materials and methods (what I did here), results, and discussion with respect to mice and B. anthracis. I think the paper could be written as a "CpG" paper better than an

"anthrax" paper. (Besides, I am unqualified to write about CpG oligos!) Please let me know what you would like to do in this respect.

2) If you are going to any meetings in the near future and want to present the work in an abstract, please feel free to do so.

I'll get the rest of the data back to you as soon as I can.

Let me know what your ideas on this are. You can email me or call me at [redacted]

Hope you had a fine trip,
- Bruce

_____ Reply Separator _____
Subject: RE: CpG/anthrax/mouse experiment results
Author: [redacted].fda.gov> at Internet-Mail
Date: 6/7/99 4:47 PM

Bruce,
I'm here now. I'll be in all week, then gone next week.

How interesting were the results?
[redacted]

-----Original Message-----
From: ivinsb@ftdetrck-ccmail.army.mil [SMTP:ivinsb@ftdetrck-ccmail.army.mil]
Sent: Monday, June 07, 1999 5:03 PM
To: [redacted].fda.gov
Subject: CpG/anthrax/mouse experiment results

Hi, [redacted]

Please let me know by email when you get back. We have some very interesting results!

- Bruce

<< File: bi-cpg2.xls >>

[redacted] USAMRMC

From: Bruce Ivins
Sent: Monday, April 26, 1999 3:02 PM
To: [redacted]
Subject: Re: MPL-AF from [redacted]

Hi, [redacted]

It appears as though we'll need about 20-25 mg for our plague and anthrax work. I don't know if we'll need more than that after the first sets of experiments, so in several months to a couple of years, would we be able to request more if the initial results are promising? Also, please note [redacted]'s email to me about information on MPL-AF in non-human primates and humans. Whatever you are permitted to share with us on the subject, we would greatly appreciate.

- Bruce

Forward Header

Subject: Re: MPL-AF from [redacted]
Author: [redacted] at USAMRIID4_FTDETRCK
Date: 4/22/99 10:46 PM

Bruce,

Great. I will look for the info when I get back. Can you please try to get ALL the available info on its use in primates and humans, as well as rodents.
What we need to try to obtain is information on the same antigen formulation used in small animals vs non-human primates vs hopefully humans, so that we can decide what animals are relevant vis a vis this particular adjuvant system. I think as we begin to take a fresh look at adjuvants and delivery systemsm, the experiments need to be planned as we did previously where we eventually can design the experiment to compare the various adjuvants head to head. I have also had discussions with Smith Kline to re-look at some of their products. The animal numbers look reasonable. For plague it should be mice and primates eventually. You might want to discuss with [redacted] and [redacted] when he visits.

[redacted]

.

[redacted] USAMRMC

From: Bruce Ivins
Sent: Friday, April 23, 1999 11:23 AM
To: [redacted].fda.gov
Cc: [redacted]
Subject: DNA analysis

Hi, [redacted]

Here is the information from our statistician on the CpG experiment. I have submitted a protocol addendum to perform a second such experiment with your suggested changes: 1) Cut the challenge dose in half; 2) Add a CpG group 6 days before challenge. Thus we'll have 3 groups - no CpG (controls), CpG at day -6, and CpG at day -3.

I'll let you know when the protocol gets approved and then we can set up a time for me to pick up more CpGs

Best regards,

- Bruce

_____ Forward Header _____

Subject: DNA analysis
Author: [redacted]t USAMRIID7_FTDETRCK
Date: 4/22/99 3:52 PM

Summary (assuming all animals died):

Group	Mean Survival Time (Days)	S.E.
1	98.2	9.3
2	109.9	7.5
3	97.5	9.9
4	88.9	7.5

Logrank test of equality of mean survival times p=.4752

The evidence does not support a group 2 significant increase in mean survival time (which is the same as mean time to death since all animals died). However, group 2 did have the longest mean survival time in days of any of the groups.
Perhaps this is a real effect, but the animal variability requires more animals to confirm.

[redacted]

Details follow:

```
Release: 7.0        (BMDP/DYNAMIC)          Date: 04/22/99   at 15:42:26
Site: spo461
      usarmy


/PROBLEM TITLE IS 'DNA ANTHRAX SPORE CHALLENGE TTD ANALYSIS'.

/INPUT FILE='D:\PROJECTS\ivens\deaddna.POR'.
       CODE=deaddna.
       PORT.
       VARIABLES ARE 3.

# NOTE: THIS INPUT FILE CREATED FORM PC/SAS FILE USING SAS XPORT
#       MISSING SET TO BMDP DEFAULT MISSING CODE (*) BY BMDP IMPORT PROGRAM
```

```
#       BMDP CODE BELOW SET FOR PROCEDURE 1L

/VARIABLE NAMES=group,censored,ttd.
/TRANSFORM USE=group le 4.
/FORM TIME=ttd.
      UNIT=DAYS.
      STATUS=CENSORED.
      RESPONSE=0.
/GROUP CODES(CENSORED) = 0,1.
       NAMES(CENSORED) = DEAD,ALIVE.
/ESTIMATE METHOD=PRODUCT.
          GROUPING=GROUP.
          STATISTICS=BRESLOW,MANTEL.
/END

NUMBER OF CASES READ. . . . . .      40
            PRODUCT-LIMIT SURVIVAL ANALYSIS   GROUPING VARIABLE IS group
                                                LEVEL IS *1

                        TIME VARIABLE IS ttd

  CASE      TIME    STATUS   CUMULATIVE  STANDARD   CUM      CUM   REMAIN
 NUMBER     DAYS             SURVIVAL    ERROR     DEAD     LOST  AT RISK
 ------   ------   ------   ----------  --------  ------   -----  -------
      1    48.00   DEAD        0.9000    0.0949       1       0        9
      2    57.00   DEAD        0.8000    0.1265       2       0        8
      3    72.25   DEAD        0.7000    0.1449       3       0        7
      4   101.00   DEAD                                4       0        6
      5   101.00   DEAD        0.5000    0.1581       5       0        5
      6   107.00   DEAD        0.4000    0.1549       6       0        4
      7   118.50   DEAD                                7       0        3
      8   118.50   DEAD        0.2000    0.1265       8       0        2
      9   126.00   DEAD        0.1000    0.0949       9       0        1
     10   133.00   DEAD        0.0000    0.0000      10       0        0

MEAN SURVIVAL TIME =      98.22          S.E. =      9.305


                                ASYMPTOTIC
QUANTILE          ESTIMATE      STANDARD ERROR
75TH                 64.62          20.69
MEDIAN (50TH)       101.00          18.31
25TH                118.50           8.09


    BROOKMEYER-CROWLEY 95.0% CONFIDENCE INTERVAL FOR MEDIAN SURVIVAL TIME
                (    72.25 ,     118.50 )

*** N O T E *** BROOKMEYER-CROWLEY CONFIDENCE INTERVAL ASSUMES NO TIES AMONG
                OBSERVED RESPONSE TIMES.  AT LEAST ONE SUCH TIE OCCURRED.
            PRODUCT-LIMIT SURVIVAL ANALYSIS   GROUPING VARIABLE IS group
                                                LEVEL IS *2

                        TIME VARIABLE IS ttd

  CASE      TIME    STATUS   CUMULATIVE  STANDARD   CUM      CUM   REMAIN
 NUMBER     DAYS             SURVIVAL    ERROR     DEAD     LOST  AT RISK
 ------   ------   ------   ----------  --------  ------   -----  -------
     11    72.25   DEAD        0.9000    0.0949       1       0        9
     12    94.50   DEAD                                2       0        8
     13    94.50   DEAD                                3       0        7
     14    94.50   DEAD        0.6000    0.1549       4       0        6
     15   101.00   DEAD        0.5000    0.1581       5       0        5
     16   107.00   DEAD        0.4000    0.1549       6       0        4
     17   118.50   DEAD        0.3000    0.1449       7       0        3
     18   126.00   DEAD        0.2000    0.1265       8       0        2
     19   142.50   DEAD        0.1000    0.0949       9       0        1
```

20	148.00	DEAD	0.0000	0.0000	10	0	0

MEAN SURVIVAL TIME = 109.88 S.E. = 7.501

QUANTILE	ESTIMATE	ASYMPTOTIC STANDARD ERROR
75TH	94.50	*
MEDIAN (50TH)	101.00	9.88
25TH	122.25	10.18

* COULD NOT BE ESTIMATED ACCURATELY.

BROOKMEYER-CROWLEY 95.0% CONFIDENCE INTERVAL FOR MEDIAN SURVIVAL TIME
(94.50 , 126.00)

*** N O T E *** BROOKMEYER-CROWLEY CONFIDENCE INTERVAL ASSUMES NO TIES AMONG OBSERVED RESPONSE TIMES. AT LEAST ONE SUCH TIE OCCURRED.

PRODUCT-LIMIT SURVIVAL ANALYSIS GROUPING VARIABLE IS group
LEVEL IS *3

TIME VARIABLE IS ttd

CASE NUMBER	TIME DAYS	STATUS	CUMULATIVE SURVIVAL	STANDARD ERROR	CUM DEAD	CUM LOST	REMAIN AT RISK
21	48.00	DEAD	0.9000	0.0949	1	0	9
22	57.00	DEAD	0.8000	0.1265	2	0	8
23	79.25	DEAD			3	0	7
24	79.25	DEAD	0.6000	0.1549	4	0	6
25	101.00	DEAD	0.5000	0.1581	5	0	5
26	107.00	DEAD	0.4000	0.1549	6	0	4
27	118.50	DEAD			7	0	3
28	118.50	DEAD			8	0	2
29	118.50	DEAD	0.1000	0.0949	9	0	1
30	148.00	DEAD	0.0000	0.0000	10	0	0

MEAN SURVIVAL TIME = 97.50 S.E. = 9.850

QUANTILE	ESTIMATE	ASYMPTOTIC STANDARD ERROR
75TH	68.12	*
MEDIAN (50TH)	101.00	21.94
25TH	118.50	*

* COULD NOT BE ESTIMATED ACCURATELY.

BROOKMEYER-CROWLEY 95.0% CONFIDENCE INTERVAL FOR MEDIAN SURVIVAL TIME
(79.25 , 118.50)

*** N O T E *** BROOKMEYER-CROWLEY CONFIDENCE INTERVAL ASSUMES NO TIES AMONG OBSERVED RESPONSE TIMES. AT LEAST ONE SUCH TIE OCCURRED.

PRODUCT-LIMIT SURVIVAL ANALYSIS GROUPING VARIABLE IS group
LEVEL IS *4

TIME VARIABLE IS ttd

CASE NUMBER	TIME DAYS	STATUS	CUMULATIVE SURVIVAL	STANDARD ERROR	CUM DEAD	CUM LOST	REMAIN AT RISK
31	57.00	DEAD	0.9000	0.0949	1	0	9
32	72.25	DEAD			2	0	8
33	72.25	DEAD			3	0	7
34	72.25	DEAD	0.6000	0.1549	4	0	6

35	79.25	DEAD	0.5000	0.1581	5	0	5
36	82.00	DEAD	0.4000	0.1549	6	0	4
37	94.50	DEAD	0.3000	0.1449	7	0	3
38	107.00	DEAD	0.2000	0.1265	8	0	2
39	126.00	DEAD			9	0	1
40	126.00	DEAD	0.0000	0.0000	10	0	0

MEAN SURVIVAL TIME = 88.85 S.E. = 7.529

QUANTILE	ESTIMATE	ASYMPTOTIC STANDARD ERROR
75TH	72.25	*
MEDIAN (50TH)	79.25	7.71
25TH	100.75	16.96

* COULD NOT BE ESTIMATED ACCURATELY.

BROOKMEYER-CROWLEY 95.0% CONFIDENCE INTERVAL FOR MEDIAN SURVIVAL TIME
(72.25 , 107.00)

*** N O T E *** BROOKMEYER-CROWLEY CONFIDENCE INTERVAL ASSUMES NO TIES AMONG OBSERVED RESPONSE TIMES. AT LEAST ONE SUCH TIE OCCURRED.

SUMMARY TABLE

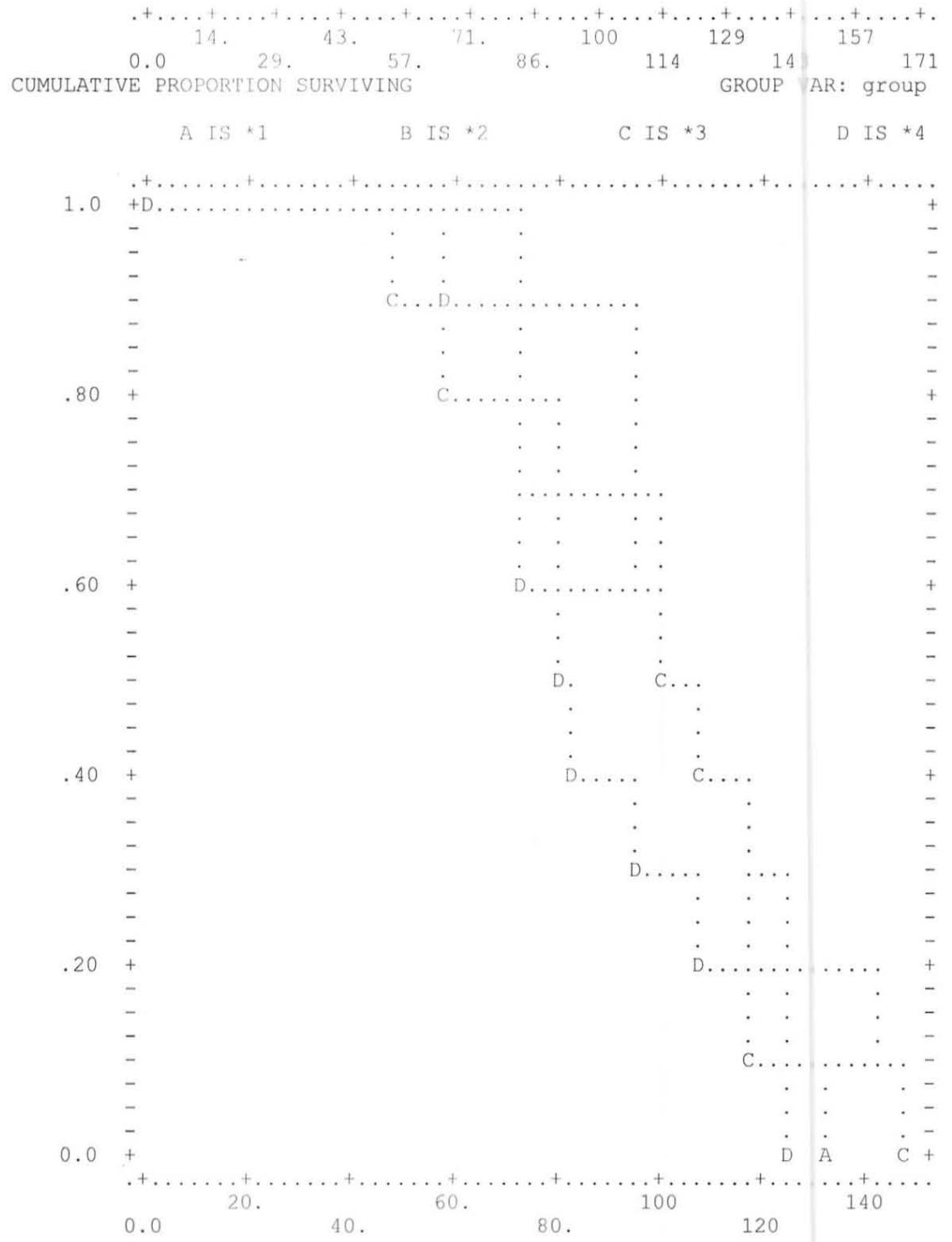
	TOTAL	DEAD	PROPORTION CENSORED
*1	10	10	0.0000
*2	10	10	0.0000
*3	10	10	0.0000
*4	10	10	0.0000
TOTALS	40	40	

TEST STATISTICS

	STATISTIC	D.F.	P-VALUE
GENERALIZED SAVAGE (MANTEL-COX)	2.501	3	0.4752
GENERALIZED WILCOXON (BRESLOW)	2.422	3	0.4895

PATTERN OF CENSORED DATA

PATTERN OF TRUE RESPONSE TIMES



ttd

NUMBER OF INTEGER WORDS USED IN PRECEDING PROBLEM 2538

BMDP1L - LIFE TABLES AND SURVIVOR FUNCTIONS

Release: 7.0 (BMDP/DYNAMIC) Date: 04/22/99 at 15:42:42
Site: spo461
usarmy

FINISH/

NO MORE CONTROL LANGUAGE.

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PROGRAM TERMINATED
```

[redacted] USAMRMC

From: Bruce Ivins
Sent: Friday, September 18, 1998 4:05 PM
To: [redacted];
Subject: Re: 2001 Anthrax meeting

Bruce, good points all, maybe a couple more to consider:
1. an after-dinner address by a speaker of significant scientific accomplishment to give us a different perspective on things. Might have improved the dinner in Plymouth to have heard a few words after the meal. 3 years ought to be enough time to enlist a big-shot

2. security - may want to start a dialogue early on with the experts to benefit from their wisdom and knowledge so we can say we've done everything possible to ensure a safe meeting.

Good Points! - Bruce

Reply Separator

Subject: 2001 Anthrax meeting
Author: Bruce Ivins at USAMRIID4_FTDETRCK
Date: 9/18/98 11:50 AM

[redacted]

I talked with [redacted] about having an anthrax meeting in 2001 on THIS side of the ocean. (Several of the Brits made it a point of asking me when WE were going to host one, since they have done the past three.) Here are some things that came out of our little discussion:

a) Either Williamsburg or Annapolis sounds like a good place to have a meeting. (Good suggestions, [redacted])

b) Before anything else, we need to get approval from the command to organize and put on such a meeting. If the Army won't approve of our efforts and won't give us any financial support, then we can't go forward.

c) In England, the Society for Applied Microbiology helped with the logistics of putting on the recent meeting. Perhaps we should contact the American Society for Microbiology (Meetings Department) to see if we could or should enlist their assistance in publicizing and putting on the meeting.

d) Once a site is chosen, we should contact the Chamber of Commerce or the Tourist Council of the area to start the ball rolling with resepct to a) lodging and meals; b) meeting area(s); c) social functions, tours, etc.

e) We need to start thinking about who to notify about the meeting, who to specifically invite (i.e. past participants) and what the content of the meetings should be (presentation areas/themes and specific talks/posters). We could probably get help from the Brits on this, since they have had considerable experience. Also we'll need to round up some corporate financial sponsorship.

f) Since there are a number of us working on anthrax either full-time or part-time [redacted]) perhaps each could take a particular area (ASM coordination; facilities and functions; scientific program; participant list and notification; corporate sponsorship; etc.) and work principally with it. We could have periodic meetings when necessary and people could work together when areas overlapped.

g) We (some of us) would probably have to visit the actual site at least once or twice to make sure of the logistics of everything (for example, size of meeting rooms, acceptability of acommodations, etc.)

h) The theme for the meeting coud be "ANTHRAX IN THE SECOND

[redacted] USAMRMC

From: bruce.ivins@amedd.army.mil
Sent: Thursday, January 31, 2002 9:43 AM
To: bruce.ivins@amedd.army.mil
Subject: NYTimes.com Article: Terrorist Strain of Anthrax Studied

Terrorist Strain of Anthrax Studied

January 30, 2002

By THE ASSOCIATED PRESS

Filed at 8:30 p.m. ET

WASHINGTON (AP) -- To Dr. Michael L. Vickers, a dead cow lying in a remote pasture of a South Texas ranch in 1981 was no different from the hundreds of other felled cattle he had seen.

Vickers, who has a private veterinary practice in nearby Falfurrias, sliced out tissue from the animal -- the liver, the spleen and other organs -- put them into a plastic ice chest and sent them by bus to a laboratory in College Station, home of Texas A&M.

He was sure the animal had died of anthrax -- the blackberry color of the spleen was the main clue -- but he sought confirmation from the Texas Veterinary Medical Diagnostic Laboratory.

``It was just another anthrax,'' recalls Vickers. ``In the field, anthrax is just anthrax. We see it just about every year.''

Vickers had no idea that 21 years later bacteria perhaps descended from those specimens he collected would be at the center of a bioterrorism attack that would kill five people, infect a dozen more and force the evacuation and sterilization of buildings in Florida, New York and Washington.

Back in 1981, workers at the College Station lab received Vickers' package and cultured specimens from the organs of the dead cow. They quickly confirmed that the specimens

were loaded with bacteria with the characteristic bamboo-jointed rods of anthrax.

Dr. Konrad Eugster, chief of the diagnostic lab in 1981, remembered that the Army had earlier requested a fresh field isolate of anthrax. He said two vials filled with the anthrax cultures were packaged in ice and shipped to Fort Detrick, Md., headquarters of the Army's biological warfare research center.

Eugster said the box bore a prepaid label with the return address of the National Veterinary Services Laboratory in Ames, Iowa, an Agriculture Department facility.

According to The Washington Post and The New York Times, the specimens from Texas A&M were among 27 anthrax strains that were collected at Fort Detrick. Since the box bore an Ames, Iowa, return address, researchers called the anthrax isolate ``Ames.''

Five years later, two researchers at Fort Detrick published a science paper in which they reported the Ames strain was highly lethal when tested on laboratory animals. They also said the anthrax strain came from Iowa, continuing the mistake prompted by the mailing label.

It was a mistake that would matter little until last fall, when investigators determined that the spores used in the anthrax-by-mail attacks in Florida, New York and Washington were all the Ames strain.

This prompted investigators and the media to start asking questions in Ames, Iowa. Officials at Iowa State's College of Veterinary Medicine, which had a collection of anthrax cultures, dug through old files, but found no documentation that any of their isolates were the Ames strain, according to the Times.

The true origin of the killer strain -- that dead cow 21 years ago in Texas -- was confirmed in old Army documents, according to the Washington Post.

Vickers said he was not surprised that the spores used in the deadly anthrax attacks came from Texas.

``We have a really virulent strain,'' he said. ``I have seen 30 head (of cattle) die in just 24 hours.''

Vickers said that natural anthrax, present as spores in the mesquite and grassy prairies of south and central Texas, routinely kills scores of deer annually. Most ranchers inoculate their cattle, but some strays still get sick nearly every year, he said. Vickers recommends that ranchers avoid sick and dying cattle because the bacteria is dangerous to humans.

``I tell ranchers to pile on mesquite logs and burn the animal on the spot,'' said Vickers. To protect himself, the vet says he disposes of instruments, equipment and even clothes that have come into contact with contaminated specimens.

And as a final precaution, Vickers said he takes a full course of antibiotics after dealing with an animal that has been killed by anthrax.

``I've never had anthrax,'' he said, ``but I am very

cautious.''

http://www.nytimes.com/aponline/national/AP-Anthrax-Origin.html?ex=1013488208&ei=1&en=22189606b747926f

[redacted] USAMRMC

From: bruce.ivins@amedd.army.mil
Sent: Wednesday, January 30, 2002 3:22 PM
To: Bruce.ivins@amedd.army.mil
Subject: NYTimes.com Article: Geographic Gaffe Misguides Anthrax Inquiry

Geographic Gaffe Misguides Anthrax Inquiry

January 30, 2002

By WILLIAM J. BROAD

The postmarks on the deadly letters laced with anthrax made clear from the start that they came from Trenton. But tracing the origin of the strain of anthrax that killed five people last fall has been a far murkier venture. And it now turns out that scientists and investigators have been on the wrong trail all along.

Federal investigators have found in recent weeks that the so-called Ames strain was first identified not in Ames, Iowa, its reputed home, but a thousand miles south, in Texas. The strain of the bacteria was found on a dead cow near the Mexican border in 1981, and the geographic gaffe was the result of a clerical error by a scientific researcher.

It was of little consequence until last October, when investigators determined that the anthrax in the nation's first major bioterrorism attack matched the "Ames strain." Then the clerical error wound up taking the investigation on several wrong turns.

Investigators spent considerable effort trying to find the genesis of the strain in Iowa, issuing a subpoena to Iowa State University, which was known to have a sizable library of anthrax samples. Investigators persisted, even though Iowa state officials said they could find no evidence of the Ames strain.

The discovery of the true origin of Ames "looks like it gets Iowa off the hook," a senior law enforcement official said yesterday.

The criminal investigation also focused on the possibility that the anthrax used in the attacks was left over from the nation's bioweapons program, which was shut down in 1969. A scientific paper published in 2000 said Ames anthrax was a strain used in the program. But now, with the discovery that Ames emerged from Texas in 1981, that part of the investigation has also lost steam.

The discovery of the error also sheds a disturbing light on the prevalence of the virulent Ames strain. Until recently, Ames was seen as a germ that had an uncertain origin in nature and was locked away in several laboratories around the country. But now scientists and veterinary doctors say they believe that Ames is common throughout Texas.

This raises a possible public health concern and increases the possibility that last fall's bioterrorist could have simply dug anthrax out of the dirt in Texas.

"We isolate a lot of anthrax here," said Lelve G. Gayle, director of the Texas Veterinary Medical Diagnostic Laboratory in College Station. He said the Ames strain now appeared to be widely scattered in natural settings. It was found in a dead goat on a Texas ranch in 1997.

The new history of Ames, some of which was reported yesterday in The Washington Post, is being investigated by the F.B.I. along with the National Intelligence Council, which does federal threat assessments, and the Central Intelligence Agency.

"This one is the true Ames," a C.I.A. analyst said of the Texas germ. He added that the anthrax that panicked the nation last fall "all came from Texas."

That history starts in late 1980 when Gregory B. Knudson, a biologist working at the Army's biodefense laboratory at Fort Detrick, Md., was searching for new anthrax strains to use in tests of the military's vaccine. In December 1980, he wrote Texas A&M veterinary officials, according to documents obtained from Dr. Knudson.

"Unfortunately, I have discarded all my pathogenic cultures," Howard W. Whitford replied in January 1981. But he said warmer weather would probably bring new outbreaks.

Indeed, in May 1981, the disease struck a herd of 900 cows at a ranch near the Mexican border.

"This heifer in excellent flesh was found in the morning unable to rise," Michael L. Vickers, a veterinarian in Falfurrias, Tex., wrote in his case report. "By noon she was dead."

In an interview, Dr. Vickers said: "This is a very lethal strain of anthrax we have down here. It's nothing to play with. I've seen as many as 30 head of cattle die a day until they're inoculated."

Dr. Vickers sent anthrax specimens to the Texas Veterinary Medical Diagnostics Laboratory, an arm of Texas A&M. The Texas laboratory, remembering Dr. Knudson's request, sent a sample along to Fort Detrick.

That is where the mix-up began. The Texas lab sent the iced specimens to Fort Detrick with a prepaid mailing label that Dr. Knudson has carefully preserved among his papers. Its

return address is not Texas A&M at College Station but rather the National Veterinary Services Laboratories, in Ames, Iowa, an arm of the federal Agriculture Department that does diagnostic tests for state and foreign veterinary labs.

The Texas laboratory frequently sent shipments to Ames using prelabeled boxes with prepaid postage. In this case, it put on an additional label to redirect the box to Fort Detrick, with the national laboratory in Ames as the return address.

The return address blur soon became a scientific muddle.

At Fort Detrick, Dr. Knudson had gathered 27 anthrax strains. "I called this `Ames' since it came from Ames," he recalled in an interview.

In May 1986, his vaccine study and the Ames strain made their public debut. Dr. Knudson and Stephen F. Little of Fort Detrick reported in a science paper that the highly lethal strain, which killed six out of six vaccinated guinea pigs, had come from an Iowa cow.

Biologists recycled the mistake. The issue grew muddier in May 2000 when a scientific paper claimed incorrectly that Ames had been used in the American germ weapons program that was shut down in 1969.

The academic confusion became a public drama last fall. After federal experts identified the strain in the bioattacks as Ames, reporters and investigators descended on the city in Iowa.

Gov. Tom Vilsack of Iowa sent armed troopers and Iowa National Guard soldiers to safeguard Iowa State University's cache of anthrax microbes, which were kept in more than 100 vials. Some news reports said the attack germs had been stolen.

Officials in the College of Veterinary Medicine tore through old files and read cryptic labels on vials but could find no documentation that any of their germs were the Ames strain. They could find nothing to support Dr. Knudson's 1986 paper that said Ames had originated in an Iowa cow.

"We figured it had to have come through here, but we couldn't prove it," recalled James A. Roth, an assistant dean.

In early October, the college destroyed its anthrax collection after deciding that the germs were not worth the trouble of the new high security. In an Oct. 12 statement, the college pointed a finger at its neighbor, the National Veterinary Services Laboratories, saying it "appears" to have shipped the Ames strain to Fort Detrick.

But officials there could also find no evidence of Ames. "The Army said they got it from us," recalled Tom Bunn, head of diagnostic bacteriology there. "But we have no records of this being in our laboratory."

Still, most federal and private analysts concluded that the germ had arisen in Iowa, been isolated at Iowa State, shared with the agriculture lab and from there shipped to

Fort Detrick.

By December, analysts were speculating that since Iowa State had destroyed anthrax cultures dating to 1925, perhaps one of those early strains was the true Ames.

Based on that interpretation, Barbara Hatch Rosenberg, a private expert in biological weapons at the State University of New York at Purchase, concluded in widely cited December report that the powdered anthrax in the attack letters "may be a remnant of the U.S. biological weapons program."

But in December, based on interviews and a review of documents, some from Dr. Knudson's file, investigators began to unravel the true Ames story.

Dr. Knudson acknowledges his mistake, saying, "It's good to get this clarified."

Officials at Iowa State could not agree more. Critics had widely faulted the university for destroying its anthrax collection, saying important evidence in the attacks might have gone up in smoke.

"My life would have been a lot easier if it was known as the College Station strain rather than the Ames strain," Dr. Roth said.

Questions linger. An official of Iowa State's veterinary school has been subpoenaed to testify in early February before a federal grand jury in Washington about the school's handling of anthrax germs.

But the discovery of the true history of Ames has raised new concerns in Texas, where the soils appear to be widely contaminated with the lethal strain. In 1997, a goat on a Texas ranch hundreds of miles from the original site of the Ames discovery died from a type of anthrax that turned out to be genetically identical to Ames.

Ames contamination could become a safety issue if would-be terrorists hunt for lethal germs in Texas soils, experts say.

Timothy W. Tobiason, a self-taught scientist who sells germ-weapon cookbooks at gun shows across the West, has suggested that old cattle trails in Texas and Oklahoma are ideal places to dig for anthrax microbes, and scientists say his logic is accurate enough to be dangerous.

"A lot of big cattle drives originated in this area," said Dr. Vickers, the Texas veterinarian who first isolated Ames. "It could be quite simple" for a terrorist to acquire the lethal spores.

http://www.nytimes.com/2002/01/30/national/30AMES.html?ex=1013422100&ei=1&en=aee406b3910ca259

kit at http://www.nytimes.com/adinfo

For general information about NYTimes.com, write to help@nytimes.com.

[redacted]USAMRMC

From: Ivins Bruce E
Sent: Friday, October 22, 1999 1:40 PM
To: [redacted]
Subject: 2001 Anthrax meeting

Hi, [redacted]!

We've looked over your Fax of the proposed schedule, and it looks good. We like the idea of having a light social mixer (like wine and cheese?) on Sunday evening, perhaps at the "boat house" (?) that we visited on the campus. We could have a banquet one evening, perhaps another social event on another evening (such as a tour of Annapolis? boat ride? visit to some historic site?) (The Naval Academy may be off-limits to individuals from some countries - we may need to check into this with them.) We could leave one other evening free for people to do as they please. If we wish to offer tours of DC or Annapolis on Thursday, June 14, perhaps we should ask people ahead of time (when they register?) who wishes to go, so that we can make appropriate reservations.

I am really not the "Organizer" of the meeting, just the person who was tasked to do much of the interfacing with ASM on this. Here are names and phone numbers of persons at USAMRIID also working on the meeting:

[redacted] - lodging - [redacted] (day)
[redacted] - social events - [redacted] (day)
[redacted] - scientific program sessions - [redacted]

My day number is [redacted] and my evening number is [redacted].

We here at USAMRIID can help supply people to help answer questions from attendees. At the last meeting, such individuals wore yellow T-shirts, so that they were clearly visible.

I know that we talked about box lunches for attendees. Are breakfast and dinner going to be any problem due to the number of people? I remember we talked about the idea of using either the gymnasium or getting a large tent.

Please let us know what we need to do to help, and thanks for all of your efforts!!

Sincerely,

Bruce

P.S. [redacted]ys, "Make sure they have good food and wine!"

[redacted] USAMRMC

From: Ivins Bruce E
Sent: Thursday, September 23, 1999 4:23 PM
To: [redacted]
Subject: RE: Anthrax meeting, July 2000

[redacted], please remember that the meeting is for July of 2001, not 2000.
Thanks!

- Bruce

-----Original Message-----
From: [redacted]
Sent: Thursday, September 23, 1999 3:23 PM
To: 'Ivins Bruce E '
Subject: RE: Anthrax meeting, July 2000

Hey, Bruce, thanks for the message. I am in San Francisco at another meeting until October 5, but when I return I will start on our projects. We should probably plan a meeting in mid-late October (your place?)where we'll discuss contracting with ASM, as well as program and logistics details. ASM can't sign any hotel or vendor contracts until the agreement between us is finalized and signed, so the sooner the better. THe information you sent me is great background, and very helpful. I'll contact you when I come back into town. Looking forward to it!

-----Original Message-----
From: Ivins Bruce E
To: [redacted]
Sent: 9/22/99 4:10 PM
Subject: RE: Anthrax meeting, July 2000

Hi, [redacted]
I just got the word from [redacted]er. You can proceed with your plan for getting the contract from St. John's and contacting hotels.
Didn't
we like that one particular hotel that was near the campus? (I forget its name.)When do we need to sit down and talk to you more about specifics, including cost? If you have some kind of informal timeline and would like to share it with us soon, please do. You are versed on putting on conferences, and we are not. We've given you some information on past conferences, but probably a lot more needs to be smoothed out with respect to who to invite, when, how to get invitations out, etc. [redacted]) is working on a tentative conference program. She could probably email you a copy if you'd like one, or I could send to you the one she emailed to me. I guess we'll also need to get the eating plans social event plans, etc. down.

- Bruce

-----Original Message-----
From: [redacted] [mailto[redacted]]
Sent: Friday, September 10, 1999 11:30 AM
To: bruce.ivins@det.amedd.army.mil
Subject: Anthrax meeting, July 2000

Hi, Bruce, how are you doing? I would like to start setting up a workplan for the Anthrax Conference, and was wondering if it is OK with you that I begin by getting a contract from St. John's and contacting the hotels to find out availability for a block of rooms. Is there anything that comes to your mind that you are uneasy about, that you would like to get out of the way quickly, or would you like me to set up a timeline for your review?

[redacted]USAMRMC

From: Ivins Bruce E
Sent: Monday, September 13, 1999 3:47 PM
To: [redacted]
Subject: FW: Anthrax meeting, July 2000

Importance: High

[redacted]:

Can you please get back to me soon on this. [redacted] at the ASM now wants to proceed on this. She and those of us who went to Annapolis a[redacted]e in agreement as to where the sessions should be held, what the primary hotel should b[redacted], and what the logistical arrangements in general should be. We need to get back to he[redacted] soon on this, so that she can start moving forward on it. If there are any questions i[redacted] your minds on this, perhaps we should have a short meeting (soon!) with you and those of us who went to Annapolis.

Thanks for your attention to this.

- Bruce

-----Original Message-----
From: [redacted] [mailto:[redacted]]
Sent: Friday, September 10, 1999 11:30 AM
To: bruce.ivins@det.amedd.army.mil
Subject: Anthrax meeting, July 2000

Hi, Bruce, how are you doing? I would like to start setting [redacted]p a workplan for the Anthrax Conference, and was wondering if it is OK wit[redacted] you that I begin by getting a contract from St. John's and contacting th[redacted] hotels to find out availability for a block of rooms. Is there anythin[redacted] that comes to your mind that you are uneasy about, that you would like to g[redacted]t out of the way quickly, or would you like me to set up a timeline for yo[redacted]r review?

Thanks for your input, I look forward to working on this with you and your staff.

[redacted]
American Society for Microbiology
1325 Massachusetts Avenue NW
Washington, D.C. 20005
phone: [redacted]
fax: [redacted]
[redacted]

[redacted]USAMRMC

From: Ivins Bruce E Dr USAMRIID
Sent: Friday, January 21, 2000 12:46 PM
To: [redacted]
Subject: RE: Anthrax, mice, and CpG

Great, [redacted]
I'll see you then. Thanks!
- Bruce

-----Original Message-----
From: [redacted]
Sent: Friday, January 21, 2000 10:36 AM
To: 'Ivins Bruce E Dr USAMRIID'
Subject: RE: Anthrax, mice, and CpG

Dear Bruce,

I'm due at Ft. Detrich at 11. I'll come to USAMRIID first, and drop off the ODN.

Dennis

> -----Original Message-----
> From: Ivins Bruce E Dr USAMRIID [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> Sent: Friday, January 21, 2000 10:04 AM
> To: 'Klinman, Dennis'
> Subject: RE: Anthrax, mice, and CpG
>
> Hi, [redacted]
> My first vaccinations (including CpG) are on Thursday, 27 Jan. When
> will you be coming? I have a meeting from 10-12, but I'll be here in
> my office from 8-10, and I'll also be here after 1 pm. Somebody will
> be in my office from 10-12. When you get to USAMRIID, either the front
> desk or the back desk, just have the guard call my number [redacted] or [redacted]
> number
> [redacted] and someone will be down to pick the oligos up. If you need
> directions, let me know. Thanks!
>
> - Bruce
>
>
> -----Original Message-----
> From: [redacted].fda.gov]
> Sent: Thursday, January 20, 2000 4:37 PM
> To: 'Ivins Bruce E'
> Subject: RE: Anthrax, mice, and CpG
>
>
> Dear Bruce,
>
> The ODNs are tested. They worked fine, and are ready for pick up. I have
> to visit Ft. Detrick on Thurdsay Jan 27. If that's not too late, I could
> drop them off to you. Otherwise, I could Fex Ex them to you or you
> could pick them up.
>
> Let me know.
>
> [redacted]
>
> > -----Original Message-----
> > From: Ivins Bruce E [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> > Sent: Thursday, October 07, 1999 8:40 AM

> > To: [redacted].fda.gov'
> > Subject: Anthrax, mice, and CpG
> >
> > Hi, [redacted]
> > As you remember, in our first experiment with the mice, we got some
> > time-to-death extension with CpG for mice challenged with virulent B.
> > anthracis spores. In the second experiment, we demonstrated not only
> > time-to-death extension, but also protection from death with the
> > CpG. In this last experiment which we just concluded, we strangely
> > got no protection at all, in terms of either survival or increased
> > time-to-death. I
> believe
> > that the main problem is that the mouse is such a generally poor and
> > unpredictable model for anthrax. The guinea pig is a MUCH better
> > model for anthrax infection/protection, and our guinea pig protocol
> > for CpG has
> been
> > approved, so I think the next step should be (when we get the funds
> > released) to go into the guinea pigs. We'll be able to look at
> > specific
> as
> > well as non-specific protection, and if we get some promising
> > results,
> we
> > can head into non-human primates. Hopefully we'll get some money
> released
> > within a few weeks and we can get started then. I'll let you know.
> > I'm sure that mice are an excellent animal model for a number of
> > diseases, but anthrax isn't one of them.
> >
> >
> > - Bruce

[redacted] USAMRMC

From: Ivins Bruce E Dr USAMRIID
Sent: Friday, January 14, 2000 10:52 AM
To: [redacted] USAMRIID
Subject: AVA Info for CDC

[redacted]

Here is AVA vaccination info for CDC meeting. I am letting [redacted] give you her data.

1. B91-03 - 2 year monkey study with AVA - Monkeys were immunized at 0 and 2 weeks, then challenged by aerosol with the Ames strain of B. anthracis at various times.

Time of Challenge	mean LD50	Survivors/Total
8 wk	437	10/10
38 wk	203	3/3
100 wk	330	7/8

2. F95-09 - Adjuvant study in monkeys - Monkeys were vaccinated at 0 wk with AVA, then challenged at 6 weeks with 74 aerosol LD50 of Ames spores.

Survivors/Total
10/10

3. B97-05 - Vegetative cell/spore challenge in rabbits - Rabbits were immunized with AVA at 0 and 4 weeks, then challenged at 10 weeks subcutaneously with an LD99 of either Ames spores or Ames encapsulated, vegetative cells.

Challenge	Survivors/Total
Spores	8/8
Vegetative cells	8/8

4. B98-03 - Challenge of rabbits with spores of highly virulent strains - Rabbits were immunized at 0 and 4 weeks, then aerosol challenged at 10 weeks with spores from one of 6 different B. anthracis strains (the equivalent of about 1,000 to 2,000 Ames spore LD50s).

Total Survivors/Total Challenged
57/59

One group was challenged subcutaneously with the equivalent of 1,000 Ames LD50s (Zimbabwe strain).

Survivors/Challenged
10/10

5. F99-07 - Challenge of AVA-immunized monkeys with Namibia and Turkey spores - Monkeys were immunized at 0 and 4 weeks, then aerosol challenged at 10 weeks with Namibia spores (~ 250 LD50 equivalents) or Turkey spores (~700 LD50 equivalents).

Challenge strain	Survivors/Total
Namibia	10/10
Turkey	8/10

6. B96-08 - Potency stability test in guinea pigs - Guinea pigs were immunized with AVA which had been stored for varios periods of time. Two weeks later they were challenged i.m. with 1,000 Vollum 1B spores.

Storage time	Survivors/Total
0 months	12/16
1.5 months	15/16
4.5 months	11/16
12 months	8/16
2.5 years	5/16

[redacted] USAMRMC

From: Ivins Bruce E Dr USAMRIID
Sent: Tuesday, January 11, 2000 2:03 PM
To: [redacted] USAMRIID
Subject: RE: rabbits

OK. Here are the data. - Bruce

>-----Original Message-----
>From: [redacted] USAMRIID
>Sent: Tuesday, January 11, 2000 1:24 PM
>To: Ivins Bruce E Dr USAMRIID
>Subject: rabbits
>
>I have inherited the histology for protocol 97-05 for [redacted].
>Could you please let me know if these rabbits were challenged with
>heat-shocked or non-heat shocked spores or encapsulated or
>nonencapsulated vegetative cells? Their numbers are: 9, 10, 15, 16,
>17, 18,21, 22,27, 28, 29, and 30. Thanks for the info. Dana
>**********
****

>Number	Sex	Vaccine	Challenge
>9	Female	AVA human anthrax vaccine	2 X 10E5 Ames spores
>10	Female	AVA human anthrax vaccine	"
>15	Male	AVA human anthrax vaccine	"
>16	Male	AVA human anthrax vaccine	"
>17	Female	Sterne spore vet. anthrax vaccine	":
>18	Female	Sterne spore vet. anthrax vaccine	"
>21	Male	Sterne spore vet. anthrax vaccine	"
>22	Male	Sterne spore vet. anthrax vaccine	"
>27	Female	PA + aluminum hydroxide	"
>28	Female	PA + aluminum hydroxide	"
>29	Male	PA + aluminum hydroxide	"
>30	Male	PA + aluminum hydroxide	"

[redacted] USAMRMC

From: Ivins Bruce E Dr USAMRIID
Sent: Wednesday, January 05, 2000 10:34 AM
To: [redacted]
Subject: 2001 International Anthrax Meeting

Hi, [redacted]

As you know, International Anthrax Meetings have been held in 1989 (Winchester, England), 1995 (Winchester, England), and 1998 (Plymouth, England). We are planning another International Anthrax Meeting in Annapolis, Maryland, on June 10-13, 2001. We are presently contacting individuals who may wish to attend the meeting and deliver oral or poster presentations at the meeting. (We anticipate approximately 200 - 400 people will be at the meeting.) If you are interested in the meeting and would like further information, please let me know. Also, if you are interested in delivering an oral or poster presentation, please let me know. If there are other individuals who are working in the field of anthrax at CDC and who may be interested in the meeting, please pass this information on to them.

Thank you,

Bruce Ivins

USAMRIID Bacteriology Division
1425 Porter Street
Frederick, MD 21702-5011
[redacted]
FAX - [redacted]
email - bruce.ivins@AMEDD.ARMY.MIL

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)
Subject: rPA Studies
Date: Monday, January 24, 2000 2:03:56 PM

(b) (6) protocol (B00-03) covers much of what needs to be done with rPA. I think what gets contracted out is going to depend on the space we have here, and the length of time we have to accomplish the work. As it stands now, we can't possibly complete everything in the protocol by the end of the year. I think we could do experiments 1, 2 and 5 this calendar year if we started now, but that's about it. The rest of it may well have to be contracted out.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Anthrax, mice, and CpG
Date: Wednesday, January 26, 2000 7:48:28 AM

(b) (6)
I should need 2.4 mg of non-CpG oligos and 12 mg of CpG oligos at 100 micrograms per ml. Thanks.

- Bruce

P.S. Hope you weathered the snow OK yesterday!

-----Original Message-----
From: (b) (6)
Sent: Tuesday, January 25, 2000 3:34 PM
To: 'Ivins Bruce E Dr USAMRIID'
Subject: RE: Anthrax, mice, and CpG

Dear Bruce,

I recall that we re-calculated the amount of ODN needed for the guinea pig experiments, but can't find my notes. Could you remind me about the amount of + and - ODN I should bring up on Thursday. Many thanks,

(b) (6)

> -----Original Message-----
> From: Ivins Bruce E Dr USAMRIID [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> Sent: Friday, January 21, 2000 10:04 AM
> To: (b) (6)
> Subject: RE: Anthrax, mice, and CpG
>
> Hi, (b) (6)
> My first vaccinations (including CpG) are on Thursday, 27 Jan. When
> will you be coming? I have a meeting from 10-12, but I'll be here in my
> office from 8-10, and I'll also be here after 1 pm. Somebody will be in my
> office from 10-12. When you get to USAMRIID, either the front desk or the
> back desk, just have the guard call my number (b) (6)
> number
> (b) (6) and someone will be down to pick the oligos up. If you need
> directions, let me know. Thanks!
>
> - Bruce
>
>
> -----Original Message-----
> From: (b) (6)
> Sent: Thursday, January 20, 2000 4:37 PM
> To: 'Ivins Bruce E'
> Subject: RE: Anthrax, mice, and CpG
>
>
> Dear Bruce,
>
> The ODNs are tested. They worked fine, and are ready for pick up. I have
> to visit Ft. Detrick on (b) (6) (b) (6) If that's not too late, I could

(6)

> drop them off to you. Otherwise, I could Fex Ex them to you, or you could
> pick them up.
>
> Let me know.
>
> (b) (6)
>
> > -----Original Message-----
> > From: Ivins Bruce E [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> > Sent: Thursday, October 07, 1999 8:40 AM
> > To: (b) (6)
> > Subject: Anthrax, mice, and CpG
> >
> > Hi (b) (6)
> > As you remember, in our first experiment with the mice, we got some
> > time-to-death extension with CpG for mice challenged with virulent B.
> > anthracis spores. In the second experiment, we demonstrated not only
> > time-to-death extension, but also protection from death with the CpG. In
> > this last experiment which we just concluded, we strangely got no
> > protection
> > at all, in terms of either survival or increased time-to-death. I
> believe
> > that the main problem is that the mouse is such a generally poor and
> > unpredictable model for anthrax. The guinea pig is a MUCH better model
> > for
> > anthrax infection/protection, and our guinea pig protocol for CpG has
> been
> > approved, so I think the next step should be (when we get the funds
> > released) to go into the guinea pigs. We'll be able to look at specific
> as
> > well as non-specific protection, and if we get some promising results,
> we
> > can head into non-human primates. Hopefully we'll get some money
> released
> > within a few weeks and we can get started then. I'll let you know. I'm
> > sure
> > that mice are an excellent animal model for a number of diseases, but
> > anthrax isn't one of them.
> >
> >
> > - Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Titers for B97-05 sera
Date: Wednesday, January 26, 2000 11:16:10 AM

(b) (6) Have the Anti-PA ELISA titers for B97-05 rabbit sera been run yet? If not, do you know about when they might be done?

Thanks!

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Monkey protocol
Date: Thursday, January 27, 2000 9:52:39 AM

Hi, (b) (6)

I think the monkey protocol we talked about yesterday sounds good. At last, a meeting where something concrete gets decided! Even if we did the mice, guinea pigs and rabbits, we'd still have to go to monkeys eventually. Thus we are actually saving animals (mice, guinea pigs and rabbits) by going straight to the primate. (If the LACUC gives us a hard time we can tell them that.)

Is this correct for what came of the meeting with respect to the monkey passive protocol?

a) 4 control and and 4 experimental monkeys
b) On days ? and ? (-1 and +1 ??) the controls will get normal human IgG, and the experimental animals will get anti-AVA IgG.
c) On day 0, the animals will get an aerosol Ames spore challenge of about 10 LD50.
d) Daily quantitative bacteremias will be done on all monkeys.
e) The monkeys will be monitored ? (3?) times daily to determine times to death.
f) Serum antibody levels will be determined daily.

Whatever help I can provide, please let me know.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Titers for B97-05 sera
Date: Thursday, January 27, 2000 8:29:17 PM

(b) (6) I can't print the file for some reason. - Bruce

>-----Original Message-----
>From: (b) (6)
>Sent: Thursday, January 27, 2000 5:31 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: Titers for B97-05 sera
>
> << File: JB992402.xls >> Thats your data attached. Any problems let me know. The 2 low positve "saline" controls were on a plate filled with negatives so I didn't see an evident problem with the results.
>
>Have fun,
(b) (6)
>
> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Wednesday, January 26, 2000 3:46 PM
> To: (b) (6)
> Subject: RE: Titers for B97-05 sera
>
> Yes, please! Thanks, (b) (6)
>
> - Bruce
>
> -----Original Message-----
> From: (b) (6)
> Sent: Wednesday, January 26, 2000 1:52 PM
> To: Ivins, Bruce E Dr USAMRIID
> Subject: RE: Titers for B97-05 sera
>
> It just so happens that I am running them as I answer this. Expect results sometime tomorrow. Did you want the probit titer like last time?
>
> (b) (6)
> ----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Wednesday, January 26, 2000 11:16 AM
> To: (b) (6)
> Subject: Titers for B97-05 sera
>
> (b) (6)
> Have the Anti-PA ELISA titers for B97-05 rabbit sera been run yet? If not, do you know about when they might be done?
>
> Thanks!
>
> - Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: AVA info
Date: Monday, January 24, 2000 1:15:20 PM

AVA

1. What should be done.

a) Passive studies in mice - I would prefer that these studies be contracted out. We can provide the challenge spores and antiserum.

1) Mice = CBA/J females, 10 per group, about 20 g. Inject intraperitoneally on days -1, 0, 1, 2 and 3 with one of the following: rabbit anti-rPA antiserum; rabbit anti-AVA antiserum; human anti-AVA IgG; Normal rabbit serum; normal human IgG. On day 0, challenge subcutaneously with 10LD50s of V1B spores. Check mice 3X daily for deaths and note differences in survival as well as time to death differences. If protection is seen, repeat experiment with 10 LD50s of Ames spores. If no protection is seen, drop the challenge dose down to 3-5 LD50s of Vollum 1B spores. Enough animals should be ordered to repeat experiments. Total number of animals = 400

b) Passive studies in guinea pigs. We can do these studies in the guinea pig animal room in B3.

1) Guinea pigs = Hartley strain, 8 males and 8 females per group, about 350 g at the time of the experiment. Inject intraperitoneally on days -1, 0, 1, 2 and 3 with one of the following: rabbit anti-rPA antiserum; rabbit anti-AVA antiserum; human anti-AVA IgG; Normal rabbit serum; normal human IgG. On day 0, challenge intramuscularly with 50 LD50s (5000) of Ames spores. Check guinea pigs 3X daily for deaths and note differences in survival as well as time to death differences. If protection is seen, repeat experiment with 100 LD50s of Ames spores. If no protection is seen, drop the challenge dose down to 10 LD50s of Vollum 1B spores. Enough animals should be ordered to repeat experiments. Total number of animals = 500

c) Passive studies in rabbits and monkeys (aerosol challenge). (b) (6) and I would be willing to work on this with (b) (6) f it is decided not to contract this out.

d) For ELISAs and TNAs - mice and guinea pigs - establish serology kinetics with < 10 animals that receive antiserum or IgG. (Contract this out??) For rabbits and monkeys, bleed animals daily. (Contract the tests out??)

e) Surrogate marker for non-human primate: We can either do this, or contract out the immunizations (and bleeds), then do the aerosol challenges here.

c) Assays for immunological correlates - see (b) (6) for comments.

d) Characterization of protective antibodies - see (b) (6) for comments.

We can use the budget estimates that (b) (6) has so masterfully worked out.

- Bruce

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: CpG and guinea pigs
Date: Tuesday, December 14, 1999 4:00:40 PM

Hi (b) (6)

Good news - we just received funding in our supply line. We will now order the guinea pigs - it takes about one month for the order to be processed and the animals to get here, so we can start immunizing and injecting CpG in January. Would it be convenient to come pick up the oligos, both CpG and non-CpG, about the first week in January (5th through the 7th)? If not, please let me know what would be a good time. What I figure I will need are:

1) Non-CpG oligonucleotides, 1.2 ml at 100 micrograms per 0.1 ml. (Please let me know the sequence.)
2) CpG oligonucleotides, 12 ml at 100 micrograms per 0.1 ml. (Again, please let me know the sequence, so I can enter into my lab notebook.)

I'm quite excited about the experiment. This model should be a better anthrax model than the mouse.

Happy Holidays!

- Bruce

From: Ivins Bruce E USAMRIID
To: Bruce Ivins; (b) (6)
Subject: FW: Agreement for Anthrax meeting
Date: Tuesday, November 16, 1999 9:16:22 AM
Attachments: anthraxtemplate.doc

(b) (6) and everyone else,
Please read over the enclosed document and provide feedback.

- Bruce

-----Original Message-----
From: (b) (6)
riday, November 12, 1999 5:00 PM
To: Bruce Ivins (E-mail)
Subject: Agreement for Anthrax meeting

> Bruce, attached is a proposal for ASM to manage the Anthrax meeting. Let
> me know what you think. Have a great weekend.
>
> <<anthraxtemplate.doc>>
>
> (b) (6)
> Meetings Manager
> American Society for Microbiology
> phone: (b) (6)
> fax: (b) (6)
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Guinea pig sera
Date: Friday, January 21, 2000 3:10:51 PM

(b) (6) Here's what we have (I think). Keep in mind that some of the guinea pig sera is old and may have suffered "freezer burn" (lyophilization):

Experiment	Vaccine	Doses	Bleed	Numbers	Location
106	AVA	0 wk	6 wk	13R-24R	LA
1989G.055	AVA	0 wk	8 wk	21R-40R	LA
1989C.047	AVA	0,2,4 wk	8 wk	6R-10R	B3 office
	Alhydrogel + Sterne PA (280 micrograms)	0,2,4 wk	8 wk	1R-5R	B3 office
AVA lot testing	Lot 18 - 21 AUG 88	0,2,4 wk	8 wk	1L-20L	?
	Lot 18 - Nov 88	"	"	1R-20R	?
	Lot 19 - 20 Nov 87	"	"	21L-40L	?
	Lot 13 - 8 AUG 81	"	"	21R-40R	?
	Lot 16 - 16 FEB 85	"	"	41L-55L	?
	British vaccine	"	"	41R-50R	?
133	Alhydrogel + Diethanolamine rPA	0,4 wk	10 wk	1L-20L	?
	Alhydrogel + Ammonium acetate rPA	0.4 wk	10 wk	1R-20R	?
134	Alhydrogel + Ammonium acetate rPA	0,4 wk	10 wk	1L-20L	?
135	Alhydrogel + V770-NP1-R PA	0,4 wk	10 wk	1L-60L	?
136	Alhydrogel + Ammonium acetate rPA	0,4 wk	10 wk	1L-12L	?

Let (b) (6) and me know which ones you are interested in and how many total. These are individual sera, and we could just send tubes without pooling. Keep in mind that there may be some tubes missing.

- Bruce

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: RE: Agreement for Anthrax meeting
Date: Wednesday, November 17, 1999 10:10:01 AM

Hi, (b) (6) I've forwarded your message up front. The agreement looks good to me and others. COL (b) (6) needs to find out who will sign the agreement. It might not be a bad idea to have you and some of us sit down to talk about more specifics on the meeting.

Thanks for all of your help so far. I'm certain that it will be a fine meeting. I'll get back in touch with you when I hear more.

- Bruce

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> <<anthraxtemplate.doc>>
>
> (b) (6)
> American Society for Microbiology
> phone: (b) (6)
>

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: RE: Agreement for Anthrax meeting
Date: Monday, November 22, 1999 1:53:15 PM

Hi, (b) (6) Thanks for you help on the HTML codes! I'm trying to set up a date for a meeting between you and those of us working on the 2001 Anthrax meeting. The best dates for us would be December 13, 14, or 15. Other secondary possibilities include December 9, 20, or 21. If any of those dates are particularly good or bad for you, please let me know, then we can get a firm date and time for a meeting. Would you be able to meet up here?

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Thursday, November 18, 1999 10:14 AM
To: 'Ivins Bruce E USAMRIID'
Subject: RE: Agreement for Anthrax meeting

That's a draft, before it gets signed there are a couple of things to discuss. If you think it's time to get together, would you like to set a date in December to do so?

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> From: Ivins Bruce E USAMRIID [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> Sent: Wednesday, November 17, 1999 10:10 AM
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> Sent: Friday, November 12, 1999 5:00 PM
> To: Bruce Ivins (E-mail)
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> > <<anthraxtemplate.doc>>
> >
> > (b) (6)
> > American Society for Microbiology
> > phone: (b) (6)
> >

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: RE: Agreement for Anthrax meeting
Date: Tuesday, November 23, 1999 7:15:20 AM

Hi, (b) (6)
I think the 13th is good. I'd suggest either late morning or early afternoon. That way you'd beat the rush and we could have some lunch up here!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Monday, November 22, 1999 2:01 PM
To: 'Ivins Bruce E USAMRIID'
Subject: RE: Agreement for Anthrax meeting

Any of them are fine, and I think it would be much easier to get one of me there rather than all of you here! Let's plan on Monday 12/13, and confirm later for times. Thanks, Bruce.

> -----Original Message-----
> From: Ivins Bruce E USAMRIID [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
> Sent: Monday, November 22, 1999 1:53 PM
> To: (b) (6)
> Subject: RE: Agreement for Anthrax meeting
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> >
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> > From: (b) (6)
[redacted] Sent: Friday, November 12, 1999 5:00 PM
> > To: Bruce Ivins (E-mail)
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> > > (b) (6)
[redacted]
> > > American Society for Microbiology
> > > phone: (b) (6)
[redacted]
> > >

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: RE: Anthrax, mice, and CpG
Date: Friday, November 19, 1999 3:14:15 PM

You are correct, (b) (6) We are going into guinea pigs next, and we most certainly will when we finally get some funds. Right now, we don't have enough money to pay for housing the animals, much less for purchasing them. Just as soon as they release some money for this fiscal year, we will order the animals. I'll then contact you about getting the oligos. As I have calculated the needs should be as follows:

Non-CpG oligonucleotides (control) - 2.2 ml, at 100 micrograms per ml
CpG oligonucleotides - 12 ml, at 100 micrograms per ml.

The groups include: 1) non-CpG control; 2) CpG 6 days before challenge; 3) CpG 10 days before challenge; 4) vaccine (2 doses - 0 and 4 weeks); 5) vaccine + CpG (2 doses - 0 and 4 weeks); 6) vaccine (2 doses - 0 and 4 weeks), then CpG 6 days before challenge. I think that we should come up with data which will indicate whether (in the guinea pig model), Cpg provides either antigen-specific or non-antigen-specific enhancement of immunity to anthrax. If we get some positive results, I'll write an animal protocol for rhesus monkeys.

Have a fine Thanksgiving,

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Friday, November 19, 1999 11:35 AM
To: 'Ivins Bruce E'
Subject: RE: Anthrax, mice, and CpG

Dear Bruce,

I'm not sure where we stand on the next anthrax experiments. I thought we were moving onto guinea pigs. Are you waiting for me, or vice-versa?
(b) (6)

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From: Ivins Bruce E [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
Sent: Thursday, October 07, 1999 8:40 AM
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within a few weeks and we can get started then. I'll let you know. I'm sure
that mice are an excellent animal model for a number of diseases, but
anthrax isn't one of them.

- Bruce

From: Ivins Bruce E USAMRIID
To: (b) (6)
Subject: RE: CpG and guinea pigs
Date: Tuesday, December 21, 1999 3:11:25 PM

Hi, (b) (6)
There are 16 guinea pigs per group, 96 animals total. Thanks for making a bit more than needed. Please let me know when I should come and pick them up. Have a great holiday season and a Y2K filled with joy and success (but no glitches).

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, December 21, 1999 9:52 AM
To: 'Ivins Bruce E USAMRIID'
Subject: RE: CpG and guinea pigs

Dear Bruce,

My apologies for the tardy response. Things here have been hectic. I'll be ordering your oligos this week. No fear, they'll be ready in early January. How many animal do you have per group? I was actually a bit surprised you only need 1.2 mg of oligo. I'll make more than that, so we can be on the safe side.

Hope the Holiday season is a merry one. All the best,
(b) (6)

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I'm quite excited about the experiment. This model should be a better anthrax model than the mouse.

Happy Holidays!

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Titers for B97-05 sera
Date: Friday, January 28, 2000 2:33:35 PM
Attachments: JB992402.xls

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>
> Thanks!
>
> - Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: (b) (6) s Contract
Date: Wednesday, February 02, 2000 3:47:44 PM

Hi, (b) (6) I think I told you that when (b) (6) contract is up (I believe it's up sometime between the 12th and the 15th of July) I would like to get (b) (6) a 10% raise. Can you tell me what I need to do in order to get (b) (6) the raise? How much more money do I need to add to the contract? (I think (b) (6) present contract cost us $34,720.00.) What do I need to do at this end to get (b) (6) he raise besides adding more money? Do I need to change the contract to get more money taken out each pay period?

If we could talk about this to get it straightened out, I would appreciate it.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: CRM Contract with (b) (6)
Date: Thursday, February 03, 2000 9:06:57 AM

Hi, (b) (6) This correspondence is in reference to (b) (6) my contract technician since 15 July, 1999, with Clinical research Management, Delivery Order 0004, DAMD 17-98-D-0026.

Since (b) (6) began working with us last year (b) (6) has gained valuable experience in my laboratoary and is currently performing quite well as a technician. We wish to compensate (b) (6) for (b) (6) abilities in the lab and make certain that we retain (b) (6), since the job (b) (6) holds requires vaccination against a number of diseases, and the vaccination process takes several months to accomplish. Thus, we wish to raise (b) (6) salary by 10%. This would also bring (b) (6) salary up closer to that which is being made by individuals holding similar positions at other nearby research facilities.

I talked with (b) (6) at Clinical Research Management (b) (6)) this morning, and (b) (6) asked me to "get the ball rolling" on this by contacting you. Whatever else I need to do on this please let me know. (b) (6) said that you would contact (b) (6) on the matter.

Thanks, (b) (6) for your help.

- Bruce Ivins
USAMRIID Bacteriology Division
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: VERY HOT ITEM FROM MG PARKER: FW: Topics of possible assistance
Date: Wednesday, February 09, 2000 3:15:53 PM
Importance: High
Sensitivity: Private

-----Original Message-----
From: (b) (6)
Sent: Wednesday, February 09, 2000 1:04 PM
To: (b) (6); (b) (6)
(b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)
Subject: VERY HOT ITEM FROM MG PARKER: FW: Topics of possible assistance
Importance: High
Sensitivity: Private

I just received a call from MG Parker regarding this action and the need for a very rapid response to the requests that are enunciated by (b) (6) from BioPort. I will have a follow on message to suggest that we get as many of us together before COB today and strategize this. Others are welcome to attend. I will hold it in (b) (6) office. Right now I have a briefing to do.

Please call (b) (6) to indicate if you will be available around 1600 hrs today .

(b) (6)

-----Original Message-----
From: Parker, John S MG USAMRMC
Sent: Wednesday, February 09, 2000 12:49 PM
To: (b) (6)
Subject: FW: Topics of possible assistance
Importance: High
Sensitivity: Private

(b) (6) need this worked ASAP. John

-----Original Message-----
From: (b) (6)
Sent: Tuesday, February 01, 2000 9:02 PM
To: 'Parker, John S MG USAMRMC'; (b) (6)
Cc: (b) (6)
Subject: RE: Topics of possible assistance

O.K. Will stand by for further word.
(b) (6)
-----Original Message-----

From: Parker, John S MG USAMRMC (b) (6)
Sent: Tuesday, February 01, 2000 7:45 PM
To: (b) (6)
Cc: (b) (6)
Subject: RE: Topics of possible assistance

(b) (6) I will get back to you. I am staffing these possibilities with my laboratories. John

-----Original Message-----
From: (b) (6)
Sent: Monday, January 24, 2000 10:23 AM
To: john.parker(b) (6)
Cc: (b) (6)
Subject: Topics of possible assistance

MG Parker,

When you visited BioPort recently, you asked that I outline areas where your Command could assist in the furtherance of the AVA Biologics License Application (BLA) approval process and the resolution of issues with doses in inventory made previous to the renovation.
We received a complete Response Letter from FDA on December 29, 1999, have completely reviewed the letter and developed a work plan to address issues raised in the letter. From these activities I have generated the following list of possible participation and facilitation.

1. Evaluation of the final product:
a. Develop and qualify assay to identify the presence of bio-active LF, if any;
b. Serve as a site for inter-laboratory comparison of the present guinea pig potency test;
c. Develop methods for quantitative elution of antigens from aluminum hydroxide adjuvant and characterization of the eluted antigens;
d. More fully develop and validate a surrogate animal model of efficacy and evaluate new lots and lots in inventory with that model.
2. Validate and transfer to BioPort the Elisa assays for PA, LF and EF antigens.
3. Serve as subject matter experts, providing technical, consultative advice on:
a. Process stream (intermediate fractions) characterization;
b. Final product characterization;
c. Method development and validation of characterization methods;
d. Specifically, utilization and interpretation of SDS-PAGE and Western Blot evaluations of process streams.
4. Prepare, characterize and qualify reagents to be utilized in evaluation of the AVA manufacturing process and final AVA product.
5. Develop and qualify an AVA reference vaccine.
6. Develop and validate a n alternative potency test that is more reproducible and correlative of results found with the rabbit and primate vaccination /challenge studies.

Parts of items 1-4 can have a positive impact on the BLA approval process. Items 5 and 6 are probably future activities. There are also areas of infrastructure support that could be considered such as assistance in corporate safety programming, regulatory affairs and improved coordination of adverse event investigation, documentation and compliance.
Perhaps our respective staffs could meet soon to determine areas where assistance would be provided and to develop joint objectives and work plans in the selected areas.

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) [redacted]
Subject: FW: VERY HOT ITEM FROM MG PARKER: FW: Topics of possible assistance
Date: Wednesday, February 09, 2000 2:37:59 PM
Importance: High
Sensitivity: Private

Hi, (b) (6) I told you that General Parker wants us to solve Bio-Port's problems with AVA. Below is the list. UGH!! We are having a meeting today starting at 4 pm in the Commander's office. Oh, well, maybe they'll order pizza if the meeting goes on for awhile. :)

- Bruce

Subject: Topics of possible assistance

MG Parker,

When you visited BioPort recently, you asked that I outline areas where your Command could assist in the furtherance of the AVA Biologics License Application (BLA) approval process and the resolution of issues with doses in inventory made previous to the renovation.
We received a complete Response Letter from FDA on December 29, 1999, have completely reviewed the letter and developed a work plan to address issues raised in the letter. From these activities I have generated the following list of possible participation and facilitation.

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c. Develop methods for quantitative elution of antigens from aluminum hydroxide adjuvant and characterization of the eluted antigens;
d. More fully develop and validate a surrogate animal model of efficacy and evaluate new lots and lots in inventory with that model.
2. Validate and transfer to BioPort the Elisa assays for PA, LF and EF antigens.
3. Serve as subject matter experts, providing technical, consultative advice on:
a. Process stream (intermediate fractions) characterization;
b. Final product characterization;
c. Method development and validation of characterization methods;
d. Specifically, utilization and interpretation of SDS-PAGE and Western Blot evaluations of process streams.
4. Prepare, characterize and qualify reagents to be utilized in evaluation of the AVA manufacturing process and final AVA product.
5. Develop and qualify an AVA reference vaccine.
6. Develop and validate a n alternative potency test that is more

reproducible and correlative of results found with the rabbit and primate vaccination /challenge studies.

Parts of items 1-4 can have a positive impact on the BLA approval process. Items 5 and 6 are probably future activities. There are also areas of infrastructure support that could be considered such as assistance in corporate safety programming, regulatory affairs and improved coordination of adverse event investigation, documentation and compliance.
Perhaps our respective staffs could meet soon to determine areas where assistance would be provided and to develop joint objectives and work plans in the selected areas.

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Rabbit animal protocol-potency test and meeting
Date: Friday, February 11, 2000 9:17:06 AM
Attachments: Rabbit protocol-rPA potency01.doc

(b) (6)

Here is (b) (6) animal protocol for potency testing/efficacy testing and finding a surrogate marker of immunity. Please let us know after you read this what would be a good time to meet on it.

Thanks.

- Bruce

>-----Original Message-----
>From: (b) (6)
>Sent: Thursday, January 06, 2000 2:03 PM
>To: Ivins Bruce E Dr USAMRIID; (b) (6)
>Subject: Rabbit animal protocol-potency test
>
>
>
>
>Attached is the final version of the animal protocol
>for the potency assay & efficacy study of rPA.

From: Ivins, Bruce E Dr USAMRIID
To: [redacted]
Subject: RE: "UFRs"
Date: Friday, February 11, 2000 8:38:18 AM
Attachments: Unfunded Requirement for FY00.doc

Here it is, [redacted]. If you need more experimental detail, I can give it to you. The investigators involved would basically be [redacted] and myself. [redacted] (phagocytosis and molecular biology studies), [redacted] (aerosol challenge studies) and a veterinary pathologist would also be involved.

- Bruce

>-----Original Message-----
>From: [redacted]
>Sent: Friday, February 11, 2000 8:27 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: "UFRs"
>
>Bruce,
>
>Sounds fine - write 'er up. Use the short "blurby" format found in the attachments that I sent you. I did get a clarification from [redacted] - the $$ requested CAN'T be used for equipment.
>
> [redacted]
>
> ---------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Thursday, February 10, 2000 3:22 PM
> To: [redacted]
> Subject: RE: "UFRs"
>
> [redacted]
> I want to submit a UFR for doing some research on "atypical" (exceptionally virulent) strains of B. anthracis. Basically it would be looking at the strains from several perspectives (molecular, physiological, immunological, pathogenic, etc.) It would involve several of the anthrax researchers in the division. Any assistance you can provide would be great.
>
> Thanks!
>
> - Bruce
>
>
>
> -----Original Message-----
> From: [redacted]
> Sent: Thursday, February 10, 2000 8:35 AM
> To: [redacted] Ivins, Bruce E Dr USAMRIID; [redacted]
> Cc: [redacted]
> Subject: "UFRs"
>
> Folks:

>
> (b) (6) has indicated to us that supplemental $$ may be available for Unfunded Requirements (UFRs). This may amount to potentially several million $$ to be distributed among all the bio and chem defense labs. (b) (6) thought that this might be a good time to submit new UFRs from the respective Divisions. I've attached a guidance sheet which outlines the identification of a task as a "UFR". If you decide that you have a UFR which applies directly to ongoing research projects in your lab (current year expenditures), please submit a short write-up to me by 16 Feb. Use a format similar to the ones that are presented in the FY 99 UFR list, which I've also attached. After a review by (b) (6) and myself, I'll consolidate and forward them to (b) (6) A major (and rather puzzling) restriction is that the requested $$ CANNOT be used for purchasing equipment (just supplies), but as you'll see in the FY 99 list, there are several pieces of equipment specified. I'm trying to resolve this conflict with (b) (6), and will get back to you all, once I have an answer. For now, assume that equipment purchases are o.k. (if the work can't be accomplished w/o them). If you have any questions, please give me a shout or stop by. TNX. (b)
>
> << File: UFRGuidFY00.doc >> << File: UFR's '99 >>
>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: MPL-AF
Date: Wednesday, February 16, 2000 3:43:01 PM

Sure, (b) (6)! Yes, I did!
- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, February 16, 2000 3:35 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: MPL-AF
>
>Bruce,
>
>My F1-V protocol has finally completed the circuit and I am ready to actually get some real work done. I'm in the process of ordering some mice - once those come in I'll be needing the MPL-AF to mix with the F1-V. For the first dose I'll need about 700 microliters of the stuff - should I just call you a day or so beforehand and come by and get it?
>
>Thanks!
>
>BTW, did you enjoy the Anthrax-no digests I sent you? Interesting to know what we're up against.
>
>(b) (6)
>
(b) (6)

>(b) (6)
>U.S. Army Medical Research Institute of Infectious Disease
>1425 Porter St. Ft. Detrick
>Frederick, MD 21702-5011
(b) (6)

>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Draft DTO
Date: Monday, February 21, 2000 10:22:24 AM
Attachments: DRAFT DTO.doc

(b) (6)

Here is a draft DTO for anthrax that you requested.

Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Contract
Date: Wednesday, February 23, 2000 12:12:49 PM

If we intend to have an international anthrax conference in 2001, the contract needs to be signed!! (b) (6) I believe that you have the contract. Can we please get this taken care of before the whole thing falls through, and we owe the ASM for a conference that they worked on?

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, February 23, 2000 10:41 AM
To: (b) (6)
Cc: Bruce Ivins (E-mail)
Subject: RE: Contract

(b) (6) I can't sign it until the Army comes to a final agreement with ASM. Would you please extend that deadline another six weeks? I know its a lot to ask, but the agreement must make its way up the ranks at Ft. Detrick.

I am copying our contact there, Bruce Ivins, to let him know that you are awaiting word. Thanks for your patience.

> -----Original Message-----
> From (b) (6)
> Sent: Wednesday, February 23, 2000 9:55 AM
> To: (b) (6)
> Subject: Contract
>
>
>
> Hi (b) (6), just a reminder that we were expecting the contract by February
> 18
> If you would please sign and return by Friday, I would appreciate it
> greatly...any questions, please advise. We look forward to hosting your
> group
> . Best wishes,

(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Contract
Date: Wednesday, February 23, 2000 12:26:17 PM

Sure, (b) (6) I'm sorry that it's taken so long. I'll keep on (b) (6) to get it signed. If (b) (6) misplaced it, I'll let you know and you can send us (FAX or email) a new copy.

Thanks again,

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, February 23, 2000 12:08 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Contract

Thanks, Bruce!

> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID (b) (6)
> Sent: Wednesday, February 23, 2000 12:13 PM
> To: (b) (6)
> Subject: FW: Contract
>
> If we intend to have an international anthrax conference in 2001, the
> contract needs to be signed!! (b) (6) I believe that you have the contract.
> Can
> we please get this taken care of before the whole thing falls through, and
> we owe the ASM for a conference that they worked on?
>
> - Bruce
>
>
>
> -----Original Message-----
> From: (b) (6)
> Sent: Wednesday, February 23, 2000 10:41 AM
> To: (b) (6)
> Cc: Bruce Ivins (E-mail)
> Subject: RE: Contract
>
>
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> Would you please extend that deadline another six weeks? I know its a lot
> to ask, but the agreement must make its way up the ranks at Ft. Detrick.
>
> I am copying our contact there, Bruce Ivins, to let him know that you are
> awaiting word. Thanks for your patience.
>
> > -----Original Message-----
> > From: (b) (6)
> Wednesday, February 23, 2000 9:55 AM
> > To: (b) (6)

> > Subject: Contract
> >
> >
> >
> > Hi (b) ust a reminder that we were expecting the contract by February
> > 18(6)
> > If you would please sign and return by Friday, I would appreciate it
> > greatly...any questions, please advise. We look forward to hosting
> your
> > group
> > . Best wishes,
> >
(b) (6)
> >

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: multiagent vaccine study
Date: Monday, February 28, 2000 8:13:33 AM

We have space in B3 for the guinea pigs at any time.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Thursday, February 24, 2000 12:53 PM
>To: (b) (6); Ivins, Bruce E Dr USAMRIID; (b) (6)
>Subject: multiagent vaccine study
>
>We are ready to schedule the multiagent vaccine study. There are two experiments that need to be scheduled.
>
>Experiment 1 - prime boost study for Ebola and anthrax
> We would like to start this experiment as soon as possible. There are 9 groups of 6 guinea pigs (54 total) that will need to be challenged with Ebola 8-12 (most likely 12) weeks after beginning vaccination. There are 6 groups of 6 guinea pigs (36 total) that will need to be challenged with anthrax.
>
>Experiment 2 - DNA multiagent vaccine for Ebola, Marburg, anthrax, and VEE
> We would like to start this experiment 2-4 weeks after beginning the first experiment. I realize that the challenge portion of the first experiment will need to be complete to allow for suite space for the challenge of the animals in this second experiment. Challenges needed are as follows:
> 1. Ebola - 3 groups of 6 (18 total)
> 2. Marburg - 3 groups of 6 (18 total)
> 3. anthrax - 4 groups of 6 (24 total)
> 4. VEE - 4 groups of 6 (24 total)
>
>(b) (6) the critical thing I need to know from you is when you can accomidate suite space for the Ebola and Marburg challenges.
>
>Dr. Ivins, the critical thing I need to know from you is when you can accomidate suite space for the anthrax challenges.
>
>The availability of the suites needs to be at the same time.
>
>I want to thank you in advance for your cooperation. I know that these are large studies and require a large amount of space. If you need anything form me, please let me know. I appreciate your efforts.
>
>Best regards,
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: multiagent vaccine study
Date: Wednesday, March 01, 2000 10:43:41 AM

(b)
(6) s all prepared to do the ELISA assays, and (b) has done them previously. My suggestion - to make it easier for you - would be to have (b) (6) group do these. Why not contact (b) (6) and ask (b) (6)

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, March 01, 2000 10:37 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: multiagent vaccine study
>
>Dear Bruce,
> I have some answers for your questions below. They are as follows:
>
>1. We don't have the dates yet. I just got with (b) (6) yesterday and (b) (6) said that we can start immediately. I am ordering the Hartley animals today. I hope to start within the next 2 weeks. The prime boost will be started first and we will start the second experiment 2 weeks later.
>
>2. Experiment 1 is all gene gun except the AVA and TC83 control.
>
>3. Group 6 is the liscensed AVA vaccine. I have been assuming that you have some of this. I apologize for not asking earlier, there has been a lot to coordinate on this. If you have a better idea for a control for this, we are open to it.
>
>4. We are planning to keep all animals will be on the cold side for all vaccinations.
>
>5. I have spoken with VET MED numerous times to coordinate this with them. I have sopken with (b) (6). I have worked with (b) (6) techs) numerous times. They will be the primary assistance form VET MED on this.
>
>6. I can do these if you wish and was planning to do so. I will need some antigen for the ELISA's (the more I type here the more I realize that there are several reagents I will need for you to provide, I apologize for not clearing this with you earlier. this study has been a logistical nightmare!). If you prefer (b) (6) do these assays, that is fine with me also.
>----------
>1. Yes 30 total and 6 negative controls.
>
>2. see above.
>
>Thanks for all your efforts on this. You have helped a great deal. I appreciate your questions as they have helped me be better prepared.
>
>Best regards,
(b)
(6)
> ---------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Wednesday, March 1, 2000 10:16 AM
> To: (b) (6)
> Subject: RE: multiagent vaccine study
>

> Dear (b
>)Questions about the study (Experiment 1) with respect to anthrax :
> 1. Do you have the dates of immunization and challenge yet?
> 2. For group 4, do these critters only get DNA vaccine by gene gun (no other anthrax vaccines)?
> 3. For group 6, I presume that these animals get only the licensed human anthrax vaccine?
> 4. Are these animals going to be "cold" until challenge?
> 5. Have the Vet Med personnel who will bleed these animals been identified and contacted?
> 6. Who will be doing the anthrax anti-PA ELISAs? (b) (6)
>
> Questions about Experiment 2 with respect to anthrax:
> 1. It looks like a total of 30 animals will be vaccinated for anthrax. Correct?
> 2. See questions 4-6 above.
>
> General comments: It would be easiest if these animals could stay "cold" until challenge. We have plenty of space in B-3 for them, and we have licensed anthrax vaccine, PA, Ribi adjuvant, and aluminum hydroxide.
>
> - Bruce
>
> -----Original Message-----
> From: (b) (6)
> Sent: Thursday, February 24, 2000 12:53 PM
> To: (b) (6) Ivins, Bruce E Dr (b) (6)
> Subject: multiagent vaccine study
>
> We are ready to schedule the multiagent vaccine study. There are two experiments that need to be scheduled.
>
> Experiment 1 - prime boost study for Ebola and anthrax
> We would like to start this experiment as soon as possible. There are 9 groups of 6 guinea pigs (54 total) that will need to be challenged with Ebola 8-12 (most likely 12) weeks after beginning vaccination. There are 6 groups of 6 guinea pigs (36 total) that will need to be challenged with anthrax.
>
> Experiment 2 - DNA multiagent vaccine for Ebola, Marburg, anthrax, and VEE
> We would like to start this experiment 2-4 weeks after beginning the first experiment. I realize that the challenge portion of the first experiment will need to be complete to allow for suite space for the challenge of the animals in this second experiment. Challenges needed are as follows:
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>
> (b) (6) the critical thing I need to know from you is when you can accomidate suite space for the Ebola and Marburg challenges.
>
> Dr. Ivins, the critical thing I need to know from you is when you can accomidate suite space for the anthrax challenges.
>
> The availability of the suites needs to be at the same time.
>
> I want to thank you in advance for your cooperation. I know that these are large studies and require a large amount of space. If you need anything form me, please let me know. I appreciate your efforts.
>
> Best regards,

> (b) (6)
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Contract
Date: Monday, March 06, 2000 3:57:33 PM
Attachments: anthraxtemplate.doc

Here it is, (b) (6) Thanks!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, February 23, 2000 12:31 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Contract

I've attached it just in case.

<<anthraxtemplate.doc>>

> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID [SMTP:Bruce.Ivins(b) (6)
> Sent: Wednesday, February 23, 2000 12:26 PM
> To: (b) (6)
> Subject: RE: Contract
>
> Sure, (b) (6) I'm sorry that it's taken so long. I'll keep on (b) (6) o get it
> signed. If (b) (6) misplaced it, I'll let you know and you can send us (FAX
> or (6)
> email) a new copy.
>
> Thanks again,
>
> - Bruce
>
> -----Original Message-----
> From (b) (6)
> Sent: Wednesday, February 23, 2000 12:08 PM
> To: 'Ivins, Bruce E Dr USAMRIID'
> Subject: RE: Contract
>
>
> Thanks, Bruce!
>
> > -----Original Message-----
> > From: Ivins, Bruce E Dr USAMRIID
> [SMTP:Bruce.Ivins(b) (6)
> > Sent: Wednesday, February 23, 2000 12:13 PM
> > To: (b) (6)
> > Cc: '(b) (6)
> > Subject: FW: Contract
> >
> > If we intend to have an international anthrax conference in 2001, the
> > contract needs to be signed!! (b) (6), I believe that you have the contract.
> > Can
> > we please get this taken care of before the whole thing falls through,

> and
> > we owe the ASM for a conference that they worked on?
> >
> > - Bruce
> >
> >
> >
> > -----Original Message-----
> > From: (b) (6)
> > Sent: Wednesday, February 23, 2000 10:41 AM
> > To: (b) (6)
> > Cc: Bruce Ivins (E-mail)
> > Subject: RE: Contract
> >
> >
> > (b) (6) I can't sign it until the Army comes to a final agreement with
> ASM
> > Would you please extend that deadline another six weeks? I know its a
> lot
> > to ask, but the agreement must make its way up the ranks at Ft. Detrick.
> >
> > I am copying our contact there, Bruce Ivins, to let him know that you
> are
> > awaiting word. Thanks for your patience.
> >
> > > -----Original Message-----
> > > From: (b) (6)
> > > Sent: Wednesday, February 23, 2000 9:55 AM
> > > To: (b) (6)
> > > Subject: Contract
> > >
> > >
> > >
> > > H (b) (6) just a reminder that we were expecting the contract by
> February
> > > 18...
> > > If you would please sign and return by Friday, I would appreciate it
> > > greatly...any questions, please advise. We look forward to hosting
> > your
> > > group
> > > . Best wishes,
> > >
> > > (b) (6)
> > >

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Policy question
Date: Monday, March 06, 2000 11:10:37 AM

Hi, (b) (6) So nice to hear from you, but shame on you for getting (b) (6) "in a family way!" (Just kidding, of course.) Here at USAMRIID, pregnant women are not allowed in biocontainment suites, at least the BL-3 suites where they work with B. anthracis. Talk to you later!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Monday, March 06, 2000 8:53 AM
To: 'Bruce.Ivins@(b) (6)
Subject: Policy question

Dear Bruce,

Hi! I think you know I am doing this spell at CDC helping (I hope) them to retrieve lost low-tech anthrax skills.I believe (b) (6) conveyed my good wishes 10 days ago in DC.

Can you tell me whether there is a policy in place in USAMRIID regarding pregnant women working with B. anthracis? This is assuming that, at the time they learn they are pregnant, their vaccination status is OK.

Despite "retirement" from (b) (6), I have a string of papers/chapter demands hanging round my neck. Working on these I constantly marvel at how productive you have been over the 16 years (I think) I have known you. Citations of your work always constitute great strings in my references. (b) (6) have done extremely well also, of course. It seems to remain a great team up there.

Enough flattery, I must get back to work!

Usual best wishes,

(b) (6)

From: Ivins, Bruce E Dr USAMRIID
Sent: Tuesday, March 07, 2000 3:24 PM
To: (b) (6) SAMRIID; (b) (6) USAMRIID
Subject: (b) (6)

Hi, (b) (6)
Here are the email address and telephone for (b) (6) t the American Society For Microbiology.

(b) (6)

(b) (6)

- Bruce

From: Ivins, Bruce E Dr USAMRIID
Sent: Tuesday, March 07, 2000 8:59 AM
To: (b) (6)
Subject: RE: Policy question

Hi, (b) (6) would be the person to contact. He is the safety person here. 301/(b) (6) s his phone number here. My best to (b) (6) (b) (6)

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Monday, March 06, 2000 5:22 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Policy question

Thank you, Bruce. Who would be the official person to respond to my question?
(b) (6)

who is the person in USAMRIID to direct the query to officially?

Have a good evening.

(b) (6)

> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID [SMTP:Bruce.Ivins (b) (6) (
> Sent: Monday, March 06, 2000 11:11 AM
> To: (b) (6)
> Subject: RE: Policy question
>
> Hi, (b) (6) So nice to hear from you, (b) (6) ere at
> USAMRIID, pregnant women are not allowed in biocontainment suites, at
> least the BL-3 suites where they work with B. anthracis. Talk to you later!
>
> - Bruce
>
> -----Original Message-----
> From: (b) (6)

> Sent: Monday, March 06, 2000 8:53 AM
> To: 'Bruce.Ivins@DET.AMEDD.ARMY.MIL'
> Subject: Policy question
>
>
> Dear Bruce,
>
> Hi! I think you know I am doing this spell at (b) (6)
> them to retrieve lost low-tech anthrax skills.I believe (b) (6)
> conveyed my good wishes (b) (6) in DC.
>
> Can you tell me whether there is a policy in place in USAMRIID
> regarding pregnant women working with B. anthracis? This is assuming
> that, at the time they learn they are pregnant, their vaccination status is
OK.
>
>(b) (6)
>
> Enough flattery, I must get back to work!
>
> Usual best wishes,
>
>(b) (6)

From: Ivins, Bruce E Dr USAMRIID
Sent: Tuesday, March 07, 2000 9:13 AM
To: [redacted] USAMRIID
Subject: RE: Rabbit Bleed

Dearest Colleague,

Have you checked with the STO manager as to the acceptability of this change in procedure? If not, I suggest that you immediately schedule an appointment and prepare to perform numerous experiments to demonstrate that the change in bleeding dates will have no effect on the response to the anthrax vaccine, the response to challenge, or the response of natives in Borneo to increased rainfall.

- Your buddy,
Bruceman - hey! big man! hey! Is [redacted] back there?

>-----Original Message-----
>From: [redacted] USAMRIID
>Sent: Tuesday, March 07, 2000 7:24 AM
>To: [redacted] USAMRIID; Ivins, Bruce E Dr USAMRIID
>Cc: [redacted] USAMRIID
>Subject: Rabbit Bleed
>
>[redacted]
> I was looking at the schedule for B00-03 and noticed that you have bleeds scheduled for the same day as challenges. I suggest that you move these bleed to 30 and 31 March. The rabbits are put in the plethismograth prior to challenge so that the inhaled spore dose can be calculated. The rabbits need to be awake for this procedure. Bruce, [redacted] and I can help with the bleeds those days if necessary.
>
[redacted]

From: Ivins, Bruce E Dr USAMRIID
Sent: Wednesday, March 08, 2000 7:21 AM
To: (b) (6) USAMRIID
Subject: FW: URL for conference form

Importance: High

Hi, (b) (6)

I got a call from (b) (6) ate yesterday afternoon. S(b) (6) aid that the ASM is not really asking for an amount of money. The ASM is looking for a contractual guarantee that the Army will "share the risk" for the meeting. She again stated that they are not asking for a grant of money.

If the Army insists that the BAA application form be filled out, (b) (6) said tha(b) (6) will need some help from us filling out certain parts of it, since some of the information being requested (b) (6) oesn't know.

Finally, (b) (6) emphasized the need for quick action, since the hotel where we want to hold certain functions needs to get a committment in writing, or they can't reserve it for us.

Please call (b) (6) as soon as you can today. It's really important that this get taken care of as soon as possible. I'm sorry this sat for so long before being dumped on you. Whatever I can do to help the process along, I will gladly do.

Thanks!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, March 07, 2000 4:31 PM
To: Bruce Ivins (E-mail)
Subject: URL for conference form

http://www-usamraa.army.mil/

(b) (6)
(b) (6)
American Society for Microbiology
1752 N Street NW
Washington, DC 20036
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
Sent: Wednesday, March 08, 2000 10:30 AM
To: (b) (6) USAMRIID
Cc: (b) (6) USAMRIID; (b) (6) USAMRIID; (b) (6) (b) (6)
Subject: PBS

Hi, (b) (6)

Here's the information:

Avant PA and MARP PA was diluted in Avant buffer or Dulbecco's PBS to 0.2 mg/ml. The Abosrbance at 280 was read and determined to be 0.2, indicating that the concentrations provided us were correct (Avant PA = 2.5 mg/ml; MARP PA = 1.18 mg/ml). Alhydrogel was added to each tube to an aluminum concentration of 0.5 mg/0.5 ml (the desired concentratio of aluminum in a 1/2 ml human dose). The tubes were mixed and allowed to sit overnight at 4C. The Alhydrogel was sedimented by centrifugation, and the supernatant absorbance at 280 nm was read.

Results:

	Avant buffer	Dulbecco's PBS
Avant PA	0.109	0.030
MARP PA	0.110	0.028

These data indicate that adsorption of PA was substantially greater in Dulbecco's PBS (no calcium or magnesium) than in the Avant buffer. This is not surprising, in that there is more twice the phosphate in the Avant buffer, and phosphate is known to interfere with binding to Alhydrogel. The Avant and MARP PA products will be mixed with Alhydrogel and Dulbecco's PBS for the first experiment in rabbits to determine which product, if any, we should choose.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
Sent: Wednesday, March 08, 2000 12:50 PM
To: (b) (6)
Subject: RE: ELISA & TNA

Hi (b) (6)

Good to hear from you again. If we keep this correspondence going I must put you on my list of people to send "jokes" that I receive over email!

For (b) (6) email address, try either of the following:

(b) (6)

or

(b) (6)

I am accustomed to looking just at titers as well. However, it was thought by (b) (6) and others, that determining actual concentrations of anti-PA IgG would be more quantitative (therefore, I guess, more accurate and meaningful). There is a tendency by some around here to be rather anal-retentive about scientific experiments. We still do just titers for animals in routine experiments, but for stuff that's going to the FDA, exact concentrations of specific IgG will be determined.

Let me know if you'd like to be sent some of my "Yankee" humor.

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, March 08, 2000 12:05 PM
To: 'Bruce.Ivins(b) (6)
Subject: ELISA & TNA
Importance: High

Dear Bruce,

Good to have you at the other end of the email line.

One last question on that subject - do you know (b) (6) email address?

Change of subject - thanks for your help with that last one.

I send you the extract below in confidence. It is the response from the resident immunologist/serologist to what is needed in order to do the serology and TNA properly for the planned vaccine and primate trials. It through me into confusion! Firstly, I only became aware of this new view that one should be measuring ug/ml of anti-PA IgG rather than titer as I was reading on the plane coming over! But trying to get an explanation from (b) (6) (b) (6) - he was down here for some of the FDA planning meetings a month ago) of how this is done left me wondering in what way it was more precise than titers for measuring antibody response. And this standard serum thing below.

Is he going over the top a bit? I said we had used a running control for our tests, which was serum from a vaccinated individual. If we were running out of that, we ran it in parallel with another vaccinee serum which then became a control. I said we were more interested in changes with time than absolute values. He certainly makes me feel I have been very amateur in my approach to ELISA over these many years. How do you react to this?

> -----Original Message-----
> From: (b) (6)
>
> For the last several days I have been talking to the folks at USAMRIID
> and my staff trying to develop a laboratory plan for testing specimens
> for the human and animal studies.
>
> There is no standard reference serum for doing ELISA or TNA. This is
> amazing to me considering all the work and years of experience that
> has gone into evaluating this vaccine using serologic techniques.
> What would have to be done is have people get vaccinated (standard
> regimen, 0,2,4, 6 months, maybe 12 months) and then plasmaphorese
> them. After screening the plasma (we have always converted to serum
> at this step), pool, purify out the IgG fraction and then affinity
> purify anti-PA IgG. At this point the mass of the anti-PA would have
> to be determined to assign a ug/ml value for the reference. Next an
> independent measure of antibody done by ELISA would have to be run and
> the mass estimate and ELISA estimate would have to be is reasonable
> agreement. After the anti-PA values are assigned the serum needs to
> be lyophilized in small aliquotes and stored for use and distribution.
>
> The USAMRIID folks estimated that we plasmaphorese 20 people at about
> 500 ml per person and hopefully be able to get about 10 liters of
> starting material to purify.
>

From: Ivins, Bruce E Dr USAMRIID
Sent: Thursday, March 09, 2000 11:32 AM
To: [redacted] USAMRIID
Subject: FW: Pregnancy and working in anthrax lab

-----Original Message-----
From: [redacted] USAMRIID
Sent: Thursday, March 09, 2000 7:48 AM
To: [redacted]
Cc: Ivins, Bruce E Dr USAMRIID; [redacted]
Subject: RE: Pregnancy and working in anthrax lab

Hi [redacted]

Regarding the situation of allowing pregnant women to work in a containment laboratory, I submit the following information. During December 1992, I received legal advice from our lawyer representative regarding Pregnant Women in Biocontainmernt Suites. A few salient comments were:

a. The condition of pregnancy does not appear to in any manner prevent a women from performing operations in a BSL-3 and BSL-3a environment.

b. I can conceive of no risks to other USAMRIID personnel or to anyone else that will be present if a pregnant woman works in such a BSL suite. Consequently, no bona fide occupational qualification exists to lawfully prevent pregnant women from working

in a BSL-3 or BSL-3a suite.

Consequently, it was necessary to identify USAMRIID's responsibilities with regard to pregnant women, their unborn fetuses, and other laboratory employees. [redacted] and I discussed this issue in August 1993. It was decided to complete a CONSULTATION SHEET (Standard Form 513) for PREGNANCY AND BIOCONTAINMENT. The CONSULTATION REPORT should include the following:

1. Discuss all apparent and potential risks for the biocontainment suite or laboratory (such as immunizations and laboratory-acquired infections).

2. Explain how USAMRIID has identified the risks (such as the type of procedure [aerosol or animal inoculation], and infection or intoxication incidence).

3. Explain that a decision to limit work in a biocontainment suite or laboratory at a particular stage of pregnancy is justified to insure an effective emergency response, if needed.

4. Acknowledge (by signature or initialing) that the individual has understood this consult and was notified of all apparent and potential risks.

5. DO NOT INCLUDE, OR MAKE REFERENCE TO, A WAIVER OF LIABILITY.

I hope my comments provide you with some information. Let me know if you need more information or more history.
It is a difficult and delicate situation.

Hope to see you again in the near future. Regards, (b) (6)
&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

-----Original Message-----
From: (b) (6)
Sent: Wednesday, March 08, 2000 4:39 PM
To: (b) (6)
Subject: FW: Pregnancy and working in anthrax lab

> -----Original Message-----
> From: (b) (6)
> Sent: Wednesday, March 08, 2000 4:20 PM
> To: (b) (6)
> Subject: Pregnancy and working in anthrax lab
>
> Dear (b) (6)
>
> Bruce Ivins gave me your name and email address. Bruce and I have worked
> collaboratively and competitively (b) (6) I am
> spending (b) (6) endeavoring to help in their (b) (6)
> BT response unit.
>
> The question I was asking was whether USAMRIID had a written policy on
> pregnant women working in the anthrax laboratory. This assumes that, at
> the time they test positive for pregnancy, their vaccination status is OK.
>
> Bruce said pregnant women are not allowed in biocontainment suites, but
> then added that (b) (6) was permitted to continue working in
> a Racal suit.
>
> The problem, I imagine, with coming up with a policy is that the person
> will have been pregnant for several weeks before knowing it and so the
> point at which she can sudenly no longer enter the laboratory is somewhat
> arbitrary.
>
> Has this been discussed and any formula formulated in USAMRIID?
>
> Thank you.
>
> Sincerely,
>
> (b) (6)

From: Ivins, Bruce E Dr USAMRIID
Sent: Thursday, March 09, 2000 11:55 AM
To: [redacted]
Subject: RE: URL for conference form

[redacted] Did [redacted] get back to you yesterday? I sent him an urgent message on what we talked about over the phone. If he didn't please let me know so I can talk to him and really push this from our end. Sorry for all the hassle we've caused you.

- Bruce

-----Original Message-----
From: [redacted]
Sent: Tuesday, March 07, 2000 4:31 PM
To: Bruce Ivins (E-mail)
Subject: URL for conference form

http://www-usamraa.army.mil/

[redacted]
American Society for Microbiology
1752 N Street NW
Washington, DC 20036
[redacted]

From: Ivins, Bruce E Dr USAMRIID
Sent: Friday, March 10, 2000 10:26 AM
To: (b) (6) USAMRIID
Subject: More notebooks

Hi, (b) (6)

We have more notebooks for you. Please either email me or call me at (b) (6) to let me know when we can bring them down. Thanks!

- Bruce

From: Ivins, Bruce E Dr USAMRIID
Sent: Saturday, March 11, 2000 7:14 PM
To: [redacted]
Subject: RE: Reprint

[redacted]

I'll forward this to [redacted] nd have himn send youa copy. Unfortunately, the editors never made all of the corrections that we asked them to make.

- Bruce

-----Original Message-----
From: [redacted]
Sent: Saturday, March 11, 2000 3:52 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Reprint

Guess who, again, Bruce. Disturbing you in your slumbers and stirring you into action again.

I can now confess I reveiwed a manuscript of yours and S[redacted] n 1[redacted] I see I didn't want to make it too easy for you and suggested a number of changes (!) - but I did say it was "an extremely well-researched and fully comprehensive review ... readable .. will be well received and widely read"!

Anyhow, I never saw the finished product. Might I have a reprint (or copy) of it please?

Address: [redacted]

Thanks. When you have executed that commmand, you can go back to sleep in your arm chair there!

[redacted]

From: Ivins, Bruce E Dr USAMRIID
Sent: Monday, March 13, 2000 10:43 AM
To: (b) (6) USAMRIID
Subject: B97-03 necropsies

(b) (6)

Here is what we have for the next several weeks as far as guinea pig necropsies on the B97-03 protocol:

21-24 March (Challenged on 20 March)
11-14 April (Challenged on 10 April)
25-28 April (Challenged on 24 April)

Each strain will have 4 males and 4 females challenged. I don't know how many you want to do of each strain.

- Bruce I.

From: Ivins, Bruce E Dr USAMRIID
Sent: Monday, March 13, 2000 2:10 PM
To: (b) (6)
Subject: FW: Immunoprotective Effects of CpG Oligonucleotides Briefing
Attachments: (b) (6) abstract.doc

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Monday, March 13, 2000 12:50 PM
>To: (b) (6) Ivins, Bruce E Dr USAMRIID
>Subject: FW: Immunoprotective Effects of CpG Oligonucleotides Briefing
>
>
>
>----------
>From: (b) (6) USAMRMC
>Sent: Sunday, March 12, 2000 12:52 PM
>To: (b) (6)
(b)
>Cc: (b) (6)
>Subject: RE: Immunoprotective Effects of CpG Oligonucleotides Briefing
>
>Just another reminder about (b) (6) talk on 20 March. I have attached
an abstract of his work. Everyone is welcome to attend.
>
>Thanks,
(b) (6)
>
>
>
>-----Original Message-----
>From: (b) (6) USAMRMC
>Sent: Tuesday, February 22, 2000 10:17 AM
>To: (b) (6)

(b) (6)

>Cc: (b) (6)

>Subject: Immunoprotective Effects of CpG Oligonucleotides Briefing
>
(b) (6) from the FDA will be visiting Fort Detrick on (b) (6) to brief on the results of studies he's conducted concerning the use of CpG oligos as anti-bioterrorism agents. His briefing will be held at the Dalrymple conference room at RIID. Please consider this message an invitation for you or anyone in your organization who may be interested in attending.
>
>POC for this briefing is (b) (6)
>
>
>Thanks,
>
>(b) (6)
>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: B97-03 necropsies
Date: Tuesday, March 14, 2000 1:59:44 PM

The room will be (b) This in an anthrax only room and you will only need anthrax vaccinations in the suite. I believe that (b) (6) is the person to contact about getting clearance for the suite. Send him an email message and ask him for clearance. Let me know exactly when you want to go into the suite.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Tuesday, March 14, 2000 11:45 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: B97-03 necropsies
>
>The schedule looks ok. (b) (6) and I will need clearance for the room we will be using, can you tell me if you initiate that request to security? We would like to get into the room on Friday or next Monday to see what we should expect to bring with us. As far as numbers, the minimum for most protocols is 3. However, I don't know if that number will change by using male and female (if we expect a sex associated difference in histology). It may be best to address the number question to the statistician, would you like me to do that or would you rather contact him? I will visit with you soon and work out the details. Thanks (b) (6)
>
> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Monday, March 13, 2000 9:43 AM
> To: (b) (6) USAMRIID
> Subject: B97-03 necropsies
>
> (b) (6)
> Here is what we have for the next several weeks as far as guinea pig necropsies on the B97-03 protocol:
> 21-24 March (Challenged on 20 March)
> 11-14 April (Challenged on 10 April)
> 25-28 April (Challenged on 24 April)
>
> Each strain will have 4 males and 4 females challenged. I don't know how many you want to do of each strain.
>
> - Bruce I.
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: PA
Date: Wednesday, March 15, 2000 11:26:15 AM

Hi, (b) (6)
I was really sorry to hear about (b) (6) Would you have some rPA (about 4 mg) I could have for some immunization studies?

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: anthrax vaccination
Date: Wednesday, March 15, 2000 12:03:20 PM

OK. We can supply you with some if you can replace it. Let me know how much you need.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, March 15, 2000 10:54 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: anthrax vaccination
>
>We don't have any. I had thought I asked you for some, but may not have. I would appreciate getting some and I could replace it later.
>
(b)
(6)
>
> ---------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Wednesday, March 15, 2000 10:23 AM
> To: (b) (6) USAMRIID
> Subject: RE: anthrax vaccination
>
> The Ribi adjuvant is much easier to use then Freund's adjuvant. Per bottle, put in 2ml of antigen + diluent (saline or buffer or water). marm to about 37 to 42C and vortex to mix for a couple of minutes. Pull into the syringe and inject. Do you have Ribi adjuvant for the Ebola-Baculo groups?
> - Bruce
>
> -----Original Message-----
> From: (b) (6) USAMRIID
> Sent: Wednesday, March 15, 2000 10:16 AM
> To: Ivins, Bruce E Dr USAMRIID
> Subject: RE: anthrax vaccination
>
> We are going to start at about 8AM and probably go all day. Let me know what time is good for you and we will do those groups then. We are going to use RIBI with the Ebola Baculo groups also and can mix that with RIBI when we start. Is it made into an emulsion like with Freund's?
>
> (b
>)
> ---------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Wednesday, March 15, 2000 9:50 AM
> To: (b) (6) USAMRIID
> Subject: RE: anthrax vaccination
>
> Hi,(b)
> (6)We can bring the PA-Alhydrogel and PA-Ribi to the guinea pig room and vaccinate them on Friday, March 24. We canb also bring saline for the control guinea pigs. Let us know what time you would like us there.
> - Bruce
>
> ----Original Message-----
> From: (b) (6) USAMRIID
> Sent: Wednesday, March 15, 2000 9:35 AM

> To: Ivins, Bruce E Dr USAMRIID
> Subject: anthrax vaccination
>
> Dr. Ivins,
> Next Friday, March 24, we are going to begin the study outlined below. We will need the bacillus PA with alum and RIBI adjuvant, and we will need some RIBI adjuvant for the Ebola groups also. I would like to know if you would you like to help us vaccinate and when I can get some of the reagents needed (you can just bring them with you if you are going to help vacciante)? We will be doing all the vaccinating in AR2.
>
> Thanks,
> (b
>)
>
>
> Group vaccine #guinea pigs Boost (2 times) schedule
>
> 1 EBO GP DNA 6 EBO GP DNA 0, 4, (8)
> 2 EBO GP DNA 6 Baculo EBO GP 0, 4, (8)
> 3 EBO GP+NP DNA 6 EBO GP+NP DNA 0, 4, (8)
> 4 EBO GP+NP DNA 6 Baculo EBO GP+NP 0, 4, (8)
> 5 Baculo EBO GP 6 Baculo EBO GP 0, 4, (8)
> 6 Baculo EBO GP+NP 6 Baculo EBO GP+NP 0, 4, (8)
> 7 EBO GP DNA 6 Vaccinia EBO GP 0, 4, (8)
> 8 Vaccinia EBO GP 6 Vaccinia EBO GP 0, 4, (8)
> 9 anthrax PA DNA 6 anthrax PA DNA 0, 4, (8)
> 10 anthrax PA DNA 6 bacillus PA-AlOH3 0, 4, (8)
> 11 anthrax PA DNA 6 bacillus PA-RIBI 0, 4, (8)
> 12 bacillus PA-RIBI 6 bacillus PA-RIBI 0, 4, (8)
> 13 bacillus PA-AlOH3 6 bacillus PA-AlOH3 0, 4, (8)
> 14 no vaccine (-control) 12 NA 0
> Total guinea pigs 90
>
>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Research Plan
Date: Wednesday, March 15, 2000 10:40:18 AM
Attachments: Research Plan - CpG.doc

(b) (6)

Here is the Research Plan.

-Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: CpG and guinea pigs
Date: Thursday, March 16, 2000 8:37:44 AM

Hi (b) (6)

We are currently in the middle of our experiment testing the ability of the CpG oligos to stimulate specific or non-antigen-specific protection against intramuscular anthrax spore challenge in guinea pigs. We currently have no data but here are the groups:

1) These guinea pigs will receive i.m. in the right and left rear thighs 0.05 ml (100 micrograms total) of non-CpG oligonucleotides 6 days before i.m. challenge in the right rear thigh with 100 LD50 of B. anthracis Ames spores. These animals will be the negative controls.

2) These guinea pigs will receive i.m. 100 micrograms (administered as above) of of CpG oligonucleotides 6 days before challenge.

3) These guinea pigs will receive i.m. 100 micrograms (administered as above) of of CpG oligonucleotides 10 days before challenge.

4) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine in both the right and left rear thighs at 0 and 4 weeks. At 10 weeks, they will be challenged as above.

5) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine + 0.05 ml of CpG oligos in both the right and left rear thighs at 0 and 4 weeks. At 10 weeks, they will be challenged as above.

6) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine in both the right and left rear thighs at 0 and 4 weeks. Six days before challenge they will be CpG oligos as above. At 10 weeks, they will be challenged as above.

One week before challenge, all animals will be bled for anti-PA ELISA titers.

Hope this is helpful (b) (6) Any more questions, please contact me.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Mouse data for anthrax
Date: Thursday, March 16, 2000 10:12:36 AM
Attachments: CpG-anthrax-mice.doc

(b) (6)

I am faxing you some data. I am also enclosing a Word file with some data. We have no guinea pig data.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID; (b) (6) USAMRIID
Subject: Guinea pigs
Date: Friday, March 17, 2000 1:32:50 PM

Re: The 8 guinea pigs that came into 207 last week on Protocol B97-03:
I would like to go ahead and challenge them on Monday, 20 March. This would mean the animals would die between Wednsday and Friday. Another experiment I'm on has been postponed to Monday, 27 March, and I'd rather not have to try to do 2 on the same day.

- Bruce Ivins

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: RE: B99-04 Completion
Date: Friday, March 17, 2000 12:48:01 PM

(b) (6)
No form was attached.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Friday, March 17, 2000 8:51 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: B99-04 Completion
>
>
>Bruce - Request that you complete the attached form for the completion of the subject protocol.
>
>Thanks. Happy St. Pat's Day.
>
(b) (6)
>Veterinary Medicine Division
(b) (6)
>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: RE: Update of NRC Research Opportunities Booklet
Date: Monday, March 20, 2000 10:09:36 AM

Hi, (b) (6) No revision is needed for mine. Thanks.

- Bruce I.

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Sunday, March 19, 2000 4:15 PM
>To: (b) (6)
>Cc: (b) (6) USAMRIID
>Subject: Update of NRC Research Opportunities Booklet
>
>Folks - the time has come again to update the descriptions of the research opportunities at USAMRIID for NRC Research Associateship awards. I apologize that I simply cannot cut out each of your opportunities and send it to you individually, but I would ask that you please, when you revise your opportunity, just cut it out, paste into a mail message or file, and send only your revision (not the file for the whole booklet) back to me. I need to have the revisions, or a statement from you that no revision is needed, back not later than April 17th. Seriously.
>
>The attached files are 1) some instructions and 2) the USAMRIID booklet, quaintly titled "infect". Please be sure to follow the instructions - use strikethrough for deletions, underline for additions. Be sure to include key words or revise if necessary. Only make substantive changes. If you have any questions about these revisions, please just give me a call at (b) (6) or an email. If you see that I missed someone in the addressing of this message, please forward it to them!
>
>Many thanks.
>
(b) (6) << File: NRCupdate00.doc >> << File: Infect.rtf >>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: Anthrax spores
Date: Tuesday, March 21, 2000 7:50:34 AM

(b) (6)

Yesterday, 20 MAR 00, B. anthracis Ames spores were irradiated by your department with 5 million rads. The samples were plated out onto Tryptic soy agar and found to be sterile.

- Bruce Ivins
Bacteriology Division

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: asm pOSTER
Date: Tuesday, March 21, 2000 5:13:50 PM
Attachments: ASM 2000 poster - Ivins.doc

(b) (6) Here is the poster.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: FW: Bioport response
Date: Tuesday, March 21, 2000 2:05:17 PM
Attachments: bioport response.doc
Memorandum for Record - BioPort Meeting of 10 March 20001.doc
Importance: High

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Tuesday, March 21, 2000 9:51 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: FW: Bioport response
>Importance: High
>
>Bruce, For your info. (b) (6)
>
>----------
>From: (b) (6) USAMRIID
>Sent: Tuesday, March 21, 2000 8:15 AM
>To: (b) (6)
>Cc: (b) (6) USAMRIID; (b) (6) USAMRIID
>Subject: RE: Bioport response
>Importance: High
>
>To all. I drafted a strawman response last night. Please review, edit, modify or anything else ASAP. We need to get a response to others in our chain and the CG for review. A final letter must go out to BioPort by 24 March and actual work on the responses must have started last week as I know some of you have been working on it.
>
>Thanks.
(b) (6)
>
>
>
>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Monday, March 20, 2000 2:43 PM
>To: (b) (6)
>Cc: (b) (6) USAMRIID
>Subject: Bioport response
>
>Following our after action meeting of the BioPort trip on 13 Mar, individuals were tasked to prepare draft responses to BioPort's request. If you already forwarded those to (b) (6) pls reforward to me. If you have not done the draft response and we asked you to provide the strawman response to one of the request, pls do so ASAP and forward to me so that we can finalize a written response to the request.
>
>Attached is the final version of the memo summarizing the trip and the requests that we received.
>
(b) (6)
>

> << File: Memorandum for Record - BioPort Meeting of 10 March 20001.doc >>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Cc: (b) (6) USAMRIID
Subject: Necropsy help
Date: Tuesday, March 21, 2000 2:35:14 PM

(b) (6)

I would like to ask you for your help in guinea pig necropsies to be done in (b) rom tomorrow, Wednesday, 22 MAR through Friday, 24 MAR. (b) (6)) will be performing the necropsies. He will probably need help with euthanasia of any moribund animals as well as help with other things.

I will be out of the office on Wednesday, 22 MAR.

Thank you,

- Bruce Ivins
Bacteriology Division
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: RE: LD50 for Ames
Date: Tuesday, March 21, 2000 2:38:23 PM

I gave it to him over the phone, (b) (6)
SC = 1560 spores
Aerosol = 105,000 spores

- Bruce

>-----Original Message-----
>From: (b) (6)
uesday, March 21, 2000 1:37 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: LD50 for Ames
>
>I have been asked by (b) (6) the Ames LD50 for rabbits sc and aerosol. Do you have that info?
>
>The sc Ames LD 50 is 1500 spores?
>
>Thanks,
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: RE: A reply from (b) (6)
Date: Wednesday, March 22, 2000 4:20:09 PM

Yes, (b) (6)
I received a reply from (b) (6) just a few days ago. He thanked me for my letter of recommendation.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, March 22, 2000 8:36 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: A reply from (b) (6)
>
>Bruce,
>
>How are you? Can you walk without any support now? I have only one question.
>
>After you wrote a letter of recommendation to (b) (6) in supporting my application, did he reply your letter and thank you for your comments? According to (b) (6) the Search Committee will meet this week and evaluate my application. Either way (yes or no), a decision will be made soon. I will inform you about the Committee's decision after I am
>notified. It appears that all signs are positive so far.
>
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Subject: RE: immunizations
Date: Wednesday, March 22, 2000 4:26:56 PM

Not a problem, (b. Would you like us to provide you with adjuvant and the two prepared vaccines (PA + Alhydrogel; PA + Ribi adjuvant) on Monday morning about 8:30? The two vaccines will already be mixed and reaady to go. If you would like the Ribi adjuvant Thursday or Friday, let me know. We have it for you.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, March 22, 2000 11:54 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: immunizations
>
>Bruce,
> Sorry it has taken me so long to get back to you. I have had many things to do. In any event, I have figured out how much of the adjuvant we will need for the first vaccination.
>
> 1. 18 guinea pigs will get an Ebola recombinant protein in RIBI adjuvant. At 4 doses per vial, I believe that this will require 5 vials.
>
> 2. 6 guinea pigs will get bacillus PA in RIBI = 2 vials
>
> 3. 6 guinea pigs will get bacillus PA in alhydrogel
>
>There are no negative controls that will need adjuvant. The reason, as you may recall, is that our negative controls for this first round are just non-vaccinated animals. This was because we would have needed another 40-50 animals just for negative controls. The groups that work in this first round will be repeated and the full negative vaccinated controls will be done with them. I can't say that I like this approach the best, but it is best as far as logistics are concerned. We are still on track to do this Monday. We will start at 9AM. When you know what time you would like to come by, let me know.
>
>Thanks,
(b)
(6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) USAMRIID
Bcc: (b) (6) USAMRIID; (b) (6) USAMRIID
Subject: B-5 cleaning report
Date: Thursday, March 23, 2000 2:31:45 PM

To:
(b) (6)
Bacteriology Division
(b) (6)

(b) (6) This communication is to inform you that Team Ivins has successfully completed the cleanup of porcelain items (urinal, commode, sink) in the B-5 men's lavatory. Building Engineers has been notified about the leak in the sink. The urinal, commode and sink are ready for inspection and approval. If there are any problems with the work accomplished, please contact me.

Sincerely,

Bruce Ivins
Team Ivins team leader
USAMRIID Bacteriology Division

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: USAMRIID/DET Password Change Schedule
Date: Friday, March 24, 2000 11:06:24 AM

3/30 is a bad day for (b) (6) and me (O19), (b) Can it be done on another day, say 3 April? If not, just give us (b) (6) Bruce Ivins) our passwords the way you did it 6 months ago (on a sheet of paper), and we'll use them. We don't have to make them up ourselves. It actually might be more convenient the latter way, since we are in and out of the office a lot. Could that be done (just giving us our passwords on a paper, so that if we forget, we can look them up)?

Thanks!

- Bruce I.

>-----Original Message-----
>From: (b) (6)
>Sent: Friday, March 24, 2000 9:27 AM
>To: ALL USAMRIID USERS; USAMRIID DISTRIBUTION B; USAMRIID DISTRIBUTION C
>Subject: USAMRIID/DET Password Change Schedule
>Importance: High
>
>AR380-19 requires a 180 day password expiration cycle. It is time to change USAMRIID network users' passwords for the (b) (2) domains. The (b) (2) is where most users logon to and (b) (2) mail accounts are located. The password change has been scheduled for (b) (2), 2000 through (b) (2) 2000 and will be done on a Division basis. This time the end user's will be able to choose their own password as long as it meets 3 of 4 requirements that are included in instructions on how to change your password which will be posted COB Wednesday. The user accounts will be changed (b) (2) of the scheduled password change so that they will be prompted to change their password the next time they logon after this time. The Help Desk will notify the Division secretaries the working day prior to the password change.
>
>Following is the password change schedule:
>
>Date Division
>
>(b) (2) BIMD (for testing purposes)
>
(b) (2) MEDOPS, VET MED
>(b) (2) HQS, HRO, Library, Logistics, Medical Company, MLPO, OPDRA, RPO, Safety, Security, VIO
>(b) (2) DSD, VIR
(b) (2) BACT, PATH, TOX
>
>The attachments are the instructions for changing passwords on a Macintosh or NT/95 computer. All user's still using Windows for Workgroup computers will need to call the USAMRIID Help Desk for instructions (b) (2)
>
>Please call me or the USAMRIID Help Desk if you need further information.
>
> << File: NT Password SOP - USAMRIID.doc >> << File: MAC Password SOP.doc >>
>
(b) (6)
>USAMRIID-Frederick
(b) (6)
>1425 Porter Street
>Ft Detrick, MD 21702

(b) (6)

[redacted]

>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: RIBI
Date: Saturday, March 25, 2000 1:11:36 PM

Sure.
Where will you be - in (b) (2)
- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Friday, March 24, 2000 4:30 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RIBI
>
>Bruce,
> I got busy an ddidn't get by today to pick up the RIBI. Can I just get it when you bring the bacillus PA?
>
>Thanks,
(b)
(6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Review materials
Date: Monday, March 27, 2000 5:20:02 PM

(b) (6) If second prize in a vacation contest is 2 days in Bethesda, what's first prize...I don't have to go? I really never considered this a vacation!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Monday, March 27, 2000 3:20 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Review materials

Bruce,

We're working on it. I thought it was just a Committee Management Office decision, and those people are easy to deal with. But, because you are a Federal Government employee the approval process is different. It requires more bureaucratic scrutiny to be sure that we aren't spending taxpayer dollars to provide you with a free vacation. Don't do anything with the hotel for a few days until we get this sorted out. I'll stay on top of it.

(b) (6)
NIAID Scientific Review Program
6700-B Rockledge Drive MSC 7616
Bethesda, MD 20892-7616
(b) (6)

-----Original Message-----
From: Ivins, Bruce E Dr USAMRIID [mailto:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
Sent: Monday, March 27, 2000 2:46 PM
provided on prior email

provided on prior email

[redacted]

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Review materials
Date: Monday, March 27, 2000 3:45:58 PM

(b) (6):

I have just received the package of proposals. (b) (6) has informed me over the phone that there may be problems with my staying at the Holiday Inn in Bethesda due to the fact that I live in Frederick, Maryland. It appears that I will have to commute morning and night to and from the sessions. This would be inconvenient, but if I need to do it, I will.

Sincerely,

Bruce Ivins
USAMRIID Bacteriology Division
(b) (6)

-----Original Message-----
From: (b) (6)
Sent: Monday, March 27, 2000 10:43 AM
To: Bruce Ivins; (b) (6)
Subject: Review materials

Reviewers:

Today you should receive a package of review materials via FedEx. Please open the package as soon as possible and FAX back the receipt page. It would also be good if you could check your assignments and let me know if you are uncomfortable with any of them. It is always easier to make changes early in the process, before your colleagues have begun writing their critiques.

For those staying in the meeting hotel (local reviewers excluded):
Please note the April 10, 2000 deadline for re-confirming your hotel room reservation. You should call the Holiday Inn Bethesda at 301-652-2000 to confirm and to provide a credit card account number. Do not say "I would like to make a reservation". We have already done that. In order to be billed at the US government rate, you should say that you wish to confirm your reservation for the NIAID/Bacterial Pathogens meeting. Your reservations are for the nights of April 25-26, 2000 (Meeting dates April 26-27, 2000). There is a "Millennium march" event in Washington DC that coincides with our meeting dates, so the hotel has imposed a strict April 10 deadline to re-confirm reservations for our meeting.

Also, please remember that all travel arrangements must be made through the official NIH travel agent. Instructions are found in the cover letter included in your package.

Feel free to call either me or (b) (6) if we can do anything to facilitate your preparations for the review meeting.

Thanks again for your help.

(b)
(6)

[redacted]

(b) (6)

[redacted]

From:	Ivins, Bruce E Dr USAMRIID
To:	(b) (6)
Subject:	Executive Summary and Research Plan
Date:	Tuesday, March 28, 2000 9:35:03 AM
Attachments:	Research Plan - CpG.doc Executive Summary of CpG Research Plan.doc

---

Enclosed please find my executive summary and research plan.

Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Score Sheet
Date: Tuesday, March 28, 2000 1:04:23 PM

Thanks, (b) (6) ..It's just what I've always wanted. How did you ever know?
- Your loyal and faithful servant

>-----Original Message-----
>From: (b) (6)
>Sent: uesday, March 28, 2000 12:00 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: Score Sheet
>
>
>Bruce,
>
>Here it is... << File: plan eval sheet.xls >> -G

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: CRM TO 4
Date: Wednesday, March 29, 2000 12:29:10 PM

(b) (6) The last I heard we had enough FY 00 contract money in 6EDP to cover (b) (6) contract with CRM. What do I need to do to straigten this situation out?
Thanks!

- Bruce

>-----Original Message-----
>From: (b) (6)
>Sent: Tuesday, March 28, 2000 11:38 AM
>To: Ivins, Bruce E Dr USAMRIID
>Cc: (b) (6)
>Subject: CRM TO 4
>Importance: High
>
>Bruce,
>We are out of funds again on this. Do you have more funds on there way over here? Let us know so we can process the voucher for the month of Feb.
>Thanks
>
(b) (6)
, USAMRAA
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: FW: California
Date: Wednesday, March 29, 2000 12:07:04 PM

Hi, (b) (6) It was a picture, which started to shake when opened. Sometime they don't go through, becuase of a JPG computer viewer problem.

I'm just coming off a ruptured gastrocnemius in my right calf - very painful. I've been on crutches for 6 weeks, and this is my last week. (I hurt it while walking down the hall at work!)

I'm looking forward to seeing you at the ASM! Will you have a poster/presentation? Will you be at the NEB booth?

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, March 29, 2000 11:02 AM
To: Ivins, Bruce E Dr USAMRIID
Subject: Re: FW: California

Hi Bruce,

There wasn't a message in this email.

Take care,

(b) (6)

(b) (6)
(b) (6)
New England Biolabs, Inc. (b) (6)
32 Tozer Rd. alternate email: (b) (6)
Beverly, MA 01915, USA

The NEB WWW Server is at (b) (2)

InBase, the Intein Registry, can be found at
(b) (2)
or by clicking the Technical Resource button
on the US or European NEB Home pages.

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Manuscript review
Date: Wednesday, March 29, 2000 8:01:32 AM

Dear (b) (6)

I am currently reviewing several proposals for an RFA 00-004, "Preparedness Against Illegitimate Use of Bacterial Pathogens," and I will not be able to review the manuscript. May I suggest the following as possible reviewers:

(b) (6)

All of the above are research scientists in the anthrax program here at USAMRIID. Were it not for my already reviewing the proposals, I would be most willing to review the manuscript.

Thank you very much for considering me,

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, March 28, 2000 5:14 PM
To: 'bruce.ivins@amedd.army.mil'
Subject: Manuscript review

Dear Dr. Ivins:

Would you be willing to review the following manuscript for Infection and Immunity? If you agree, I would request that you review the manuscript within two weeks after you receive it.

Title: Attenuated nontoxinogenic and nonencapsulated recombinant B. anthracis spore vaccines protect against anthrax

Authors: (b) (6)

Please e-mail your response back to me (b) (6)) or fax your response back to me at (b) (6) If you agree to review the manuscript, please provide your current mailing address, phone number, and fax number. Thank you for your consideration.

Sincerely,
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Anthrax Plus adjuvant study
Date: Wednesday, March 29, 2000 2:45:53 PM

We have some preliminary evidence in mice that CpG offers non-specific protection against challenge. We are in the midst of an experiment currently looking at the ability of CpG to render either specific or non-specific protection to guinea pigs. If successful, we'll go into primates. I think (b) (6) is jumping the gun a bit in completely bypassing animal studies which we have planned and are in the midst of.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Wednesday, March 29, 2000 12:56 PM
>To: Ivins, Bruce E Dr USAMRIID
>Cc: (b) (6) USAMRIID
>Subject: FW: Anthrax Plus adjuvant study
>
>Bruce, Can you help me out with this? (b) (6) I thought you might want to know about this inquiry.
(b)
(6)
>
>----------
>From: (b) (6) COL WRAMC-Wash DC
>Sent: Tuesday, March 28, 2000 12:19 PM
>To: (b) (6)
>Subject: Anthrax Plus adjuvant study
>
>
>Dear(b) (6)
> I was advised recently that you had done some studies on anthrax vaccine plus the DNA adjuvant CpG in animal models. I am meeting with (b) (6) on 5 April to discuss the possibility of a clinical pilot study comparing anthrax dose #1 IM plus CpG DNA versus anthrax IM at 0 and 4 weeks versus SQ 0 and 4 weeks following serologies over the subsequent 24 months with a second dose of CpG plus anthrax at 1 year. I would very much appreciate any information regarding your animal experience in this area.
>
(b) (6)
>
> << File: (b) (6) WRAMC-Wash DC.vcf >>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: CRM TO 4
Date: Wednesday, March 29, 2000 2:40:55 PM

Thanks, (b) (6)
>-----Original Message-----
>From: (b) (6)
>Sent: Wednesday, March 29, 2000 1:40 PM
>To: (b) (6)
>Cc: Ivins, Bruce E Dr USAMRIID
>Subject: FW: CRM TO 4
>Importance: High
>
(b) (6)
>
>Check on this one first thing in the morning. More than likely a Form 9 has been done to get her through 31 December and (b) (6) hasn't gotten to it. But make sure that is the case.
>
>Thanks
>
>
>-----Original Message-----
>From: Ivins, Bruce E Dr USAMRIID
>Sent: Wednesday, March 29, 2000 11:29 AM
>To: (b) (6)
>Subject: RE: CRM TO 4
>
(b) (6) The last I heard we had enough FY 00 contract money in 6EDP to cover (b) (6) contract with CRM. What do I need to do to straigten this situation out?
> Thanks!
>
> - Bruce
>
>
>
> -----Original Message-----
> From: (b) (6)
[redacted] uesday, March 28, 2000 11:38 AM
> To: Ivins, Bruce E Dr USAMRIID
> Cc: (b) (6)
> Subject: CRM TO 4
> Importance: High
>
> Bruce,
> We are out of funds again on this. Do you have more funds on there way over here? Let us know so we can process the voucher for the month of Feb.
> Thanks
>
> (b) (6)
> Contract Specialist, USAMRAA
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: CRM TO 4
Date: Thursday, March 30, 2000 9:02:00 AM

Great! Thanks!

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Thursday, March 30, 2000 7:59 AM
>To: (b) (6) SAMRAA
>Cc: Ivins, Bruce E Dr USAMRIID; (b) (6)
>Subject: RE: CRM TO 4
>
(b) (6)
>
>This one has been funded thru 31 December 2000 (FORM9M98166003-138) which was signed off by (b) on 07 January 2000. If you need a copy, please provide me with your fax number and I'll send it right over.
>
>Thanks!
>(b) (6)
>
> -----Original Message-----
> From: (b) (6) USAMRIID
> Sent: Wednesday, March 29, 2000 1:40 PM
> To: (b) (6) USAMRIID
> Cc: Ivins, Bruce E Dr USAMRIID
> Subject: FW: CRM TO 4
> Importance: High
>
> (b) (6)
>
> Check on this one first thing in the morning. More than likely a Form 9 has been done to get her through 31 December and B.C. hasn't gotten to it. But make sure that is the case.
>
> Thanks
>
>
> Provided in other email(s)

[redacted]

AA

> Provided in other email(s)
>
>
>
>
>
>
>
>
us know
>
>
>
>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: IP Volume
Date: Friday, March 31, 2000 1:39:25 PM

>-----Original Message-----
>From: (b) (6)
>Sent: Friday, March 31, 2000 11:33 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: IP Volume
>
>Bruce,
> The maximum volume recommended for a single IP injection in a mouse is 2-3 mls. As long as the there was no abdominal distension the next day or two, I don't see why it couldn't be repeated at 1-2 day intervals.
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: bacillus PA
Date: Friday, March 31, 2000 10:44:25 AM

PA per animal = 50 micrograms, (b)) We've got AVA for you whenever you want it.

- Bruce

>-----Original Message-----
>From: (b) (6) 2000 9:28 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: bacillus PA
>
>Bruce,
> Just wanted to let you know that all the vaccinations went well. For the bacillus PA, we administered 500µl of each innoculum to each animal as you instructed, but what was the amount of PA antigen per animal? In 2 weeks we will start the next phase of this study which has a control group of animals that receives the human AVA vaccine. Do I get that from the clinic or do yo have it?
>
>Thanks,
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: Steering Committee meeting
Date: Saturday, April 01, 2000 9:05:06 PM

(b) (6)

I won't be able to meet Wednesday - Friday of this week due to the 110-rabbit aerosol challenge experiment testing the two PA preparations. Please let me know which of the following is preferable:

1) Meeting on Monday, 3 April or Tuesday, 4 April

2) My passing (by email) my proposal scores and comments along to both of you for the proposals I reviewed.

3) My meeting with (b) (6) on Monday or Tuesday and giving her my scores and opinions. Then those scores and opinions can be included in the discussion the two of you have sometime Wednesday.

Thanks.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: Vaccine
Date: Monday, April 03, 2000 10:37:48 AM

The antigen is not quantitated - that's one reason we want to develop a new vaccine. The amount of aluminum (in aluminum hydroxide adjuvant) is 0.725 mg per 0.5-ml dose. The PA level per dose varies (apparently) from about 0.5 micrograms to 20 micrograms. The release criterion for the vaccine is based on passing a potency assay in guinea pigs. It is not based on a standard or minimum amount of PA in the vaccine.

- Bruce

>-----Original Message-----
>From: (b) (6)
onday, April 03, 2000 10:35 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: Vaccine
>
>How much antigen is in that?
>
> ----------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Monday, April 3, 2000 10:33 AM
> To: (b) (6) USAMRIID
> Subject: RE: Vaccine
>
> (b
>) The guinea pigs should get 0.5 ml I.m. We will give you a 5-ml vial, which should cover what you need. Stop by anytime and pick it up - just let us know beforehand.
>
> - Bruce
>
> -----Original Message-----
> From: (b) (6) USAMRIID
> Sent: Monday, April 03, 2000 9:51 AM
> To: Ivins, Bruce E Dr USAMRIID
> Subject: RE: Vaccine
>
> Bruce,
> There are 6 guinea pigs that will need the AVA vaccine. We did not give the dose in the protocol, only the innoculum volume (500µl). We will use whatever dose you think is best. Just let me know what it is so I can record it in my lab notebook.
>
> Thanks,
> (b
>)
> ----------
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Monday, April 3, 2000 9:44 AM
> To: (b) (6) USAMRIID
> Subject: Vaccine
>
> (b) -
> (b) ll me how much AVA you would like to have for the April 13 vaccinations and you can get it anytime.
>
> - Bruce

>
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Contract
Date: Thursday, April 06, 2000 11:06:10 AM
Attachments: anthraxtemplate.doc

-----Original Message-----
From: (b) (6)
ednesday, February 23, 2000 12:31 PM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: Contract

I've attached it just in case.

<<anthraxtemplate.doc>>

> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID (b) (6)
> Sent: Wednesday, February 23, 2000 12:26 PM
> To: (b) (6)
> Subject: RE: Contract
>
> Sure, (b) I'm sorry that it's taken so long. I'll keep on (b) o get it
> signed (6) If he's misplaced it, I'll let you know and you ca(6) send us (FAX
> or
> email) a new copy.
>
> Thanks again,
>
> - Bruce
>
> -----Original Message-----
> From (b) (6)
> Sent: Wednesday, February 23, 2000 12:08 PM
> To: 'Ivins, Bruce E Dr USAMRIID'
> Subject: RE: Contract
>
>
> Thanks, Bruce!
>
> > -----Original Message-----
> > From: Ivins, Bruce E Dr USAMRIID
> (b) (6)
Sent: Wednesday, February 23, 2000 12:13 PM
> > To: (b) (6)
> > Subject: FW: Contract
> >
> > If we intend to have an international anthrax conference in 2001, the
> > contract needs to be signed!! (b) believe that you have the contract.
> > Can (6)
> > we please get this taken care of before the whole thing falls through,
> and
> > we owe the ASM for a conference that they worked on?

> >
> > - Bruce
> >
> >
> >
> > -----Original Message-----
> > From: (b) (6)
> > Sent: Wednesday, February 23, 2000 10:41 AM
> > To: (b) (6)
> > Cc: Bruce Ivins (E-mail)
> > Subject: RE: Contract
> >
> >
> > (b) (6) I can't sign it until the Army comes to a final agreement with
> ASM
> > Would you please extend that deadline another six weeks? I know its a
> lot
> > to ask, but the agreement must make its way up the ranks at Ft. Detrick.
> >
> > I am copying our contact there, Bruce Ivins, to let him know that you
> are
> > awaiting word. Thanks for your patience.
> >
> > > -----Original Message-----
> > > From: (b) (6)
Wednesday, February 23, 2000 9:55 AM
> > > To: (b) (6)
> > > Subject: Contract
> > >
> > >
> > >
> > > Hi (b) (6) just a reminder that we were expecting the contract by
> February
> > > 18...
> > > If you would please sign and return by Friday, I would appreciate it
> > > greatly...any questions, please advise. We look forward to hosting
> > your
> > > > group
> > > > . Best wishes,
> > > >
> > > > (b) (6)
> > > >

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: BIOPORT
Date: Saturday, April 08, 2000 10:46:01 AM

(b) (6)

I am in the hot suite (b) (2) aerosolizing rabbits until about 1430 on Monday. Anytime after 1500 would be fine. (b) (6) and I would be more than willing to help BioPort with the guinea pig potency test. I think that almost all of it can be handled by phone, FAX and email. We've already made a number of suggestions about how to get their test in line.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Friday, April 07, 2000 6:58 PM
>To: Ivins, Bruce E Dr USAMRIID
(b) (6)
>Subject: BIOPORT
>
>Bruce - I intended to talk with you today, but the day got away from me. (b) (6) would like to have you help on a team that he has pulled together to work on the potency test for AVA. This is probably an area where we can be of assistance in helping out the group. (b) (6) may have called you this afternoon. If so, my apologies for not discussing this possibilty before (b) (6) called. We will need to talk on Monday.
>Thanks
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: POTENCY TEST TEAM
Date: Monday, April 10, 2000 9:18:19 PM

>-----Original Message-----
>From: (b) (6)
>Sent: Monday, April 10, 2000 6:00 PM
>To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)
>Subject: POTENCY TEST TEAM
>
(b) (6) - Bruce Ivins, (b) (6) and myself discussed the potency test team that is being established at BioPort. Bruce is available as we discussed to assist the team in working through the many variables and to provide advice from his experience here, although we believe that many of the issues can be dealt with telephonically or electronically. However, it would be beneficial for Bruce to visit BioPort and meet with the team to get a first-hand sense of the issues. This week Bruce et al. are completing a 110 rabbit aerosol challenge study for rPA so this week is out, but next week would be good. The bottom line - Bruce will contact you about arranging a time for him to visit BioPort next week. As we were discussing this issue, we also thought about lab animal issues as a variable and are considering sending a lab animal officer along too. Do you think that it would be useful to include a vet to join in on the discussions of the animal issues?
>
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: POTENCY TEST TEAM
Date: Monday, April 10, 2000 10:13:46 PM

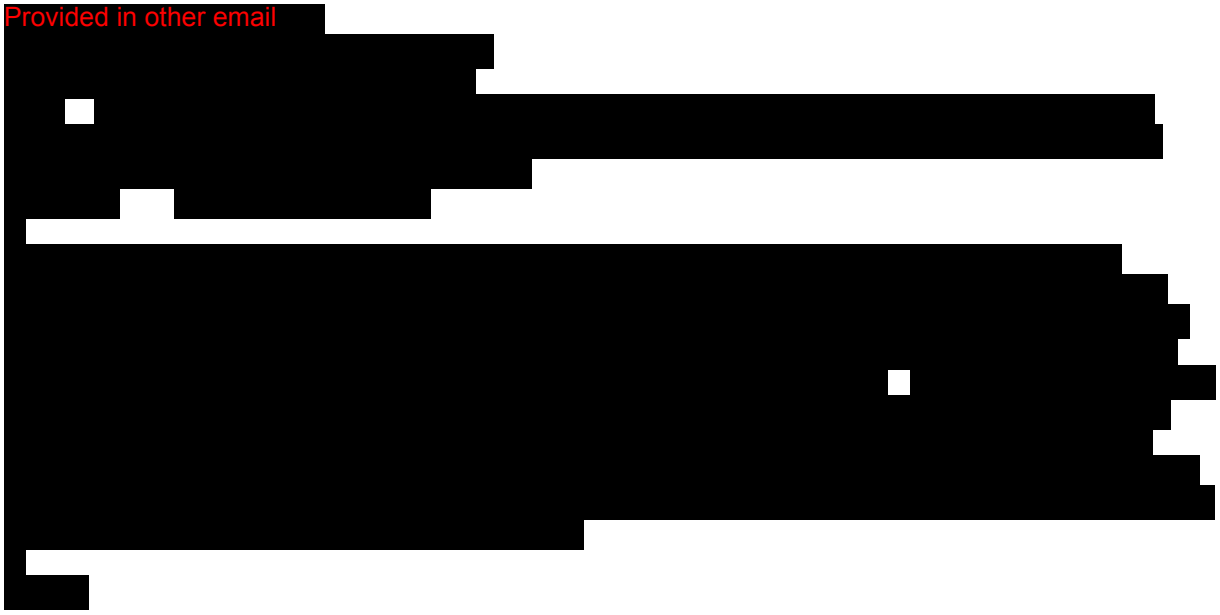
(b) (6)

Next week would be good for me, especially Wednesday or Thursday. I have a Doctor's appointment on Tuesday, April 18, so let me know well in advance if I need to cancel it. (I'm supposed to give a week's notice, so you'd have to tell me by Tuesday afternoon. Also, please send to me by FAX or email a copy of the potency test. I used to have it, but I lent it to someone and didn't get it back. I think it's in the CFR.

Thanks,

Bruce

Provided in other email



From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: POTENCY TEST TEAM
Date: Tuesday, April 11, 2000 7:08:48 AM

(b) (6)

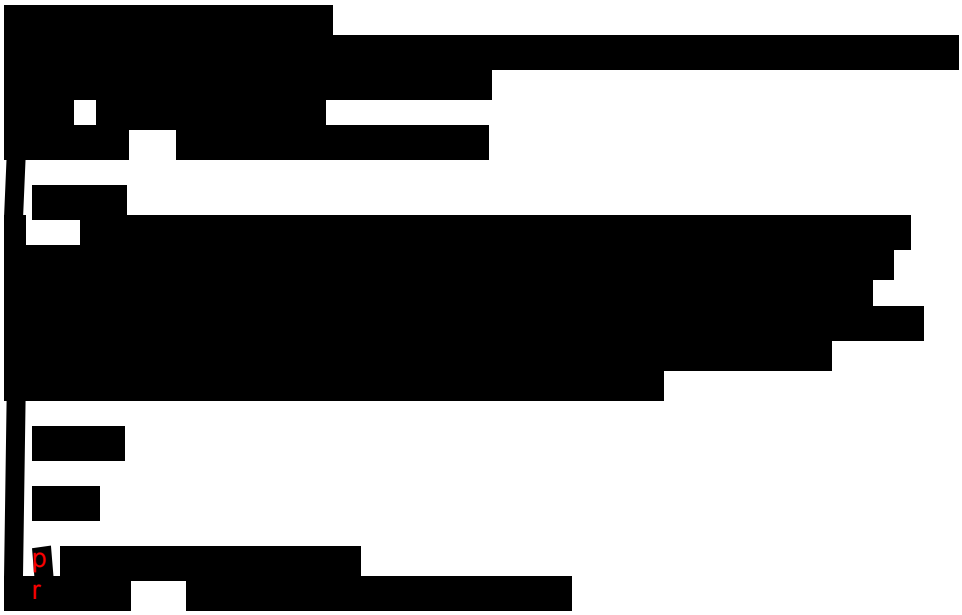
I'll talk to (b) (6) this morning about whether she can go to BioPort and if she's interested in joining the Potency Test Team. She has had a number of very good ideas in the past about how it can be improved.

- Bruce

-----Original Message-----
From: (b) (6) USAMRIID
Sent: Tuesday, April 11, 2000 7:07 AM
To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)
Subject: RE: POTENCY TEST TEAM

thanks
(b)
(6)
-----Original Message-----
From: (b) (6)
Sent: Monday, April 10, 2000 11:50 PM
To: 'Ivins, Bruce E Dr USAMRIID'; (b) (6)
Subject: RE: POTENCY TEST TEAM

All,
I will check with the team at BioPort about a lab vet tomorrow. Sounds like a good idea. Will contact Bruce tomorrow about the following week. The potency test is the same, except for how they do the calculations, which has changed. I'll get a copy tomorrow and will forward to Bruce.
(b) (6)



> > Sent: Monday, April 10, 2000 6:00 PM
provided in other emails

[redacted]

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: POTENCY TEST TEAM
Date: Tuesday, April 11, 2000 7:29:23 AM

(b) (6) will be happy to be on the USAMRIID contingent of the Potency Test Team. We'll have to find out when the meeting at BioPort will be before she can commit to the visit. Wednesday and Thursday are the best days for us, Thursday especially.

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, April 11, 2000 7:21 AM
To: (b) (6) Ivins, Bruce E Dr USAMRIID
Subject: RE: POTENCY TEST TEAM

Wow! That is a big turnout.
(b) (6)
-----Original Message-----
From: (b) (6)
uesday, April 11, 2000 7:14 AM
To: (b) (6) Ivins, Bruce E Dr USAMRIID
Subject: RE: POTENCY TEST TEAM

(b) (6)
(b) (6) will be at the Holiday Inn South today for the training. More than 30 signed up, so BioPort needed to find a room larger enough for the presentation.
(b) (6)

> -----Original Message-----
> From (b) (6)
(b) (6)
ent: Tuesday, April 11, 2000 7:07 AM
> To: (b) (6) ; Ivins, Bruce E Dr USAMRIID; (b) (6)
> USAMRIID
> Subject: RE: POTENCY TEST TEAM
>
> thanks
> (b) (6)
> -----Original Message-----
> From: (b) (6)
> Sent: Monday, April 10, 2000 11:50 PM
> To: 'Ivins, Bruce E Dr USAMRIID'; (b) (6)
RE: POTENCY TEST TEAM
>
>
> All,
> I will check with the team at BioPort about a lab vet tomorrow. Sounds
> like
> a good idea. Will contact Bruce tomorrow about the following week. The
> potency test is the same, except for how they do the calculations, which

> has
> changed. I'll get a copy tomorrow and will forward to Bruce.
>(b) (6)
>
> > -----Original Message-----
> > From: Ivins, Bruce E Dr USAMRIID
> [S(b) (6)
> > Sent: Monday, April 10, 2000 10:14 PM
> > To: (b) (6)
> > Subject: FW: POTENCY TEST TEAM
> >
> > (b) (6)
> > Next week would be good for me, especially Wednesday or Thursday. I
> > have a Doctor's appointment on Tuesday, April 18, so let me know well in
> > advance if I need to cancel it. (I'm supposed to give a week's notice,
> so
> > you'd have to tell me by Tuesday afternoon. Also, please send to me by
> FAX
> > or email a copy of the potency test. I used to have it, but I lent it to
> > someone and didn't get it back. I think it's in the CFR.
> >
> > Thanks,
> >
> > Bruce
> >
> > > -----Original Message-----
provided in
other emails

provided in
th il

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: PA Comparison
Date: Monday, April 17, 2000 10:15:59 AM

We just had another Avant-25 rabbit die. The numbers below reflect the new survival values.

>-----Original Message-----
>From: Ivins, Bruce E Dr USAMRIID
>Sent: Monday, April 17, 2000 10:09 AM

Provided in other emails

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: PA Comparison
Date: Monday, April 17, 2000 10:09:09 AM

It has been 7 days since the final group of rabbits was aersolized in this experiment (B00-03), which had 3 objectives:

a) Select a PA for further testing in efficacy experiments (from Bacillus anthracis Delta Sterne-1(pPA102)CR4 produced at the MARP, or from E.coli, produced at Avant.

b) Correlate survival with ELISA and toxin neutralizing titers in the rabbits.

c) Correlate survival with dose of PA + aluminum hydroxide.

Thus far here is what we have as far as survival data (survivors/total challenged):

DOSE OF PA (micrograms)	MARP PA	Avant PA
25	8/10	6/10
5	4/10	4/10
1	2/10	2/10
0.2	1/10	0/10
0.08	0/10	0/10

The animals immunized with the Avant PA have seemed to die a little quicker than those immunized with MARP PA. We'll caculate mean times to death after all the animals have died to see if there is a pattern.

(b) (6) We'll try to get to you the AGI data by the end of the week so that the spore doses which the rabbits received can be calculated.

(b) (6)- Please let us know when you have the ELISA data and the TNA (toxin neutralizing assay) data.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: stuff
Date: Monday, April 17, 2000 4:25:56 PM

(b) (6) We never used Ribi adjuvant in primates. I would guess that a 1-ml dose is appropriate, since that is what is called for in rabbits, and that is what is used for goats. I would recommend a total of 50 micrograms of PA in 1.0 ml, with 0.5 ml in each of two intramuscular sites.

I have Thursday, April 20, as the day for vaccination. Let me know if it is not. We will have the PA + Ribi and PA + Alhydrogel for you. Just stop by the office on the day of vaccination, and (b) (6) will get them for you. Let me know about the dates.

- Bruce

>-----Original Message-----
>From: (b) (6) USAMRIID
>Sent: Monday, April 17, 2000 3:29 PM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: stuff
>
>Bruce,
> I have a couple questions I was hoping you could answer for me. When you used RIBI in primates, what was your protocol like (volume of innoculum, antigen dose, immunization site)? We are going to do a prime-boost experiment with Ebola and will be using RIBI.
>
> Also, we have more guinea pigs this Friday to vaccinate. 12 animals will need the bacillus PA in RIBI and 12 animals will need the bacillus PA in alum. I have some RIBI now and won't need to borrow any. I can also replace what I did borrow.
>
>Thanks,
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: Ivins, Bruce E Dr USAMRIID; (b) (6) [redacted]
Subject: RE: PA Comparison
Date: Tuesday, April 18, 2000 8:49:29 PM

On Tueday, 18 APR, 1 more rabbit died that had been immunized with 25 micrograms of Avant (E. coli) PA. That makes the survivors/total for 25 micrograms of PA:

MARP PA - 8/10
Avant PA - 4/10

- Bruce

>-----Original Message-----
>From: Ivins, Bruce E Dr USAMRIID
>Sent: Monday, April 17, 2000 10:09 AM
provided in other emails [redacted]

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: CpG and guinea pigs
Date: Friday, April 21, 2000 10:27:10 AM

Hi, (b) (6)
Groups that got oligo alone did not do any better than groups that got none. If we inject 300 micrograms of CpG oligonucleotides in our next experiment, I may need to get some more. I'll let you know. We still have to run ELISAs, and I'm hoping they will be done next week. I'll be sure to tell you what we got when the ELISA data come in.

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, April 19, 2000 11:08 AM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: CpG and guinea pigs

Dear Bruce,

I'm sorry you didn't see better results. The oligos should be fine for months if stored at 4o C. Were there any groups that got oligo alone, and how did they do?

In terms of dose, in a study involving cotton rats, we found that using 300 ug of CpG oligo with antigen gave a more reproducible boost in immunity than 100 ug, without toxicity. Thus, we could go up in dose.

Give me a call one of these days, and we can discuss it further.

Hope all is well,
(b) (6)

-----Original Message-----
From: Ivins, Bruce E Dr USAMRIID (b) (6)
Sent: Wednesday, April 19, 2000 9:41 AM
To: (b) (6)
Subject: RE: CpG and guinea pigs

Hi, (b) (6)
So far, it appears that there was no non-antigen-specific protection afforded, either with respect to increased survival or increased time to death. The immunized animals are still occasionally dying, so no data are available yet, but it looks as if there is not much specific protection there either. I'm very interested to do the ELISA titers on the animals to see if there is any increase in antibody titers in the animals given vaccine + CpG oligos. If we don't see increased titers, I'd suggest that we dilute the vaccine down and test with or without CpG oligos to see if titers are improved. If we were using a dose which gave us a maximum antibody response, we may not have been able to see a stimulation in the immune response.
QUESTIONS:
a) Can we use the same preps (we still have material) or should we use fresh oligos?
b) We used 100 microliters (100 micrograms) of the CpG oligos previously. Would it be beneficial to increase the dose somewhat?

Please let me know your thoughts. I will get you the final death/survival data when the guinea pigs have finished dying. We'll get you the antibody data as soon as we can do the ELISAs.

P.S. All of us thought your seminar was just great - extraordinarily interesting!

- Bruce

Provided in other emails

[redacted]

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: CpG and guinea pigs
Date: Wednesday, April 19, 2000 9:41:16 AM

Hi, (b) (6),

So far, it appears that there was no non-antigen-specific protection afforded, either with respect to increased survival or increased time to death. The immunized animals are still occasionally dying, so no data are available yet, but it looks as if there is not much specific protection there either. I'm very interested to do the ELISA titers on the animals to see if there is any increase in antibody titers in the animals given vaccine + CpG oligos. If we don't see increased titers, I'd suggest that we dilute the vaccine down and test with or without CpG oligos to see if titers are improved. If we were using a dose which gave us a maximum antibody response, we may not have been able to see a stimulation in the immune response.

QUESTIONS:

a) Can we use the same preps (we still have material) or should we use fresh oligos?

b) We used 100 microliters (100 micrograms) of the CpG oligos previously. Would it be beneficial to increase the dose somewhat?

Please let me know your thoughts. I will get you the final death/survival data when the guinea pigs have finished dying. We'll get you the antibody data as soon as we can do the ELISAs.

P.S. All of us thought your seminar was just great - extraordinarily interesting!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Wednesday, April 19, 2000 9:00 AM
To: 'Ivins, Bruce E Dr USAMRIID'
Subject: RE: CpG and guinea pigs

Dear Bruce,

Any results from the most recent CpG studies?

(b) (6)

-----Original Message-----
From: Ivins, Bruce E Dr USAMRIID (b) (6)
Sent: Thursday, March 16, 2000 7:38 AM
To: (b) (6)
Subject: CpG and guinea pigs

Hi, (b) (6)

We are currently in the middle of our experiment testing the ability of the CpG oligos to stimulate specific or non-antigen-specific protection against intramuscular anthrax spore challenge in guinea pigs. We currently have no data but here are the groups:

1) These guinea pigs will receive i.m. in the right and left rear thighs 0.05 ml (100 micrograms total) of non-CpG oligonucleotides 6 days before i.m. challenge in the right rear thigh with 100 LD50 of B. anthracis Ames spores. These animals will be the negative controls.

2) These guinea pigs will receive i.m. 100 micrograms (administered as above) of of CpG oligonucleotides 6 days before challenge.

3) These guinea pigs will receive i.m. 100 micrograms (administered

as above) of of CpG oligonucleotides 10 days before challenge.

4) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine in both the right and left rear thighs at 0 and 4 weeks. At 10 weeks, they will be challenged as above.

5) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine + 0.05 ml of CpG oligos in both the right and left rear thighs at 0 and 4 weeks. At 10 weeks, they will be challenged as above.

6) These guinea pigs will receive 0.25 ml of AVA human anthrax vaccine in both the right and left rear thighs at 0 and 4 weeks. Six days before challenge they will be CpG oligos as above. At 10 weeks, they will be challenged as above.

One week before challenge, all animals will be bled for anti-PA ELISA titers.

Hope this is helpful, (b) (6) Any more questions, please contact me.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) [redacted]
Subject: FW: Trip to BioPort
Date: Monday, April 24, 2000 1:23:28 PM

>-----Original Message-----
>From: Ivins, Bruce E Dr USAMRIID
>Sent: Monday, April 24, 2000 1:21 PM
>To: (b) (6) [redacted]
>Subject: Trip to BioPort
>
(b) (6) [redacted]
> These are some comments on our trip to BioPort for the compiled trip report you are making:
>
>A number of items were discussed with respect to the AVA potency test and related procedures. Among them were the following:
>
>1) With respect to the method used for quantitating the number of spores used to challenge guinea pigs, it was recommended that BioPort change change from a pour plate procedure to a more accurate (and more easily accomplished) spread plate procedure.
>
>2) The remaining B. anthracis Vollum 1B spores of lot 189-2 have been suspended in approximately 0.1% phenol instead of 1% phenol (the usual phenol concentration for storing anthrax spores). Since this may have an effect on viability, it was recommended that a viability determination be conducted on the spores before and after heat shock at 60C.
>
>3) Also, since phenol is used to eliminate contamination of spore preparations, it was recommended that some of lot 189-2 be plated out onto sheep blood agar to look for the possible presence of contaminants.
>
>4) Since there is only a small amount of lot 189-2 spores left, it was felt that the most important experiments to be initially done were "bridging" experiments with lot 189-4, which would compare the two lots with respect to virulence, and would lead to lot 189-4 becoming the standard lot for challenge in the potency test.
>
>5) It was felt that over the years, BioPort's guinea pigs may have genetically changed and become more susceptible to anthrax infection. (Data were presented showing that the animals of today were gaining weight more rapidly than they did 20 years ago.) It was strongly recommended that BioPort guinea pigs be tested alongside guinea pigs from commercial sources to compare susceptibilities.
>
>6) Lot 189-4 spores spores are in aliquots in 81 freezer tubes. It was suggested that each year, 1 tube be removed and diluted 1:100 in 1% phenol, then put into aliquots. In this manner, the 189-4 lot would last 81 years.
>
>7) Guinea pigs of different ages and weights were recently tested in the potency test. It was found that animals 28 days old failed the test, whereas animals 42 days old passed the test. It was suggested that the animals in the potency test may be better defined by age rather than by weight. It was also suggested that the oldest and heaviest animals allowable be used in the potency test.
>
>8) The next experiment to be done will be a "pilot study" in BioPort guinea pigs, 8 per group, 500 to 600 g in weight, given intradermal injections of 500, 50, or 5 spores from lot 189-4. The survival values in this study will be used to determine the spore challenge doses in the following experiment. (They will be used to approximate where the LD50 value lies.)
>

>9) The experiment after the previous one will be a comparison of the intradermal LD50 values in BioPort and Charles River guinea pigs challenged with spores from lots 189-2 and 189-4. This experiment should determine the relative virulence of the 2 spore preparations as well as the relative susceptibilities of guinea pigs from the two sources.
>
>10) It was learned from (b) (6) that all of the fermentors used to grow the B. anthracis V770-NP1-R culture leak to different degrees. Suggestions were made as to where the leaks were occurring and how to fix them.
>
>11) It was also learned from (b) (6) that the growth medium for the B. anthracis V770-NP1-R contains sodium bicarbonate that has been sterilized by autoclaving. Since the production of protective antigen requires bicarbonate, and since autoclaving converts sodium bicarbonate to sodium hydroxide and carbon dioxide, it was strongly recommended to BioPort that a Prior Approval Supplement (PAS) be submitted to the FDA to change the method of sterilization of sodium bicarbonate from autoclaving to filtration. This step should improve potency test performance of the vaccine (by increasing the amount of protective antigen produced) and thus improve acceptability of the individual vaccine lots.
>
>- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: contract
Date: Tuesday, April 25, 2000 11:39:37 AM

Hi, (b) (6) I just sent a "nudge" to (b) (6) on this, asking him where it was, and asking if there is anything I can personally do to move this along. I'll get back to you (hopefully very soon) as soon as I find out where we are.

It's a good thing we don't fight conflicts this way! We'd still be requisitioning horses for the Spanish-American War.

Take Care!!
- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, April 25, 2000 10:16 AM
To: (b) (6)
Cc: Bruce Ivins (E-mail)
Subject: RE: contract

Sorry, (b) (6) I am still waiting for the signed documents. There has been progress but I don't know when we will receive the signed agreement.

By copy of this to Bruce Ivins of USAMRIID, I am hoping to nudge this process along so that we may sign the contract with Loews and start the ball rolling. Thanks for the friendly reminder, (b) (6) and for your patience!

(b) (6)
American Society for Microbiology
1752 N Street NW
Washington, DC 20036
(b) (6)
(b) (6)

> -----Original Message-----
> From (b) (6)
> Sent: Friday, April 21, 2000 10:56 AM
> To: (b) (6)
> Subject: contract
>
>
>
> Hi (b) (6) ..hope all is well with you .... as per my voice mail, just a
> quick note
> to check on the status of the contract....please let me know.....my direct
> line
> is (b) (6). Best wishes, (b) (6)
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: CBER Letter to Industry-BSE
Date: Tuesday, April 25, 2000 4:19:17 PM
Attachments: CBER Letter on BSE.pdf

>-----Original Message-----
>From: (b) (6)
>Sent: Tuesday, April 25, 2000 3:37 PM
>To: (b) (6) Ivins, Bruce E Dr USAMRIID; (b) (6)
>Subject: CBER Letter to Industry-BSE
>
>Attached is a recent Letter to Industry to Manufacturers of Biological Products on the use of ruminant-derived materials in the manufacture of regulated products.
>
>
>
(b) (6)
>
>Office of Product Development and Regulatory Affairs
>United States Army Medical Research Institute of Infectious Diseases
(b) (6)
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: contract
Date: Tuesday, April 25, 2000 4:17:28 PM

Thanks, (b) (6)
- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, April 25, 2000 3:17 PM
To: (b) (6)
Cc: Ivins, Bruce E Dr USAMRIID; (b) (6)
Subject: FW: contract

Hi (b) (6) I received a signed copy of the Form 9 back from acquisition April 11th. ASM needs to hear from us soon in order to get hotel contracts signed. I know you guys are extremely busy but could you give me a time frame as to when we could have a signed contract. Thanks, (b) (6)

-----Original Message-----
From: Ivins, Bruce E Dr USAMRIID
Sent: Tuesday, April 25, 2000 11:36 AM
To: (b) (6)
Subject: FW: contract

Hi, (b) (6)
How are we coming along with this contract? Will it be ready to go to the ASM soon? If there is anything that I can do or (b) (6) at the ASM can do to help the process along, please let us know. The sooner we can get this taken care of, the better.

Thanks a lot!!

- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, April 25, 2000 10:16 AM
To: (b) (6)
Cc: Bruce Ivins (E-mail)
Subject: RE: contract

Sorry, (b) (6) I am still waiting for the signed documents. There has been progress but I don't know when we will receive the signed agreement.

By copy of this to Bruce Ivins of USAMRIID, I am hoping to nudge this process along so that we may sign the contract with Loews and start the ball rolling. Thanks for the friendly reminder, (b) (6) and for your patience!

(b) (6)
(b) (6)
American Society for Microbiology
1752 N Street NW
Washington, DC 20036
(b) (6)

(b) (6)
(b) (6)

> -----Original Message-----
> From: (b) (6)
> Sent: Friday, April 21, 2000 10:56 AM
> To: (b) (6)
> Subject: contract
>
>
>
> Hi (b) (6) ..hope all is well with you .... as per my voice mail, just a
> quick note
> to check on the status of the contract....please let me know.....my direct
> line
> is (b) (6) . Best wishes, (b) (6)
>

From: Ivins, Bruce E Dr USAMRIID
To: [redacted] (b) (6) [redacted]
Date: Monday, May 01, 2000 10:16:37 AM

(b) (6) Here is where we stand on (b) (6) I think that CRM is going to build into the contract about $2000 for education and a 10% raise, right?

- Bruce

Provided in other emails


Provided in other emails

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: B. anthracis strains
Date: Monday, May 01, 2000 3:33:43 PM

Hi, (b) (6) It was great to see you at the NIH (b) (6) last week. I was very much interested in your comments on the various B. anthracis strains you have, especially Kruger A, Kruger B, and the strains from China. (The Kruger strains that we have received from (b) (6) include 1960A (ASIL K3878), K1 (ASIL K1769) and S35 (ASIL K1373). If you would be willing to collaborate, we would be interested in receiving some of the above strains, and any other strains you feel would be especially worthwhile in studying in animal hosts. You would of course be an author on any paper that came of the virulence study work. What we would do is initially screen the virulence in immunized guinea pigs, then take the most virulent strains into rabbits and monkeys.

I hope you had a good trip back to (b) (6) I look forward to hearing from you.

Sincerely,

Bruce Ivins

USAMRIID Bacteriology Division
(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: (b) (6) CRM contract
Date: Monday, May 01, 2000 10:03:19 AM

(b) (6) Yes, I am requesting a sole-source extension for (b) (6) on the CRM contract (CRM; (b) (6) since she has the shots necessary for working in both buildings. It would be too costly and time-consuming to bring another person into this position through a competitive TORP. The last day of the current task order is (b) (6) The current SOW will be acceptable. I would definitely like to be able to extend the contract after July 2001. If there is a special form or memorandum I need to send you to request a sole-source extension, please let me know. Otherwise, this letter can be considered a request for a sole-source extension of (b) (6) contract.

Thank you.

- Bruce Ivins
USAMRIID Bacteriology Division
(b) (6)

>-----Original Message-----
>From: (b) (6)
>Sent: Monday, May 01, 2000 7:35 AM
>To: Ivins, Bruce E Dr USAMRIID
>Subject: RE: (b) (6) CRM contract
>Importance: High
>
>Bruce,
>What I need from you is a request for a sole-source extension with this individual due to her having the necessary shots to work in the BL3 or 4 facilities within RIID and that it would be too timely and costly to bring another individual into this position through a competitive TORP. When does this task order expire? I will be out the rest of this week on TDY and will not return until next Monday. If there are any changes to the SOW let me know if not I will just have CRM give me a cost estimate for another years worth of service. Would you like for them to propose an option year or two for your consideration, so when the next year is over you have the option to extend it or not? Let me know.
>Thanks
>
(b) (6)
>Contract Specialist, USAMRAA
>
> -----Original Message-----
> From: Ivins, Bruce E Dr USAMRIID
> Sent: Monday, May 01, 2000 7:22 AM
> To: (b) (6)
> Subject: (b) (6) CRM contract
>
> Hi, (b) (6) With respect to my lab's (b) (6) (b) (6)), we would like to request a one-year extension on the contract. I talked to both (b) (6) here and (b) (6) at CRM, and they told me that I needed to ask you for the extension. Please let me know if there's anything else I need to do, such as modify the statement of work slightly or the requirements for shots. (She now has all the shots necessary to work in both (b) (2) and (b) (2), and as a result she is able to do more in the lab.)
>
> Thanks for your help.
>
> - Bruce Ivins

> (b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: PA Comparison
Date: Tuesday, May 02, 2000 10:38:34 AM

Hi, (b) (6) Thought you might like to see the final survival data on the experiment comparing the PA from our Sterne CR4 strain with E. coli PA.

- Bruce

>-----Original Message-----
>From: Ivins, Bruce E Dr USAMRIID
>Sent: Tuesday, May 02, 2000 10:37 AM
>To: (b) (6)
>Subject: FW: PA Comparison
>
>
>
> These are the final survival data (survivors/total challenged):
>

DOSE OF PA (micrograms)	MARP PA	Avant PA
25	8/10	4/10
5	3/10	4/10
1	2/10	2/10
0.2	1/10	0/10
0.08	0/10	0/10

>
>
> After we get ELISA data, we can hopefully choose between the two PA preps. If we don't have enough data to make a rational choice, I suggest the following experiment:
>
> 10 male and 10 female rabbits - 25 micrograms MARP PA
> 10 male and 10 female rabbits - 25 micrograms Avant PA
> 4 male and 4 female rabbits - 8 micrograms PA
>
> Challenge at 4 weeks by aerosol as before.
>
> - Bruce
>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: FW: Grant for Anthrax Conference
Date: Tuesday, May 02, 2000 10:49:34 AM
Attachments: FEB 2000 Certs - Assurances .doc
FEB 2000 REPS- .doc
Importance: High

(b) (6) We are now really in a bind on this. (b) wants to know if a Memorandum of Understanding would rather than a contract would be better. We don't want to lose this. Whatever we need to do we should, and do it as soon as possible. If a MUA would work better, let's go with it.
Thanks.
- Bruce

-----Original Message-----
From: (b) (6)
Sent: Tuesday, May 02, 2000 10:41 AM
To: Bruce Ivins (E-mail)
Cc: (b) (6)
Subject: FW: Grant for Anthrax Conference

Hi, Bruce. Soon you will get a copy of an email from the Loews giving us mere hours to sign the contract or lose the rooms. Below I have forwarded you some documents sent to me by your procurement office that ASM must complete to be awarded this contract. I apologize, but the Army has stumped me on the first one - it is for "Grants of $100,000 or more". ASM's management fee is nowhere near that amount, and the money coming to us will not be from the Army, but taken from individual registration fees. The first form makes me uncomfortable, and seems inapporpriate to this task.

I suggest that we go back to the beginning, and approach this from a different angle. How do you think a Memo of Understanding between ASM and the Army would be handled, rather than the contract I previously submitted?

(b) (6)
(b) (6)
American Society for Microbiology
1752 N Street NW
Washington, DC 20036
(b) (6)

> -----Original Message-----
> From (b) (6)
Thursday, April 27, 2000 8:21 AM
> To: (b) (6)
Conference
>
> RE: 4th International Conference on Anthrax
>
>
>
> Before I can issue a grant to your institution, the following two packages

> need to be completed. They may be emailed or faxed back to my attention.
>
> Please contact me with any questions. Thank you.
>
> <<FEB 2000 Certs - Assurances .doc>> <<FEB 2000 REPS- .doc>>
>
> (b) (6)
> Contract Specialist
> USAMRAA
> 820 Chandler Street
(b) (6)
>
>
>
> <<FEB 2000 Certs - Assurances .doc>> <<FEB 2000 REPS- .doc>>

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
(b) (6)
Subject: FW: PA Comparison
Date: Tuesday, May 02, 2000 10:37:18 AM

> These are the final survival data (survivors/total challenged):
>

DOSE OF PA (micrograms)	MARP PA	Avant PA
25	8/10	4/10
5	3/10	4/10
1	2/10	2/10
0.2	1/10	0/10
0.08	0/10	0/10

After we get ELISA data, we can hopefully choose between the two PA preps. If we don't have enough data to make a rational choice, I suggest the following experiment:

10 male and 10 female rabbits - 25 micrograms MARP PA
10 male and 10 female rabbits - 25 micrograms Avant PA
4 male and 4 female rabbits - 8 micrograms PA

Challenge at 4 weeks by aerosol as before.

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6)
Subject: RE: (b) (6) s CRM contract
Date: Tuesday, May 02, 2000 9:01:30 AM

I think that a total of $2,000 per year would cover expenses for training and education, at least for the first year. Thanks.

- Bruce

-----Original Message-----
From: (b) (6) USAMRIID
Sent: Tuesday, May 02, 2000 9:00 AM
To: Ivins, Bruce E Dr USAMRIID
Subject: (b) (6) CRM contract

Bruce, Based upon our discussion the other day, I believe you indicated that you wanted an additional $2000 placed on top of the $1200 training account that C.R.M. puts in place for all our employees?! Setting it up this way would provide (b) (6) w/a $3200 education/training account. Of course this is based on what courses/direction she is pursuing?! Please let me know which training figure you were thinking of?
Thanks Bruce./(b) (6)

-----Original Message-----
From: (b) (6)
Sent: Monday, May 01, 2000 11:31 AM
To: (b) (6)

(b) (6)
Yes, I knew we would do a 10% raise on (b) (6) when her contract renews at the anniversary date. Regarding the training funds, we will have to be sure of precisely how much he wants. We do have the $1200 company funds and we'll need to know if he wants $800 on top of that or an additional $2000 for a total of $3200. We have not received the TORP on this yet so we still have time.

(b) (6)

From: Ivins, Bruce E Dr USAMRIID
To: (b) (6) Ivins, Bruce E Dr USAMRIID
Subject: RE: PA Comparison
Date: Wednesday, May 03, 2000 3:15:31 PM
Attachments: MARP-PA vs Avant-PA.doc

For the B00-03 rabbit challenge (comparison of MARP-PA vs. Avant-PA):

Attached is the survival data with P values

- Bruce

From: Ivins, Bruce E Dr USAMRIID
To: Bruce Ivins; (b) (6) [redacted]
Subject: Contract signed!
Date: Thursday, May 04, 2000 7:40:19 AM

Just an update on the 2001 International Anthrax meeting: (b) (6) [redacted] of the ASM called yesterday to say that the contract with the Loews Hotel has been signed. (Yes!) We are now under agreement with the ASM to put this meeting on. (Yes!) (b) (6) [redacted] said that the next thing she would like to get together on is the program.

- Bruce