[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] 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
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#       BMDP CODE BELOW SET FOR PROCEDURE 1L

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/FORM TIME=ttd.
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       NAMES(CENSORED) = DEAD,ALIVE.
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          GROUPING=GROUP.
          STATISTICS=BRESLOW,MANTEL.
/END
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NUMBER OF CASES READ. 40

PRODUCT-LIMIT SURVIVAL ANALYSIS GROUPING VARIABLE IS group
LEVEL IS *1

TIME VARIABLE IS ttd

CASE NUMBER	TIME DAYS	STATUS	CUMULATIVE SURVIVAL	STANDARD ERROR	CUM DEAD	CUM LOST	REMAIN 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

QUANTILE	ESTIMATE	ASYMPTOTIC 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 NUMBER	TIME DAYS	STATUS	CUMULATIVE SURVIVAL	STANDARD ERROR	CUM DEAD	CUM LOST	REMAIN 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.

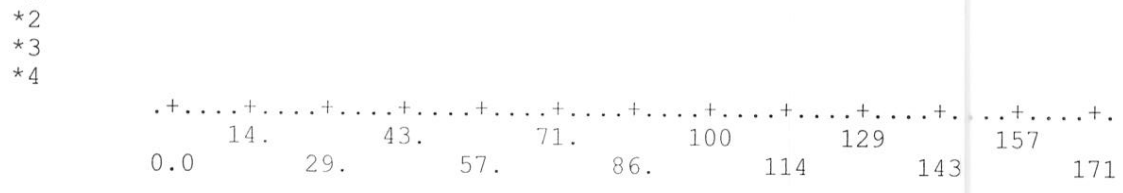
SUMMARY TABLE

	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	

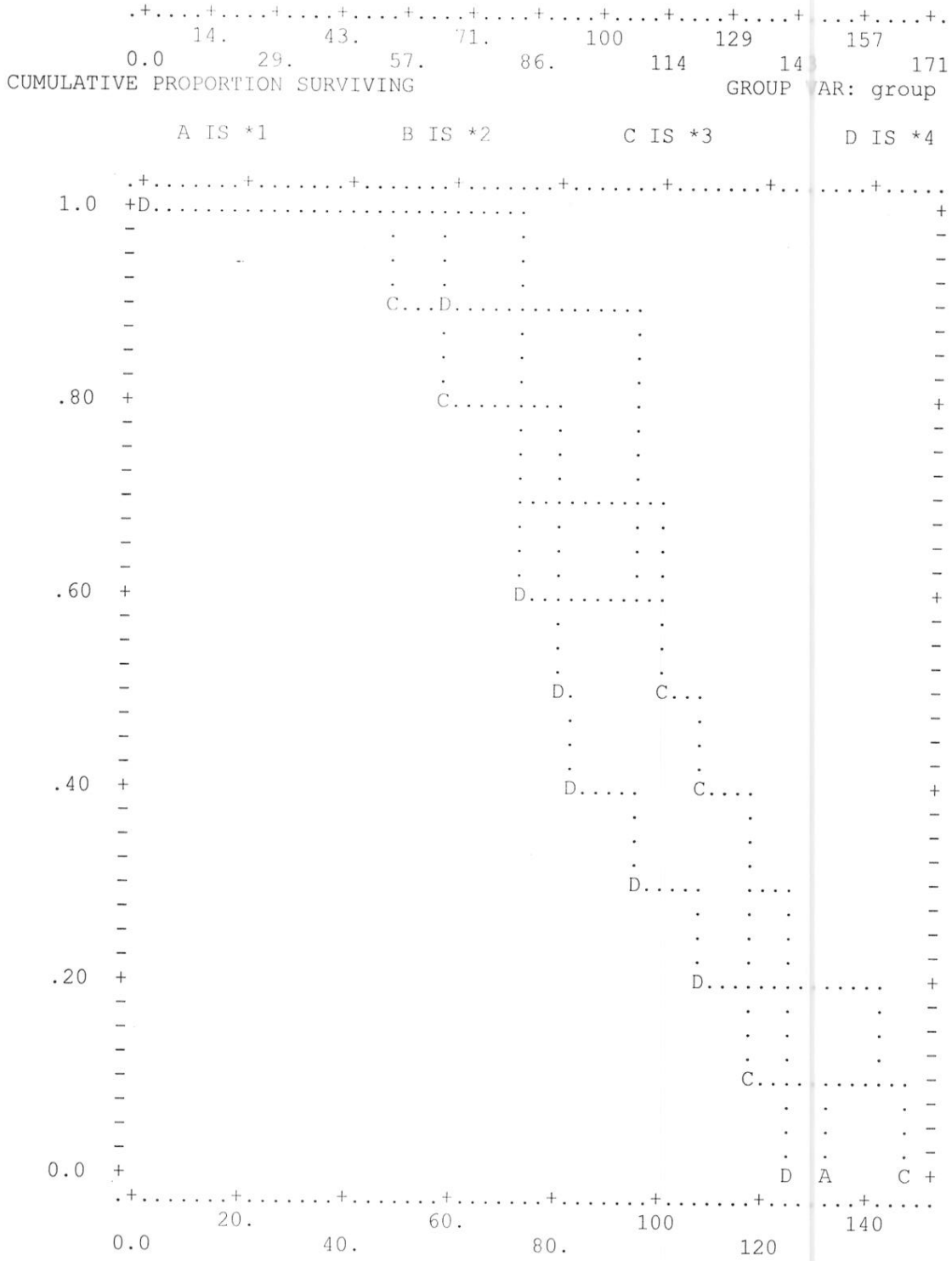
TEST STATISTICS

	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
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[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]r
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]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