



PEOPLE FOR
THE ETHICAL
TREATMENT
OF ANIMALS

November 10, 2023

Richard Hodes
Director
National Institute on Aging

Kenneth Santora
Division of Extramural Activities
National Institute on Aging

Manual H. Moro
Program Official
National Institute on Aging

Via e-mail: hodesr@31.nia.nih.gov; ks419i@nih.gov; morom@mail.nih.gov

Dear Drs. Hodes, Santora and Moro:

On behalf of People for the Ethical Treatment of Animals (PETA), I'm writing to ask the National Institute on Aging (NIA) to terminate funding to Project Number [5R21AG074251](#), titled "Experimental Sleep Fragmentation and Cognition in Aged Marmosets."¹ The NIA-funded grant application was submitted by Principal Investigator (PI) Agnès Lacreuse of the University of Massachusetts–Amherst.

We contacted you on [February 21](#) of this year to share our concerns over misleading information provided in the "Innovation," "Significance," and "Approach and Institutional Environment" sections of the grant application for this project. More specifically, we were concerned that the PI misrepresented the necessity of these experiments as well as the capability and capacity of the recipient institution to conduct the experiments.

As noted in our earlier correspondence, the project proposes to subject marmoset monkeys to extensive sleep deprivation by waking them up several times throughout the night with loud noises. The purpose is to determine whether sleep deprivation precedes or succeeds cognitive decline and related Alzheimer's disease (AD) biomarkers in these animals, assuming this will provide insight into the role of sleep disruption and neurodegenerative disease in humans.

The investigator repeatedly asserts in her grant application that these invasive experiments are necessary and significant because "human studies are unable to determine whether sleep disturbances precede or follow the development of AD pathology."² This is untrue. There are a multitude of *already published* studies conducted using human volunteers to answer this question.^{3,4,5,6,7,8,9,10,11,12,13,14,15}

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- PETA Asia
- PETA India
- PETA France
- PETA Australia
- PETA Germany
- PETA Switzerland
- PETA Netherlands
- PETA Foundation (U.K.)

Additionally, the grant application associated with this project clearly specified UMass as the proposed location of the study and asserted that it is aptly suited to carry out the proposed experiments. However, on December 23, 2021, five months after NIH notified the PI it would fund the project, the PI wrote a letter to Grants Management Specialist Elizabeth Yeomans at NIH¹⁶ to inform her that “UMass Amherst will not be able to acquire the animals needed for this project within the budget and timeframe of the awarded grant.” Subsequently, a subcontract was awarded to the Wisconsin National Primate Research Center at the University of Wisconsin-Madison.

We now have new information that, despite having more than two years to initiate the project, data collection has not yet commenced at the sponsoring university. As noted in our earlier letter, documents received via public records requests indicate there has been a host of difficulties getting this project started at UW-Madison (see Exhibit 1, pp 7-22),¹⁷ ranging from delays getting equipment purchased and/or shipped between UMass-Amherst and UW-Madison, training personnel at UW-Madison, staff absences and changes, and the investigators being too busy with conferences, study sections, and/or teaching responsibilities to get the projects up and running. In a June 2023 correspondence between the two institutions, investigators at UMass-Amherst requested that the investigators at UW-Madison collect unplanned baseline blood values from marmosets (Exhibit 1, pp 20-21) in order to have tangible measurements to demonstrate “progress” on the project.

During the August 28, 2023, IACUC meeting at UW-Madison, the committee was still debating whether the procedures should be classified as USDA Pain Category D or E, how lengthy and frequent the sleep fragmentation procedures should be, whether there might be a risk for auditory damage to the animals from the proposed procedures, and what measurements should be taken to assess the animals’ well-being. As of September 2023—more than two years after NIA notified Lacreuse that Project 5R21AG074251 would be funded—the investigators at both institutes were unclear how to control the auditory stimulus (Exhibit 1, pp 21-22). In short, it has more than been two years since the Notice of Award was sent to PI Lacreuse, but no data has been collected for this project and the experiments have not been completely designed or approved by the IACUC—even as procedures fundamental to the protocol have not been sufficiently described or considered.

It is deeply concerning that the NIA is willing to use taxpayer funds to support a project that is not only unnecessary and harmful to animals but was so poorly planned that the investigators are *still* unclear about procedural details, the effects of the procedures on the animals themselves, and the equipment needed to conduct the experiments. Please discontinue funding these experiments and redirect these resources to investigators who are conducting quality research and serious about helping our ever-growing aging population. I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read "Katherine V. Roe". The signature is fluid and cursive, with the first name "Katherine" and last name "Roe" clearly distinguishable.

Katherine V. Roe Ph.D.
Chief, Science Advancement and Outreach
Laboratory Investigations Department

People for the Ethical Treatment of Animals
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KatherineR@peta.org
240-893-7292

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- ¹ Lacreuse A. Experimental Sleep Fragmentation and Cognition in Aged Marmosets. Application funded by the National Institute of Aging as Project AG-074251, August 2021.
- ² Barthélemy NR, Liu H, Lu W, Kotzbauer PT, et al. [Sleep Deprivation Affects Tau Phosphorylation in Human Cerebrospinal Fluid](#). *Ann Neurol*. 2020 May;87(5):700–709.
- ³ Blattner MS, Panigrahi SK, Toedebusch CD, et al. [Increased Cerebrospinal Fluid Amyloid- \$\beta\$ During Sleep Deprivation in Healthy Middle-Aged Adults Is Not Due to Stress or Circadian Disruption](#). *J Alzheimers Dis*. 2020;75(2):471–482.
- ⁴ Chen DW, Wang J, Zhang LL, Wang YJ, Gao CY. [Cerebrospinal Fluid Amyloid- \$\beta\$ Levels Are Increased in Patients With Insomnia](#). *J Alzheimers Dis*. 2018;61(2):645–651.
- ⁵ Chou CA, Toedebusch CD, Redrick T, et al. [Comparison of single-channel EEG, actigraphy, and sleep diary in cognitively normal and mildly impaired older adults](#). *Sleep Adv*. 2020;1(1):zpa006.
- ⁶ Gao Y, Wei S, Gao F, et al. [Sleep Disturbance is Associated With Higher Plasma A \$\beta\$ Levels in Cognitively Normal Adults-A Population-Based Cross-Sectional Study](#). *Front Aging Neurosci*. 2021;12:615838.
- ⁷ Ju YS, Ooms SJ, Sutphen C, et al. [Slow Wave Sleep Disruption Increases Cerebrospinal Fluid Amyloid- \$\beta\$ Levels](#). *Brain*. 2017 August;140(8):2104–2111.
- ⁸ Kam K, Parekh A, Sharma RA, et al. [Sleep Oscillation-Specific Associations With Alzheimer's Disease CSF Biomarkers: Novel Roles for Sleep Spindles and Tau](#). *Mol Neurodegener*. 2019;14(1):10.
- ⁹ Kam K, Parekh A, Sharma RA, et al. [Sleep Oscillation-Specific Associations With Alzheimer's Disease CSF Biomarkers: Novel Roles for Sleep Spindles and Tau](#). *Mol Neurodegener*. 2019;14(1):10.
- ¹⁰ Li P, Gao L, Gaba A, et al. [Circadian disturbances in Alzheimer's disease progression: a prospective observational cohort study of community-based older adults](#). *Lancet Healthy Longev*. 2020;1(3):e96-e105.
- ¹¹ Olsson M, Årliig J, Hedner J, et al. [Sleep Deprivation and Cerebrospinal Fluid Biomarkers for Alzheimer's Disease](#). *Sleep*. 2018 May;41(5):10.
- ¹² Osorio RS, Ducca EL, Wohlleber ME, et al. [Orexin-A is Associated with Increases in Cerebrospinal Fluid Phosphorylated-Tau in Cognitively Normal Elderly Subjects](#). *Sleep*. 2016;39(6):1253-1260.
- ¹³ Osorio RS, Ayappa I, Mantua J, et al. [Interaction between sleep-disordered breathing and apolipoprotein E genotype on cerebrospinal fluid biomarkers for Alzheimer's disease in cognitively normal elderly individuals](#). *Neurobiol Aging*. 2014;35(6):1318-1324.
- ¹⁴ Mander BA, Dave A, Lui KK, et al. [Inflammation, Tau Pathology, and Synaptic Integrity Associated With Sleep Spindles and Memory Prior to \$\beta\$ -amyloid Positivity](#). *Sleep*. 2022 September;45(9):zsac135.
- ¹⁵ Thomas J, Overeem S, Dresler M, et al. [Shift-Work-Related Sleep Disruption and the Risk of Decline in Cognitive Function: The CRUISE Study](#). *J Sleep Res*. 2021 April;30(2):e13068.
- ¹⁶ December 2021 Letter to NIH from Agnès Lacreuse.
- ¹⁷ Exhibit 1. Correspondence between Agnes Lacreuse and Ricki Colman.

Exhibit A

From: [REDACTED]
Sent: Monday, September 20, 2021 10:46 AM
To: [REDACTED]
Subject: 1R21AG074251-01 subcontract question

Dear [REDACTED],

I am contacting you with regards to 1R21AG074251-01. Due to the shortage of suitable animals for this grant, I would like to establish a subcontract with the Wisconsin National Primate Research Center (WNPRC) to perform the animal studies there. The WNPRC has agreed, in principle. Should I go ahead and submit a new budget for your approval? Please let me know what's the best way to proceed

Thank you for your help

----- Forwarded Message -----

Subject:RE: 1R21AG074251-01 subcontract question

Date:Mon, 20 Sep 2021 20:26:43 +0000

From: [REDACTED]

To: [REDACTED]

CC: [REDACTED]

Dear [REDACTED]

In order to determine if a budget and request are needed can you please clarify through the Authorized Organization Representative the following:

- does the change in subcontract sites constitute a change in scope?
- is there is any substitution of one animal model for another?
- or change in the approved use of live vertebrate animals?

Page 3 of 4

As this is a modular award significant rebudgetting does not apply. I am copying links to section [8.1.2](#) and [8.1.2.5](#) of the NIH Grants Policy Statement which cite the policy on prior approval requirements and change of scope for your reference in case this is helpful to you.

Please let me know if you have any questions.

Kind Regards,

[REDACTED]

Subject: sub budget (R21)
Date: Tuesday, November 16, 2021 at 11:12:46 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]
CC: [REDACTED]
Category: Blue category
Attachments: UMass-Amherst-Sub-recipient-Form.pdf

Hi [REDACTED]

do you think you could get your budget together for early next week ? I need to request approval from NIH and this will involve a series of documents, including all sub docs. Given the delays already accumulated since the summer, it's important that we move this project forward, hopefully before Thanksgiving.

I am re-attaching the forms that UMass requires for a sub (I also copy [REDACTED], who is the [REDACTED] [REDACTED] for our college and can help with this)

Thank you

Subject: Re: sub budget (R21)
Date: Tuesday, November 16, 2021 at 12:49:40 PM Central Standard Time
From: [REDACTED]
To: [REDACTED]
CC: [REDACTED]
Category: Blue category

Sorry, I have one additional question. Do you need a detailed budget justification or just the personnel justification?

Thanks,

[REDACTED]

Subject: sub documents
Date: Monday, November 29, 2021 at 9:18:25 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category
Attachments: UMass-Amherst-Sub-recipient-Form.pdf

Hi [REDACTED]

I hope you had a nice Thanksgiving ! so hard to start the week when it's all over...
 Any chance we could get your sub documents this week ? I am re-attaching the forms UMass needs
 Thanks !!

[REDACTED]

[REDACTED]

[Enclosed below is the list of required for a subcontract with UMass Amherst; and confirming we do need a detailed justification.](#)

Project Title: Experimental sleep fragmentation and cognition in aged marmosets

Project Dates: 08/15/2021 – 04/30/2023

List of required documents:

1. NIH Biosketch
2. Scope/Statement of Work
3. Detailed Budget (I think WNPRC allocation is 110K DC in Y1; and 70K DC in Y2 but [REDACTED] should confirm).
4. Budget Justification (detailed)
5. Vertebrate Animals document
6. Indirect Cost Rate Agreement
7. Signed Sub-Recipient Form (attached)

Regards,

[REDACTED]

Subject: Re: sub documents
Date: Monday, November 29, 2021 at 9:43:45 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Hi [REDACTED]

I sent all of the documents to our grants office on 11/19. I just nudged them for an update and asked that it be handled ASAP. Hopefully this will work. I'll let you know.

I hope you had a nice Thanksgiving break as well,

[REDACTED]

From: [REDACTED]
Sent: Monday, January 3, 2022 11:04 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: [EXTERNAL] [REDACTED] Request approval add subcontractor to perform IACUC portion of grant 1R21AG074251-01

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are confident the content is safe.

Good morning [REDACTED],

I hope you are doing well and a very Happy New Year to you.

Attached is a request from [REDACTED] to add a subcontract on the grant to perform the animal portion of the grant activity. This is a follow up to correspondence you had with [REDACTED] in September (email message below). In addition, the following documents are also attached Budget , Budget justification along with a set of subaward documents from University of Wisconsin-Madison, Wisconsin National Primate Research Center (WNPRC)

We look forward to receiving your reply to our request. Please let me know if you need us to provide additional information for your review.

Best regards..... [REDACTED]

From: [REDACTED]
Date: Monday, January 24, 2022 at 3:04 PM
To: [REDACTED]
Subject: IACUC approval letter

Hi [REDACTED]

NIH demands the IACUC approval for the study (fortunately you were ahead of me, I have repeated to them that I did not have it yet, since it only makes sense AFTER they approve the transfer !). Could you please send to me ?

Sorry it is taking so long, the grant has had no less than 3 changes of grant managers...

[REDACTED]

From: [REDACTED]
Date: Monday, January 24, 2022 at 3:14 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: Request copy of IACUC compliance approval Document Fw: UMass [REDACTED] f grant 1R21AG074251-01

Good afternoon [REDACTED],
I hope you are doing well.

[REDACTED] is trying to get approval from NIH to add your organization to her grant with the expectation you would be performing the animal research portion of the project. The sponsor is requesting we send a copy of your IACUC compliance approval for the work to be done.

Can you please send me a copy of the compliance document or if not approved yet please let me know when it will become available?

Thank for your assistance with this matter.

Best regards..... [REDACTED]

From: [REDACTED]
Sent: Monday, January 24, 2022 3:23 PM
To: [REDACTED]
Subject: RE: [REDACTED] Request approval add subcontractor to perform IACUC portion of grant 1R21AG074251-01

Hi [REDACTED], do you have the IACUC approval you can send for this?

Thank you!

Subject: Re: IACUC approval letter
Date: Monday, January 24, 2022 at 5:01:36 PM Central Standard Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category
Attachments: G006540 Approval.pdf

No worries, here you go.

[REDACTED]



WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

New Protocol Approved by College of Letters and Science and Vice Chancellor for Research and Graduate Education Centers Institutional Animal Care and Use Committee

Protocol PI: [REDACTED]
 Protocol Title: Sleep fragmentation and cognition
 Protocol ID: [G006540](#)
 Protocol Approval Date: 1/10/2022
 Protocol Expiration Date: 1/9/2025
 Amendment Approval Date:

Only those procedures described in this New Protocol are approved by the Institutional Animal Care and Use Committee (IACUC). Performing activities not approved by the IACUC is a protocol violation and will be dealt with in accordance with All Campus Policy 1999-008 (<http://rarc.wisc.edu/policy/1999-008.html>).

NOTE: IACUC approval of an animal care and use protocol, or modifications of a protocol, is not a guarantee of research space, equipment, or other resources.

If you have any questions or concerns regarding this action, please contact your RARC veterinarian or the IACUC Administrator.

From: [REDACTED]
Date: Sunday, March 6, 2022 at 11:19 AM
To: [REDACTED] >
Subject: NIH Biosketch and commons ID needed for RPPR

Hi [REDACTED]

I hope you are doing well. So sorry that this project is taking so long, NIH has approved the change, but now waiting for UMass to establish the subcontract with you guys, super frustrating. Meanwhile I have to do an RPPR (with nothing to report !)
 Can you please send your Biosketch and commons ID ?

Thank you !
 [REDACTED]

Subject: Re: NIH Biosketch and commons ID needed for RPPR
Date: Monday, March 7, 2022 at 9:22:35 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category
Attachments: [REDACTED] Bio.3.7.22.docx

Hi [REDACTED]
It's always the business office paperwork that takes the longest!
My commons id is [REDACTED].
I have attached a biosketch. Please let me know if you need anything else.
Thanks,
[REDACTED]

From: [REDACTED]
Date: Wednesday, May 25, 2022 at 9:16 AM
To: [REDACTED]
Subject: shipping

Hi [REDACTED]
I hope that everything is well. I apologize for the delay in getting things going for the R21, I have been tied up with end of the semester stuff + NIH study section
I am hoping to start sending you material for building the touchscreen system ASAP. what address should I use for shipment ?

Page

Would be touchscreen + computer + pump and various smaller electronics

Thank you !
[REDACTED]

From: [REDACTED]
Date: Wednesday, May 25, 2022 at 12:32 PM
To: [REDACTED]
Subject: Re: shipping

Hi [REDACTED]

No worries, I am slogging my way through study section prep myself at the moment.

You can ship to:

[REDACTED]
[REDACTED]

Attn: [REDACTED]

Please let me know when you send the shipment so we can be on the lookout.

Thanks,

[REDACTED]

Subject: Re: shipping
Date: Wednesday, May 25, 2022 at 12:33:37 PM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Oops – the minute I sent this I realized I had the wrong street address (the shipping dock is in a different building). Please use:

[REDACTED]
[REDACTED]

Attn: [REDACTED]

Thanks

From: [REDACTED]
Date: Monday, June 6, 2022 at 12:45 PM
To: [REDACTED]
Subject: supplies

Hi [REDACTED]

Is a document for the supplies we need
 I will update the orders as they come along

Please let me now if you have trouble accessing the shared doc, and keep in safe place

[Supplies for touchscreen set-up.docx](#)

I'm waiting to hear about the touchscreen they were on backorder for a while

I have also hired a computer undergrad for the sound sequences

I hope that things have quieted down with the end of the semester/NIH and that all is well !

[REDACTED]

From: [REDACTED]
Date: Wednesday, June 15, 2022 at 12:07 PM
To: [REDACTED]
Subject: parts for touchscreen system

Hi [REDACTED]

I sent you a bunch of parts for the touchscreen set-up (at address you gave me) last week. Please let me know that you've received them, I suppose we will need a call to know how to put this together. The touchscreen will take a few weeks, but should be mounted on transport box
 Thanks!

[REDACTED]

Subject: Re: parts for touchscreen system
Date: Thursday, June 16, 2022 at 9:23:53 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Hi [REDACTED]

Yes, we received the parts. My staff is putting together an inventory so we can be sure we received everything. Yes, I imagine we will need some guidance. I imagine it makes sense to wait until the touchscreen is available as well?

Thanks,

[REDACTED]

Subject: Re: supplies
Date: Thursday, June 16, 2022 at 11:41:58 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

I will resend this pm, thanks !

On Thu, Jun 16, 2022 at 10:22 AM [REDACTED] > wrote:

H [REDACTED]
Unfortunately I am not able to access the shared doc.
Thanks,
[REDACTED]

From: [REDACTED] >
Date: Monday, July 25, 2022 at 9:24 AM
To: [REDACTED]
Subject: Re: parts for touchscreen system

Hi [REDACTED]
for sure ! I'm available today til Thursday , except tomorrow morning 8-9 and Wednesday 2-3 EST
let's zoom and what's best for you
Thanks
[REDACTED]

On 7/25/2022 9:27 AM, [REDACTED] wrote:

I think we have everything now. Perhaps time for a call? Do you have time this week?

From: [REDACTED]
Date: Monday, July 25, 2022 at 9:41 AM
To: [REDACTED]
Subject: Re: parts for touchscreen system

perfect !
here is a zoom link we can use

[REDACTED] is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
[REDACTED]

Subject: Re: parts for touchscreen system
Date: Monday, July 25, 2022 at 9:49:27 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Great. I will have a couple of my techs ([REDACTED] and [REDACTED]) on the call as well.
Thanks!

Subject: set-up
Date: Wednesday, August 3, 2022 at 12:55:18 PM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Hi [REDACTED],

You will receive an email from [REDACTED]. He will send you a google doc link describing the set-up.
Let's talk more via zoom when convenient !

Thanks !

[REDACTED]

Subject: Re: Another meeting
Date: Monday, August 22, 2022 at 8:35:12 PM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
Category: Blue category

Hi [REDACTED]

Next week works for me, just tell me when is convenient and we can set up a zoom

[REDACTED]

On Mon, Aug 22, 2022 at 6:13 PM [REDACTED] > wrote:

Hi [REDACTED]

My guys have a bunch of questions. I think we would benefit from another meeting. Do you have some availability in the next week or so?

Thanks,

[REDACTED]

From: [REDACTED] >
Date: Wednesday, October 26, 2022 at 12:28 PM
To: [REDACTED]
Subject: touchscreen set-up ?

H [REDACTED]

I've not heard from you in a long time, how are things moving along with the touchscreen set-up ? it seems that [REDACTED] is preparing to set-up his own touchscreen system, using [REDACTED]'s technique. I wish we could have combined efforts, as it seems wasteful. I'd like to have an update before Thanksgiving, this project needs to move along, let me know if there is a good time to talk

Thanks !

[REDACTED]

From: [REDACTED]
Date: Thursday, October 27, 2022 at 10:49 AM
To: [REDACTED]
Subject: Marm touchscreen setup

Hi [REDACTED]

Did you ever get to talk to [REDACTED] about this? I think you were planning to just before covid ran through your life.

We really need to get this moving.

Thanks,

[REDACTED]

Subject: Re: Marm touchscreen setup
Date: Thursday, October 27, 2022 at 10:51:54 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]

Unfortunately we never had a chance to meet. [REDACTED] is on vacation and gets back on Tuesday November 1st. I will get together with him that week to get the ball rolling.

[REDACTED]

From: [REDACTED]
Date: Wednesday, January 18, 2023 at 11:33 AM
To: [REDACTED]
Subject: R21 check-in

Hi [REDACTED]

Happy New year! I hope it started well for you

We need to make progress on the R21, is the touchscreen set-up almost completed ?

I'm going to send you a laptop with the programs on it, as it is urgent to start training the animals on cognitive tasks

ps. I saw your name on the list for the PBMC, are you going ?

Thanks!

[REDACTED]

On 1/18/2023 4:18 PM, [REDACTED] wrote:

Hi [REDACTED]

Happy New Year to you as well.

The touchscreen setup is ready to go. I think all we need to do is get the laptop, hook the pump up to the system, and learn the testing parameters (ie x many trials for x many days, min/max session time). I understand that my staff has been in touch with [REDACTED] about the pump setup and are waiting to hear back.

[REDACTED]

From: [REDACTED]
Date: Saturday, February 11, 2023 at 10:23 AM
To: [REDACTED]
Subject: <no subject>

Hi [REDACTED]
Sorry for the delay in getting this project up to a good start. I have ordered a laptop and will install the necessary software before sending to you.
Did [REDACTED] get back to you for the pump ?
We should have a zoom call to see about animals and getting started. One thing I'm thinking about is blood and CSF. Do you have any of these available? We could try to get baseline measures using [REDACTED] Magpix machine.
Let me know if you're available for a zoom next week
Thanks !
[REDACTED]

Subject: Re:

Date: Monday, February 13, 2023 at 8:26:48 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]

Hi [REDACTED]
No, I don't think we have heard from [REDACTED] yet, but I will double check with [REDACTED] and [REDACTED] when they get in.
Yes, we can definitely do blood, csf is harder and I believe we have the relevant markers validated, or close to it, in serum to avoid the need for csf.
Yes, happy to do a zoom. This week is a little tough though with study section. The following week would be better for me. I can do pretty much anytime on 2/20, or the morning of 2/22 if either of those would work for you.
Thanks,
[REDACTED]

Subject: Follow-up

Date: Monday, February 13, 2023 at 8:39:46 AM Central Standard Time
From: [REDACTED]
To: [REDACTED]

Hi [REDACTED],
[REDACTED] did respond to [REDACTED] very promptly. Unfortunately, sounds like he couldn't really help much until we have the laptop.
Thanks,
[REDACTED]

On 2/16/2023 5:32 PM, [REDACTED] wrote:

Sounds good.

From: [REDACTED]
Date: Thursday, February 16, 2023 at 4:27 PM
To: [REDACTED]
Subject: Re: meeting next week ?

I teach til 1 ET, so lets meet at 1 your time (2 ET) ?

On Thu, Feb 16, 2023 at 4:07 PM [REDACTED] > wrote:

I think I can do any time before 3 (central) on Thursday.

[REDACTED]

From: [REDACTED]
Date: Thursday, February 16, 2023 at 1:25 PM
To: [REDACTED]
Subject: meeting next week ?

Hi [REDACTED]

is there a good time next week to talk ? my best days are Thursday afternoon or Friday, with other times here and there

I have the laptop being set-up so hopefully it can already be up and running by then

[REDACTED]

From: [REDACTED]
Date: Wednesday, February 22, 2023 at 1:06 PM
To: [REDACTED]
Subject: Re: meeting next week ?

Hi [REDACTED]

I'm about to send you the laptop, which address should I use ?

Thank you

[REDACTED]

Subject: Re: meeting next week ?

Date: Wednesday, February 22, 2023 at 3:32:30 PM Central Standard Time

From: [REDACTED]

To: [REDACTED]

You can use the address you had on the form:

Attn: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Thanks,

[REDACTED]

Subject: Re: of course, there is a form

Date: Wednesday, February 22, 2023 at 3:32:59 PM Central Standard Time

From: [REDACTED]

To: [REDACTED]

Attachments: Equipment_Off_SiteALC.pdf

Here you go. Let me know if you need anything else.

Thanks,

[REDACTED]

From: [REDACTED]

Date: Wednesday, February 22, 2023 at 1:19 PM

To: [REDACTED]

Subject: of course, there is a form

H [REDACTED]

Please check the address, sign, and send back to me please !

[REDACTED]

Subject: Laptop

Date: Tuesday, February 28, 2023 at 9:05:00 AM Central Standard Time

From: [REDACTED]

To: [REDACTED]

Hi [REDACTED]

Just to let you know, we received the laptop yesterday afternoon.

We will work on getting things setup and be in touch.

Thanks,

[REDACTED]

On 2/28/2023 10:45 AM, [REDACTED] wrote:

Hi [REDACTED]

We are stumbling already trying to set up the system. Who can [REDACTED] talk to to get quick instructions about how to run the program so she can see if our setup is working. Do you have an SOP or a user guide of some kind?

Thanks,

[REDACTED]

From: [REDACTED]

Date: Tuesday, February 28, 2023 at 9:53 AM

To: [REDACTED]

Subject: Re: Help with monkey logic

you will need a bluetooth device to connect with the pump. [REDACTED] says it's not expensive or hard to set-up if your shop person knows a little bit of electronics. I will send the specs ASAP

Meanwhile, attached is a quick overview of the MonkeyLogic set-up to help you get started. You can run a task as a demo (without the pump)

On 2/28/2023 10:59 AM [REDACTED] wrote:

Thanks, not sure our shop person knows anything about electronics but perhaps we can find someone here to help if we can't handle it. Specs and any info would help.

From: [REDACTED] >
 Sent: Tuesday, February 28, 2023 12:37:29 PM
 To: [REDACTED]
 Cc: [REDACTED]
 Subject: Re: Help with monkey logic

You will need this to make the pump work with the software. Can you use the grant to purchase from it ?
 If not, I'll make the order and send to you, sorry it was omitted from last round of purchases

www.tinkersphere.com

TS-745 Arduino Uno R3 29.95\$
 TS1789B Enclosure 10.99\$
 TS-142 9v power adapter 5.70\$
 TS-868 HC-05 Bluetooth 10.95\$

Subject: Re: Help with monkey logic
Date: Tuesday, February 28, 2023 at 12:39:05 PM Central Standard Time
From: [REDACTED]
To: [REDACTED]

I believe we already have the Bluetooth set up for the pump...

Sent from my U.S.Cellular© Smartphone
 Get [Outlook for Android](#)

From: [REDACTED]
Date: Wednesday, March 1, 2023 at 12:53 PM
To: [REDACTED]
Subject: question for blood samples

H [REDACTED],

I was wondering if I could send you some blood samples (n ~ 60 samples) to test either your MSD or NHP thermofisher kits. These are precious because they come from a cohort with cognitive/sleep and neuropathology data. Unfortunately, they are whole blood.

Let me know what you think, it would be great to validate these kits in animals with known pathology and get some prelim data for the grant. I was planning on doing it here, but we should not duplicate efforts.

How is the MonkeyLogic going ?

[REDACTED]

Subject: Re: question for blood samples

Date: Wednesday, March 1, 2023 at 5:17:30 PM Central Standard Time

From: [REDACTED]

To: [REDACTED]

Hi [REDACTED],

Unfortunately the assays won't work on whole blood. They require serum or plasma (preferred).

I'm not sure about the status of MonkeyLogic – I will check in with my guys tomorrow and let you know.

Sorry,

From: [REDACTED]

Date: Wednesday, March 22, 2023 at 1:56 PM

To: [REDACTED]

Subject: question for biomarkers

Hi [REDACTED]

I've heard that your staff is talking to [REDACTED] and [REDACTED], I hope that the set-up is going well ?

Also, I have a question regarding AD biomarkers

Could you please find out which MSD kit worked for Abeta (antibodies 4g8 or 6E10) ? we have the instrument here [REDACTED] and I would like to run our blood samples through it

In fact, it would be good to compare our data, because we have whole blood (which should also work according to the representative) and we need plasma controls also, for pTau, did you try their most sensitive kit ? (S-plex ?)

ps. the NCE request is sent

Thanks a bunch

Subject: Re: question for biomarkers

Date: Wednesday, March 22, 2023 at 2:54:29 PM Central Daylight Time

From: [REDACTED]

To: [REDACTED]

Hi [REDACTED]

I think we are getting there with the set-up, not good to go yet, but getting closer.

Regarding the AD biomarkers, I would be happy to help but the person in our Assay Services group that has this information is out of town and unavailable. I will try to get the info as soon as she is back mid- next week and let you know what I learn.

Thanks,

From: [REDACTED]
Date: Friday, June 16, 2023 at 9:41 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: Re: Meeting today

Hi [REDACTED]
Ok- I'm leaving for a conference on the 25th and will be gone for 2 weeks. It is absolutely urgent to start this project. Can you animals and start training ASAP, as soon as the system is working? I'm not sure why it's taking so long but the way things have been going means that we need to get some data now. Can we get some baseline blood samples? We really need to show some kind of progress at this point. I think that we have the \$ to run assays here, not at UMW
Happy to meet before Friday next week
Thanks
[REDACTED]

On Fri, Jun 16, 2023 at 10:07 AM [REDACTED] > wrote:

Hi [REDACTED]
I think we should postpone our meeting this morning. We still have to hook the pump to the Bluetooth apparatus that we just got back from [REDACTED]. He just sent the info yesterday pm and we haven't had a chance to look at it yet. Once that is connected, we will then be able to look at the MonkeyLogic program and do some pseudo runs. As of now, there is nothing new since our last meeting.
Perhaps mid-next week? I will try to coordinate schedules on this end and give some more specific availabilities.
Sorry for the late notice,
Thanks,
[REDACTED]

Subject: Re: Meeting today
Date: Friday, June 16, 2023 at 10:26:05 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]
CC: [REDACTED]

for the blood samples, we need a baseline and that's a fast way to get some data. I'm thinking MSD panels (the magp x system written in the grants is not going to work), so frozen plasma would be ideal. I know you guys are doing these, the amount is as much as is feasible (we will need one assay for Abeta and another for their neurology panel: ptau, NfL and GFAP)

Happy to meet next week, as feasible on your side. My current lab manager ([REDACTED]) is leaving so urgent questions about hardware/software need to be asked now

Thanks!
[REDACTED]

On 6/16/2023 10:54 AM, [REDACTED] wrote:

Hi [REDACTED]

Yes, we will start as soon as possible. I generally avoid getting animals until we are ready to go because we have to start paying for them immediately. According to my notes we don't collect samples until the chronic phase. Would you like us to collect blood earlier? If so, can you tell me how much, what type and any handling specifications? For example, I know here for the AD markers we need to keep samples cold throughout and freeze ASAP.

I will get back to you about a time to meet – we are still working on getting our schedule together for next week.

[REDACTED]

From: [REDACTED]
Date: Friday, September 8, 2023 at 10:09 AM
To: [REDACTED]
Subject: Re: Auditory stimulus delivery

Hi [REDACTED]

I do have the program, it just needs any computer/laptop in the room to run it throughout the night
Is the machine finally working ?
Thanks

[REDACTED]

On 9/8/2023 11:01 AM, [REDACTED] wrote:

Hi [REDACTED]

Did you have a plan for how you were going to deliver the auditory stimulus? I don't see any specific info in the grant or in the abstract (and subsequent paper) that you referenced or in my searching. Before we start a deep dive on this, it would be extremely helpful to know if you already had a plan.

Thanks,

[REDACTED]

From: [REDACTED]
Date: Friday, September 8, 2023 at 10:19 AM
To: [REDACTED]
Subject: Re: Auditory stimulus delivery

This should work directly (click on link)

[Sound \(metasystems.top\)](http://metasystems.top)

On 9/8/2023 11:16 AM, [REDACTED] wrote:

Excellent. How can we get the program?

Yes, I believe the machine is working, we are waiting for final animal approval.

From: [REDACTED]
Date: Friday, September 8, 2023 at 10:31 AM
To: [REDACTED]
Subject: Re: Auditory stimulus delivery

The timing is programmed. The only thing that has to be determined is the dB, was not sure what it should be, depending on room size etc, should obviously be noticeable but not too loud, we need to figure out what it should be. The program runs by itself without a person, throughout the night. Just need to make sure that the computer won't go to sleep or shut down

On 9/8/2023 11:23 AM, [REDACTED] wrote:

Is there more to it than just playing and stopping a sound? How do you regulate the db, timing... I assumed there would be something automated so we wouldn't need to have staff in the room running the program all night.

Subject: Re: Auditory stimulus delivery
Date: Friday, September 8, 2023 at 10:59:13 AM Central Daylight Time
From: [REDACTED]
To: [REDACTED]

yes, the db will be set with the volume, which should be kept constant once it's decided

On 9/8/2023 11:56 AM, [REDACTED] wrote:

OK. Won't the db of the program depend on how the computer volume is set though?
Is there a way to change the timing if we want/need to?