

From: Mackar, Robin (NIH/NIEHS) [E]
Sent: Thu, 1 Feb 2024 16:08:31 +0000
To: Walker, Nigel (NIH/NIEHS) [E]
Subject: RE: [EXTERNAL] NTP Work on RF - Q from Louis
Categories: Me Only

Thanks. I just sent it to him.

Robin Mackar
NIEHS Office of Communications and Public Liaison
Robin.Mackar@nih.gov
[REDACTED]/cell

From: Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>
Sent: Thursday, February 1, 2024 10:55 AM
To: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

Works for me

From: "Mackar, Robin (NIH/NIEHS) [E]" <robin.mackar@nih.gov>
Date: Thursday, February 1, 2024 at 10:40 AM
To: Nigel Walker <walker3@niehs.nih.gov>, Mary Wolfe <wolfe@niehs.nih.gov>, Georgia Roberts <georgia.roberts@nih.gov>, Michael Wyde <wyde@niehs.nih.gov>
Cc: "Flowers, Christine B (NIH/NIEHS) [E]" <bruskec@niehs.nih.gov>
Subject: RE: [EXTERNAL] NTP Work on RF - Q from Louis

Thanks. This is what I will tell Louis:

Anything that will get published will be from the "feasibility studies" that we did to test the small-scale RFR exposure system.

No experiments have been conducted using 4G or 5G signals.

Robin Mackar
NIEHS Office of Communications and Public Liaison
Robin.Mackar@nih.gov
[REDACTED]/cell

From: Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>
Sent: Wednesday, January 31, 2024 2:46 PM
To: Wolfe, Mary (NIH/NIEHS) [E] <wolfe@niehs.nih.gov>; Roberts, Georgia (NIH/NIEHS) [E] <georgia.roberts@nih.gov>; Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>
Cc: Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>; Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

That's fine

Yes

Anything that will get published will be from the "feasibility studies" and all that work was with the "small chambers"

We only had "small chambers"...4 of them..that could do a max of 10 animals at a time, with one frequency/modulation at a time.

From: Mary Wolfe <wolfe@niehs.nih.gov>
Date: Wednesday, January 31, 2024 at 1:24 PM
To: Georgia Roberts <georgia.roberts@nih.gov>, Nigel Walker <walker3@niehs.nih.gov>, Michael Wyde <wyde@niehs.nih.gov>
Cc: "Flowers, Christine B (NIH/NIEHS) [E]" <bruskec@niehs.nih.gov>, "Mackar, Robin (NIH/NIEHS) [E]" <robin.mackar@nih.gov>
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

As I understand is this early work addresses feasibility as to whether we can carry out research to meet our goal. we have not data except from the *feasibility studies*.

Per Robin's question, which I address to my colleagues, is whether the response should be further revised to read, for clarity:

The work was done ~~both~~ to test the new exposure system using rats and mice and ~~to~~ assess the feasibility of measuring the impact of RFR exposure on behavior and stress, conducting real-time physiological monitoring including evaluation of heart rate, investigating whether RFR exposure induces heating, and evaluating further whether RFR causes DNA damage. After this work was completed and with consideration of the technical complexity and extensive commitment of resources, NIEHS scientists reevaluated the feasibility of conducting additional studies and the decision was made not to pursue additional experiments with this RFR exposure system. No experiments have been conducted using 4G or 5G signals.

From: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>
Date: Wednesday, January 31, 2024 at 1:19 PM
To: Wolfe, Mary (NIH/NIEHS) [E] <wolfe@niehs.nih.gov>
Cc: Roberts, Georgia (NIH/NIEHS) [E] <georgia.roberts@nih.gov>, Wyde, Michael

(NIH/NIEHS) [E] <wyde@niehs.nih.gov>, Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>, Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>

Subject: RE: [EXTERNAL] NTP Work on RF - Q from Louis

Thanks for sending a response for review.

I guess the one thing I'm still not clear on is what are we going to publish on website, per his question. *Feasibility testing results from the small chambers?*

Robin Mackar

NIEHS Office of Communications and Public Liaison

Robin.Mackar@nih.gov

984-287-3355/cell Private Info

From: Wolfe, Mary (NIH/NIEHS) [E] <wolfe@niehs.nih.gov>

Sent: Wednesday, January 31, 2024 12:59 PM

To: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>

Cc: Roberts, Georgia (NIH/NIEHS) [E] <georgia.roberts@nih.gov>; Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>; Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>

Subject: FW: [EXTERNAL] NTP Work on RF - Q from Louis

Robin,

Below is our draft response to LS's questions. Please let us know if you think it addresses them appropriately or if you have questions.

Thanks,

Mary

The work was done both to test the new exposure system using rats and mice and to assess the feasibility of measuring the impact of RFR exposure on behavior and stress, conducting real-time physiological monitoring including evaluation of heart rate, investigating whether RFR exposure induces heating, and evaluating further whether RFR causes DNA damage. After this work was completed and with consideration of the technical complexity and extensive commitment of resources, NIEHS scientists reevaluated the feasibility of conducting additional studies and the decision was made not to pursue additional experiments with this RFR exposure system. No experiments have been conducted using 4G or 5G signals.

On Jan 30, 2024, at 3:02?PM, Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov> wrote:

Hi. Can you help us answer Louis' questions below. Thanks.

Robin Mackar

NIEHS Office of Communications and Public Liaison

Robin.Mackar@nih.gov

cell Private Info

From: Louis Slesin / Microwave News <Louis@microwavenews.com>

Sent: Tuesday, January 30, 2024 2:15 PM

To: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>

Cc: Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>

Subject: Re: [EXTERNAL] NTP Work on RF

Hi Robin,

Thanks for this.

One clarification please.:

It is not clear from what you have posted on the NTP website (reprinted below) whether what will be published are the results of the *testing* of the new (smaller) exposure system or the *results of follow-up studies* using the new exposure system?

That is, can you tell me whether experiments were carried out with the new exposure system or did the NTP team complete the "feasibility testing" and then decide not to pursue additional experiments?

Am I correct that no experiments have been run using 4G or 5G signals?

I hope you can answer this soon.

Louis

Louis Slesin
Editor, *Microwave News*

On Jan 29, 2024, at 10:54?AM, Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov> wrote:

Hi Louis. Thanks for your patience.

Per your earlier questions, I wanted to bring your attention to the updated information about the status of this RFR work that is now on the NTP Web site.

In particular, please see the response to the question about future plans for studying cell phone RFR at <https://ntp.niehs.nih.gov/whatwestudy/topics/cellphones>

Also, per your question about manuscripts, we do anticipate having one manuscript published, but we are not sure of the timeline for that.

For your convenience, I pasted the status response from the website into this email as well:

“NIEHS scientists in the Division of Translational Toxicology, which supports the National Toxicology Program, undertook research to better understand some of the findings seen in the earlier Radio Frequency Radiation (RFR) rodent studies reported in NTP Technical reports TR-595 and TR-596.

The goals of this new research were to determine the impact of RFR exposure on behavior and stress, conduct real-time physiological monitoring, including evaluation of heart rate, investigate whether RFR exposure induces heating, and evaluate further whether RFR exposure causes DNA damage.

To accomplish these goals:

- 1. Researchers designed and developed a novel custom small-scale RFR exposure system, which included building, testing, and validating the exposure system. This new exposure system was based on the system used in the published NTP rodent studies.*
- 2. Researchers then conducted a series of in vivo rodent studies to assess the suitability of the new exposure system. These short-term studies were designed to allow a comparison between the new exposure system and the original exposure system.*

NIEHS has completed the feasibility testing of this small-scale RFR exposure system, and the results will be made publicly available and posted on this webpage when internal reviews are finished.

The research using this small-scale RFR exposure system was technically challenging and more resource intensive than expected. In addition, this exposure system was designed to study the frequencies and modulations used in 2G and 3G devices, but is not representative of newer technologies such as 4G/4G-LTE, or 5G (which is still not fully defined). Taking these factors into consideration, no further work with this RFR exposure system will be conducted and NIEHS has no further plans to conduct additional RFR exposure studies at this time.”

I hope this information is helpful to your story. Thanks again for reaching out and your continued interest in this work.

Robin Mackar

NIEHS Office of Communications and Public Liaison

Robin.Mackar@nih.gov

[REDACTED]/cell Private Info

From: Mackar, Robin (NIH/NIEHS) [E]

Sent: Wednesday, January 24, 2024 11:38 AM

To: Microwave News <Louis@microwavenews.com>

Cc: Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>; Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>

Subject: RE: [EXTERNAL] Re: NTP Work on RF

Hi Louis. Sorry about not acknowledging your initial email and our delayed response. We will be back in touch soon with a bit more info.

Robin Mackar

NIEHS Office of Communications and Public Liaison

Robin.Mackar@nih.gov

[REDACTED]/cell Private Info

From: Microwave News <Louis@microwavenews.com>

Sent: Wednesday, January 24, 2024 11:28 AM

To: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>; Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>

Cc: Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>

Subject: [EXTERNAL] Re: NTP Work on RF

Hello,

A week after my request, not even an acknowledgment.
Really?

LS

Louis Slesin
Editor, *Microwave News*

On Jan 19, 2024, at 1:10?PM, Microwave News <louis@microwavenews.com> wrote:

Hello again,

When might I receive a reply?

LS

Louis Slesin
Editor, *Microwave News*

On Jan 17, 2024, at 12:43?PM, Microwave News <louis@microwavenews.com> wrote:

Hi,

A belated Happy New Year to all.

I see you have revised your RF fact sheet.

It now states:

Is the NTP work on cellphone RFR completed?
Yes. NIEHS scientists conducted follow-up research to better understand some of the findings seen in the earlier RFR rodent studies.^{7,8}
A novel small-scale RFR exposure system was developed. The researchers tested the new exposure system using in vivo rodent studies. The research was technically challenging and more resource-intensive than expected. No additional RFR studies are planned.

What can tell me about **when and where** these results will be released?

Journals?

If so, how many papers are you preparing?

Conference abstracts?

Which meetings?

In-house reports?

Thank you,
LS

Louis Slesin
Editor, *Microwave News*

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From: Wolfe, Mary (NIH/NIEHS) [E]
Sent: Tue, 30 Jan 2024 21:15:15 +0000
To: Walker, Nigel (NIH/NIEHS) [E]; Wyde, Michael (NIH/NIEHS) [E]; Roberts, Georgia (NIH/NIEHS) [E]
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

Here is text on the website, which answers Louis' questions:

- Researchers then conducted a series of in vivo rodent studies to assess the suitability of the new exposure system. These short-term studies were designed to allow a comparison between the new exposure system and the original exposure system.

NIEHS has completed the feasibility testing of this small-scale RFR exposure system. The website text does not go beyond to talk about "exploratory work"

From: Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>
Date: Tuesday, January 30, 2024 at 4:11 PM
To: Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>, Roberts, Georgia (NIH/NIEHS) [E] <georgia.roberts@nih.gov>, Wolfe, Mary (NIH/NIEHS) [E] <wolfe@niehs.nih.gov>
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

I'd edit this to

The experiments that were conducted were designed to both test the new exposure system using rats and mice as well as including exploratory work to include additional endpoints such as behavioral and physiological changes. After the studies were completed and with consideration of the intensity of technical complexity and the extensive commitment of resources, the NTP team reevaluated the feasibility of conducting additional studies and the decision was made to not pursue additional experiments. ~~Efforts will be refocused in other areas where contributions can be made to understanding the potential effects of RF exposure on public health.~~
No experiments have been conducted using 4G or 5G signals.

From: Michael Wyde <wyde@niehs.nih.gov>
Date: Tuesday, January 30, 2024 at 4:03 PM
To: Mary Wolfe <wolfe@niehs.nih.gov>
Cc: Nigel Walker <walker3@niehs.nih.gov>, Georgia Roberts <georgia.roberts@nih.gov>
Subject: RE: [EXTERNAL] NTP Work on RF - Q from Louis

I wanted to reply within the group to see if there are any comments prior to responding to OCPL.

My proposed response:

The experiments that were conducted were designed to test the new exposure system using rats and mice. After the studies were completed and with consideration of the intensity of technical complexity and the extensive commitment of resources, the NTP team reevaluated the feasibility of conducting additional studies and the decision was made to not pursue additional experiments. ~~Efforts will be refocused in other areas where contributions can be made to understanding the potential effects of RF exposure on public health.~~

No experiments have been conducted using 4G or 5G signals.

From: Wolfe, Mary (NIH/NIEHS) [E] <wolfe@niehs.nih.gov>
Sent: Tuesday, January 30, 2024 3:12 PM
To: Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov>
Cc: Walker, Nigel (NIH/NIEHS) [E] <walker3@niehs.nih.gov>; Wyde, Michael (NIH/NIEHS) [E] <wyde@niehs.nih.gov>; Flowers, Christine B (NIH/NIEHS) [E] <bruskec@niehs.nih.gov>; Roberts, Georgia (NIH/NIEHS) [E] <georgia.roberts@nih.gov>
Subject: Re: [EXTERNAL] NTP Work on RF - Q from Louis

Michael will reply later today; adding Georgia
Sent from my iPhone

On Jan 30, 2024, at 3:02 PM, Mackar, Robin (NIH/NIEHS) [E] <robin.mackar@nih.gov> wrote:

Hi. Can you help us answer Louis' questions below. Thanks.

Robin Mackar

NIH/NIEHS Office of Communications and Public Liaison

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[REDACTED]/cell Private Info

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[REDACTED]/cell Private Info

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Louis Slesin
Editor, *Microwave News*

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