

To: 5.1.2e 1 5.1.2e [5.1.2e @rivm.nl]
From: 5.1.2e
Sent: Sat 12/19/2020 12:57:09 PM
Subject: Re: Protein microarray for SARS-CoV2 serology
Received: Sat 12/19/2020 12:57:29 PM
[SPECIFIC AIMS FINAL-4ALTERNATIVE.docx](#)

Dear 5.1.2e

I hope that you are keeping safe. As promised, please find the Specific Aims (one page) of the proposed NIH R21 grant application. The deadline is mid February 2020. I hope that by mid January I have completed the Research Plan (six pages) with your input.

Please note that I have decided to include a prospective study design to make the proposal stronger. Perhaps we could start with a cross sectional survey with about 1000 people with samples to be collected during 2021/2022; then identify those without evidence of SARS CoV2 infections and prospectively follow those with crossreactive antibodies and those without crossreactive antibodies for 12 months or more while monitoring for new SARS CoV2 infections. At the end of follow up we would compare both groups for the incidence/prevalence of COVID19 to assess if crossreactive antibodies are protective. What do you think?

The sample size will need to be determined by a statistician.
 There is a Figure 1 to be inserted in the Specific Aims.

I look forward to your suggestions and comments.

Best regards

5.1.2e

On Tue, Dec 1, 2020 at 2:20 PM 5.1.2e 1 5.1.2e < 5.1.2e @rivm.nl> wrote:

Hi,

5.1.2b

With respect to meta-data:

Depends on the target viruses.

Minimum set would include but please add/remove: gender, age, city/area of residence,.

Nice to know: vaccination history (important for flaviviruses (think yellow fever vaccination),known past infections, co-morbidities

Looking forward to a fruitfull collaboration!

Best wishes 5.1.2e

From: 5.1.2e < 5.1.2e @gmail.com>

Sent: maandag 30 november 2020 12:05

To: 5.1.2e 1 5.1.2e <5.1.2e@rivm.nl>

Subject: Re: Protein microarray for SARS-CoV2 serology

Dear 5.1.2e

5.1.2b

I will start working on the proposal in the second week of December. By Christmas I will share with you the Specific Aims for your perusal and input.

I also agree about including coronaviruses, influenza and arboviruses on a single slide. What kind of metadata should we collect?

Regards

5.1.2e

On Sat, 28 Nov 2020, 13:55 5.1.2e 1 5.1.2e, <5.1.2e@rivm.nl> wrote:

Dear 5.1.2e

My apologies for the delay in our response.

Yes we can do DBS, no problem.

The best way to go forward is to send the samples to RIVM for analysis. We would advice to test all samples in a dilution series of 4, so we can determine titers to the various antigens on the slides and see the differences between antigens. However, this would make the work more expensive than testing only one dilution.

5.1.2b

We could include coronaviruses, influenza viruses and arboviruses on a single slide, providing us with a lot of data to analyse if you have the accompanying metadata in place. 💎

Looking forward to hear from you 5.1.2e

From: 5.1.2e <5.1.2e@gmail.com>
Sent: woensdag 11 november 2020 11:13
To: 5.1.2e 1 5.1.2e <5.1.2e@rivm.nl>
Cc: 5.1.2e <5.1.2e@rivm.nl>; 5.1.2e <5.1.2e@rivm.nl>; 5.1.2e
<5.1.2e@rivm.nl>
Subject: Re: Protein microarray for SARS-CoV2 serology

Dear 5.1.2e

Thank you for your very positive response to my request for a collaboration on HCoV and SARS CoV2 serology using the array technology. I think it would be best and easiest if we send the samples to you.

5.1.2a

5.1.1c

Please let me know what you think and also if you know of any other grant opportunities..

Best regards

5.1.2e

What we can do

On Tue, Nov 10, 2020 at 6:56 PM [REDACTED] <[REDACTED]@rivm.nl> wrote:

Dear [REDACTED]

Thank you for your interest in our work with the array technology.

We are very much interested to collaborate and join efforts in a grant proposal.

There are several options:

- a. The easiest: you ship samples to us for us to analyse
- b. We ship array slides to you for you to use according to our protocols and depending on the equipment in your lab you either read the fluorescence in your lab or you send the slides back to us for scanning.

The assay is not related to Luminex technology.

Please let us know how you envisage to proceed and what the timeline would be,

Best wishes [REDACTED]

From: [REDACTED] <[REDACTED]@gmail.com>
Sent: dinsdag 3 november 2020 10:06
To: [REDACTED] <[REDACTED]@rivm.nl>
Subject: Protein microarray for SARS-CoV2 serology

Dear [REDACTED],

I have read with great interest your interesting paper on the use of a multiplex approach for COVID-19 serology using a protein microarray. My team in Uganda is planning to write an NIH grant to undertake large scale surveillance studies for IgG antibodies against human coronaviruses and SARS-CoV2 using pre-pandemic sera and sera collected now. The protein microarray has great promise for use under these conditions.

Are these microarrays available for distribution to collaborators? Would you be interested in a collaboration with my lab on such a project. We could send you samples for analyses or you could send us the microarrays and our collaborators with a Luminex platform could undertake the serology. Can the arrays be analyzed on the Luminex?

Please let me know what you think.

Best regards

5.1.2e

5.1.2e

Med Biotech Laboratories

5.1.2a

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