Re: SPAN: TTC analysis

From: Karisma A Nagarkatti I nagarkat@usc.edu

Thursday, Jun 24, 8:22

ΑМ

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu, cayata@mgh.harvard.edu |

CAYATA@mgh.harvard.edu

Cc: Jessica Lamb | lambj@usc.edu

Hi Drs. Ayata and Cabeen,

I wanted to follow up on Dr. Ayata's announcement last week that sites will be provided with a online tool to outline some TTC scans. Please let me know when this is available and I will send it out with the instructions that you provide. Dr. Lyden has made a draft email below, please edit as needed. Thanks for your help!

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Many thanks,

The CC"

Thanks, Karisma

From: Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

Thursday, Jun 24, 8:25 AM

To: Karisma Nagarkatti (USC) | nagarkat@usc.edu

Cc: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu, Jessica Lamb (USC) | lambj@usc.edu

Thanks, Karisma.

Ryan, I think we need together on with this... do you need more time to implement the online tool?

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From: Karisma A Nagarkatti I nagarkat@usc.edu

Thursday, Jun 24, 11:22 AM

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From: Ryan Cabeen | ryan.cabeen@loni.usc.edu

Thursday, Jun 24, 12:52

PM

Cc: Jessica Lamb (USC) | lambj@usc.edu

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Sounds great.

Karisma,

Let's send that email message to the site PIs so they identify the local staff who will do the measurements.

They should send a name and email address.

Let me know if issues...

Thanks!

Cenk

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Thursday, Jun 24, 1:20 PM

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Thank you very much for your help Ryan! The CC greatly appreciates your efforts!

Thank you,

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Monday, Jun 28, 4:54 AM

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"Dear Colleagues

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Many thanks,

The CC"

Thanks,

Karisma

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From: Ryan Cabeen | ryan.cabeen@loni.usc.edu

Monday, Jun 28, 9:06 AM

To: Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

Great, sent a calendar invite, and here's the zoom:

Topic: Ryan Cabeen's Zoom Meeting

Time: Jun 30, 2021 12:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

usc.zoom.us/j/3214616632

Meeting ID: 321 461 6632

One tap mobile

+16699006833,,3214616632# US (San Jose)

+12532158782,,3214616632# US (Tacoma)

Ryan P. Cabeen, PhD

Chan Zuckerberg Imaging Scientist

Assistant Professor of Research Neurology

Laboratory of Neuro Imaging

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University of Southern California

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Tel: (323) 44-BRAIN

Email: rcabeen@loni.usc.edu

Web: <u>cabeen.io</u> www.ini.usc.edu

From: CAYATA@mgh.harvard.edu

Monday, Jun 28, 9:03 AM

Wed, noon to 2p est is great. Please send link?

tx

С

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From: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Monday, Jun 28, 11:57 AM

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Sounds good, maybe sometime in these windows?

Wed noon-2pm eastern Wed 3-6pm eastern Fri noon-6pm eastern

I've processed the cases on the IDA as of last week, and I'll see if there are any more recent cases up since then.

Ryan P. Cabeen, PhD
Chan Zuckerberg Imaging Scientist
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University of Southern California
2025 Zonal Ave.

Los Angeles, CA 90033

Tel: (323) 44-BRAIN

Email: rcabeen@loni.usc.edu

Web: http://cabeen.io

From: CAYATA@mgh.harvard.edu

Monday, Jun 28, 4:54 AM

Ryan,

Can we find a time this week to go over what has been uploaded for rat, aged and obese mice? We need to bring together the MRI group next week to vet the stage 2 protocol. All you need to do is process the pilot aged and obese mice MRI using the automated segmentation, and check the quality of rat MRIs for any issues that might get in the way of automated segmentation when you retrain the neural net for rats. Thanks,

С

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username: span

password: v45nLSXrTYFBmqoX

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From: CAYATA@mgh.harvard.edu

Thursday, Jun 24, 8:25 AM

Thanks, Karisma.

Ryan, I think we need together on with this... do you need more time to implement the online tool?

Thanks!!

Cenk

From: Karisma A Nagarkatti I nagarkat@usc.edu

Thursday, Jun 24, 11:22 AM

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From: Ryan Cabeen | ryan.cabeen@loni.usc.edu

Tuesday, Jun 29, 4:34 PM

To: Karisma Nagarkatti (USC) | nagarkat@usc.edu

Cc: Jessica Lamb (USC) | lambj@usc.edu, Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

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Let me know if issues...

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From: Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

Tuesday, Jun 29, 4:36 PM

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Cc: Karisma Nagarkatti (USC) | nagarkat@usc.edu, Jessica Lamb (USC) | lambj@usc.edu

Thanks, Ryan, I will try and let you know.

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Assistant Professor of Research Neurology

Laboratory of Neuro Imaging

USC Stevens Neuroimaging and Informatics Institute

Keck School of Medicine of USC

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2025 Zonal Ave.

Los Angeles, CA 90033

Tel: (323) 44-BRAIN

Email: rcabeen@loni.usc.edu

Web: <u>cabeen.io</u> <u>www.ini.usc.edu</u>

From: CAYATA@mgh.harvard.edu

Thursday, Jun 24, 12:54 PM

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Let's send that email message to the site PIs so they identify the local staff who will do the measurements. They should send a name and email address.

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Cenk

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From: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Thursday, Jun 24, 3:52 PM

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From: Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

Thursday, Jul 1, 3:01 AM

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

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From: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Thursday, Jul 1, 12:27 AM

External Email - Use Caution

Los Angeles, CA 90033

Will do, and I'll wait for those additional MGH cases so they are included

Ryan P. Cabeen, PhD

Postdoctoral Scholar - Chan Zuckerberg Imaging Scientist
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From: Ryan Cabeen | ryan.cabeen@loni.usc.edu

Tuesday, Jul 6, 10:17 PM

To: Karisma Nagarkatti (USC) | nagarkat@usc.edu

Cc: Jessica Lamb (USC) | lambj@usc.edu, Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

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Wednesday, Jul 7, 8:36 AM

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Cc: Jessica Lamb | lambj@usc.edu, Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu

Hi Ryan,

I uploaded the TTC data that was sent by Dr. Qin on 6/30. Please see link attached drive.google.com/drive/folders/10zV1CcL0Qel15qYKA4YqN J5mdw1x-F9?usp=sharing

Let me know if you need anything else

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Cc: Jessica Lamb | lambj@usc.edu

Hi Ryan,

Is this ready to distribute? Are you able to send a template email with instructions for the investigators. I received the final list from the site investigators who will be analyzing using the online tool and I can distribute once this is ready to send.

Thank you for your help, we really appreciate it! Thanks,

Karisma

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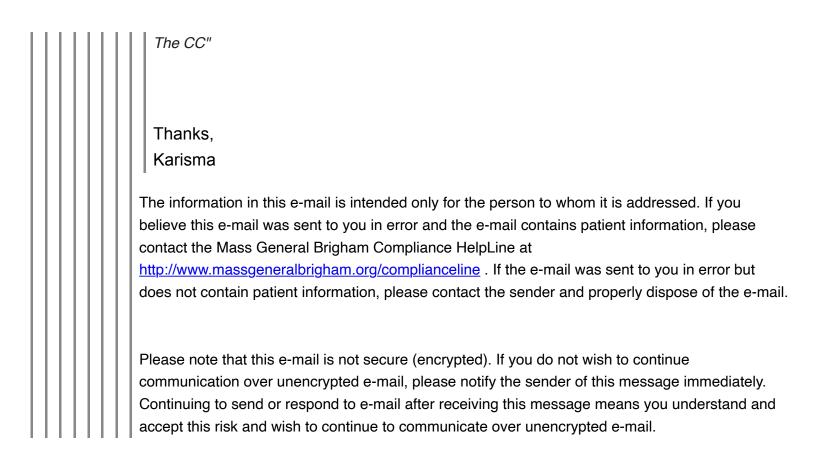
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Many thanks,



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Wednesday, Jul 7, 10:57 AM

To: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu

Cc: Ayata, Cenk, M.D. | CAYATA@mgh.harvard.edu, Jessica Lamb | lambj@usc.edu

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Thanks, Karisma

From: Ryan Cabeen | Ryan.Cabeen@loni.usc.edu To: Karisma A Nagarkatti | nagarkat@usc.edu Wednesday, Jul 7, 10:47 AM

Sounds good, thank you!

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I've updated the annotation website to use the new cases, so I think we are ready to share with the raters! Copied below please find a draft template email, which can be updated as you all see fit:

<quote>
Dear <name>,

We are writing to kindly ask for your help in validating our image analysis pipeline by providing manual segmentations of brain and lesion extent from our TTC-stained tissue images. We have built an online tool for drawing outlines, and there are about 140 images that we ask each site to help annotate. You can follow the link below and use the given username and password to login:

<url> <username>:<password>

There is an instructional video on the site that describes and demonstrates how to use the tool. Please use your own best judgement in defining the brain and lesion outlines. If there is no lesion, you can skip that label, but every image should have at least a brain label. You may also label any other features that you find relevant using a custom label. Your work will be saved automatically to the server, so you won't have to worry about sending results back to us. Please let the coordinating center know when you are finished with the task. It should take 30 seconds to 1 minute per image, so the task should take less than two hours. If you leave the site, you can return and find your previous work, but you will need to skip ahead to the image where you left off.

If you have any questions you can email Ryan Cabeen at <u>rcabeen@loni.usc.edu</u>. Your help with this is very much appreciated!

Best wishes, the CC </quote>

Then, here are the unique url/username/password that can be pasted in for each of the six raters:

www.spinhub.io/span-colab-10081 span:Q2lvwmxwQjs0RLLa www.spinhub.io/span-colab-11183 span:5qzSAV3lzDEzR4QU www.spinhub.io/span-colab-19588 span:c8S4gqC2UI62R35j www.spinhub.io/span-colab-2859 span:AhiuEUR0glBb4MdO www.spinhub.io/span-colab-24842 span:q1KdsT4nYt8dCFih www.spinhub.io/span-colab-25078 span:MiEDHXEc5oQ5Upl0

Please let me know if you need anything else.

Cheers,

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Thursday, Jun 24, 3:52 PM

External Email - Use Caution

Thanks Karisma! Yes, I'll need a bit more time to polish and test things, but it's nearly there. The last remaining pieces I see on my end are: to create a training video, to split the data up for each rater, and then do a final test session. I'll circle back after that, should be a few more days. By the way, here's a link to the current version:

http://www.spinhub.io

username: span

password: v45nLSXrTYFBmqoX

If you'd like to experiment with the test site above and have any feedback, I'm all ears. The first two images are cartoons I'll use for the tutorial (to be removed before sharing with the sites), and otherwise all of the TTC images are online there now, some of which have annotations that I made.

What I'm imagining is that I can create a separate unique version of this website for each rater, and then the CC can email each rater/site their assigned website url/credentials. Then, I'll be able to access their annotations from the server myself, so their only task would be the labeling and then letting the CC know when they are done. How does that sound?

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Thursday, Jun 24, 8:25 AM

Thanks, Karisma.

Ryan, I think we need together on with this... do you need more time to implement the online tool?

Thanks!!

Cenk

From: Karisma A Nagarkatti I nagarkat@usc.edu

Thursday, Jun 24, 11:22 AM

External Email - Use Caution

Hi Drs. Ayata and Cabeen,

I wanted to follow up on Dr. Ayata's announcement last week that sites will be provided with a online tool to outline some TTC scans. Please let me know when this is available and I will send it out with the instructions that you provide. Dr. Lyden has made a draft email below, please edit as needed. Thanks for your help!

"Dear Colleagues

The CC would like to follow up on the MRI validation plan. As you know, we have 20 subjects that have been scanned with MRI and subject to TTC imaging. Now we will run the MRI scans through the LONI pipeline. To quantify the TTC images, we will use an online tool that allows us to easily collect measurements from multiple users. Please identify one rater from your site to do the TTC outlining. Each rater will get 12 or so brains to analyze.

Many thanks,

The CC"

Thanks,

Karisma

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Mass General Brigham Compliance HelpLine at

<u>http://www.massgeneralbrigham.org/complianceline</u>. If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

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