

# SOW June 19, 2020

Hi Ryan,

On today's discussion with Pat the end result was him asking us to put in a sub award amendment for the additional work. The amendment should be comprised of a SOW and an associated budget. The SOW needs to be 1/2 page or less. I've sketched out a start on the SOW for your review and input. What should be the budget?

## SPAN Statement of Work Amendment

LONI will provide a secure, stable platform for sites to upload and share MRI scan data, build workflows to perform image quality assessment and image analysis and integrate quality assessment and image analysis results within the central data repository. This effort will encompass:

- Secure central storage of MR scans uploaded into the repository
- Automated queuing and import into the LONI Pipeline environment of newly uploaded MR scans
- [Something about the QC processing and output]
- [Something about the image analysis process and output]
- Access management system will allow study leadership to designate access on a per-study-wide basis.

## Sample size:

Pilot study: MR scans from approximately 30 animals will form the basis for operationalizing the workflows with a turn-around time of [do we want to specify or just leave this bit out?]. Modifications to the workflows will be introduced iteratively during this stage with the goal of finalizing both QC and analysis workflows for the subsequent stage.

Production stage: Scans from up to 3,000 animals will be processed ????

Thanks,

Karen

## SPAN Statement of Work Amendment

LONI will provide a secure, stable platform for sites to upload and share MRI scan

data, build workflows to perform image quality assessment and image analysis, and integrate quality assessment and image analysis results within the central data repository. This effort will encompass:

- Secure central storage of MR scans uploaded into the repository and associated results from data analysis
- Automated queuing and import into the LONI Pipeline environment of newly uploaded MR scans for image analysis and feedback of quality control metrics
- A quality control pipeline to report whether expected data was found and report summary measures of image noise, contrast, and inhomogeneity
- An analytics pipeline to produce measures of anatomical properties such as lesion volume and parameter statistics, per-hemisphere tissue volumes, midline shift, and hemorrhage
- An access management system will allow study leadership to designate access on a per-or study—wide basis.

The study will start with a pilot phase in which approximately 30 animals will be scanned across the study's imaging centers. This will form the basis for operationalizing the workflows, and modifications to the workflows will be introduced iteratively during this stage with the goal of finalizing both QC and analysis workflows for the subsequent stage. We plan to devote substantial attention and rapid feedback during this time to ensure this is accomplished satisfactorily.

Subsequently, the platform will be available for use in the production stage of the study, in which the bulk of the data will be acquired and analyzed. While the system will be automated, we will also have a research technician available for support and routine checks of the system.

With SPAN team-members, we will work to author a manuscript reporting the details of our platform and any novel findings we make along the way.