**MR Imaging Teleconference Minutes 1/21/2020**

**1/21/2020-- MRI Core Call Agenda Items: 1/21/2020 -- Minutes**

1. **Review Minutes from the December Call**

No comments, will post to LONI website.

1. **MRI Analysis Processing Report – Update missing data for all labs - Subject ID and Date (Harvey)**

Working on spreadsheets, in the next 2 weeks those will be sent to individual labs by email.  Will look at summary lists on the next call.

1. **ADNI3 Memo: ADNI Acknowledgement List**

Updated

**MRI Core Leaders and Key Personnel**

Clifford R. Jack, Jr., MD Mayo Clinic, Rochester (Core PI)

Arvin Forghanian-Arani, PhD Mayo Clinic

Bret Borowski, RTR Mayo Clinic

Chad Ward, Mayo Clinic

Christopher Schwarz, PhD Mayo Clinic

David Jones, MD Mayo Clinic

Jeff Gunter, PhD Mayo Clinic

Kejal Kantarci, MD Mayo Clinic

Matt Senjem, MS Mayo Clinic

Prashanthi Vemuri, PhD Mayo Clinic

Robert Reid, PhD Mayo Clinic

Nick C. Fox, MD, University College London

Ian Malone, PhD University College London

Paul Thompson, PhD USC School of Medicine

Charles DeCarli, MD UC Davis

Alexander Knaack, M.S UC Davis

Danielle Harvey, PhD UC Davis

Evan Fletcher, PhD UC Davis

Duygu Tosun-Turgut, PhD, PhD UCSF

Karen Crawford, USC School of Medicine

Paul A. Yushkevich, Ph.D University of Pennsylvania

Sandhitsu Das, PhD University of Pennsylvania

ATRI would like updated list.  Requested ADNI MRI Core PIs to look over and send updates back to Bret.

1. **ADNI3 Harmonization Paper Outline (Attachment - Gunter)**

Dr. Gunter reviewed outline document.

Comment: Fox/DeCarli/Thompson -  Include Visual QC of processing as well.

Comment: Jack - Traditional format doesn’t need to be followed.

Comment: Jack - Don’t need to necessarily show results just description of what is being done, or no need to show correlation between analysis.  No formal data analysis.

Comment:  Fox - What is the key purpose of the paper?   Seems like a guide.  Gunter - Should we separate out protocol/acquisition (part 1) and harmonization (part 2)?

Consensus.  Break into two and discuss new outlines on the next call.

1. **3D ASL vs FDG and 3D ASL vs early frames.**

To help justify for ADNI Renewal, the MRI Core needs to make recommendations for ASL.

No 2D ASL?  Does 3D ASL give somewhat compelling results when compared to FDG or Amyloid PET

Duygu will work with the Bill Jagust group to help continue analysis into ASL vs. PET

1. **ADNI  Renewal (Dr. Weiner Email)**

**Sent:** Monday, January 6, 2020 5:27 PM

**Subject:** [EXTERNAL] Planning for the renewal of ADNI

Friends: I hope you had a good holiday.

We should begin planning for the competing renewal of ADNI, which would probably be submitted in Sept 2021. Although this is a long way off it takes time to identify all the issues, and develop a consensus between the co-investigators, the PPSB, and the NIA. We are in a rapidly changing field, and we need to continue several work streams for discussion.

I’m hoping that during our monthly calls, each Core can bring up ADNI renewal planning, after they report on current progress.  What follows is some of the areas which need discussion:

Overall: What are the major goals for the ADNI renewal? What are the questions/ problems we propose to address:

Certainly one major issue is, what should the ADNI renewal be composed of: 1) continuation of the data , biofluid, and cell repositories (little doubt of this). 2) continue to follow rollovers from ADNI 3?  3) enroll new participants?

Clinical Core: What is the major goal: Do we focus on planning for prevention trials?  Do we enroll any new MCI or AD? How many roll overs can we expect? Should we begin to ask the sites to ask ADNI3 participants about their level of interest to continue in a renewal? Do we consider enrolling people who participated in treatment trials? What if disease modifying treatments are approved by FDA, do we exclude?  How do we do better with minority enrollment?  Should we partner with HRS for example to improve generalizability?  Should we continue to exclude co pathologies especially cerebrovascular disease?  What about digital at home assessments? Continue with Cogstate? Add anything new?  (should be coordinated with the PPSB clinical end points working group)

MRI Core: Do we continue all current sequences? Do we continue with all current MRI analysis groups? What do we change? (should be coordinated with the PPSB imaging working group)

PET Core: Given the increasingly competitive landscape with current tracers, and thre likelihood of profits for amloid imaging if new treatments are approved, do we continue with current ligands?  Any progress with an inflammation tracer? Any other new tracers on horizon?  Are we doing the optimum types of data processing between Berkeley and Banner?  Do we expand the   early Frames study?  (should be coordinated with the PPSB PET working group)

Biomarker Core: Given the increasingly competitive landscape of biofluid analysis, do we continue with Roche for CSF?  What plasma assays should be done?  (should be coordinated with the PPSB Biofluids working group)

Genetics Core: What changes should be made?

Neuropath Core: Given the interest in NIA in more Neuropath,  should the role of the NP core be expanded?

Biostat and Informatics Cores, and Publications Committee:  What plans for doing things differently?

Feel free to reply to this email. Hopefully we can be discussing all this, next Monday on the ADNI Excom.  Furthermore, there will be an ATRI meeting in San Diego with important ATRI site PIs and the ADNI renewal should be on that agenda for discussion, especially the Clinical Core aspects.  Finally, the ADNI weekend with the PPSB is in Washington DC on May 3-4 don’t forget to mark your calendars!  I’m hoping that during the ADNI Steering Committee presentation that each Core leader will summarize their ADNI accomplishments, especially for  ADNI 3, and devote considerable time to discussing the various options for their Core’s role in the renewal application.

Needless to say, the NIA and our industry partners will all be there. Following the Steering Committee meeting we’ll have a Scientific Advisory Board discussion of all theseissues.  I’m sure that we’ll be collectively proposing an exciting continuation of ADNI.

Feel free to email any comments, suggestions. What did I leave out? We all do this together.

All the best

Mike

*MRI Core: Do we continue all current sequences? Do we continue with all current MRI analysis groups? What do we change? (should be coordinated with the PPSB imaging working group)*

Important to look at the MRI Core questions above so that the ADNI MRI Core can work on justifying what should be in/out for the ADNI Renewal.

Fox - Have a MRI Core Leader only call to discuss ADNI Renewal.  Will only have ½ call in February and send ½ will be ADNI4 Planning

1. **DTI Harmonization Presentation (Thompson - Postponed until February Call)**

Postpone until March,

1. **Philips Enhanced DTI discussion (Mayo/ Talia Nir from Dr. Thompson’s group)**

Reminder - artifacts that look like venetian blinds at 4X multiband.

To correct Talia needs slice timing from the scanner as they are not in the DICOM header.

Reid – Looking at using a reduced protocol with 3X multiband, Rob will work offline with Philips and Talia to see getting it form Philips is possible.

NOTES:  Spring Steering Committee Meeting – First week in May.  Dr. Jack will need a one or two page PowerPoint reviewing analysis from each paid analysis group prior.