PET New Project Checklist

Database Account

- Most of the steps needed to initiate studies in the ALBMC are conducted and/or tracked through the <u>ALBMC database</u>. Click <u>here</u> to request a database account. Requests are typically processed within 48 hours.
- 2. Once your database account is approved, you should log into the database and carefully read the material presented there.

ALBMC Approval

- New projects must be submitted to the <u>ALBMC database</u>. It should be submitted under the primary Pls account (pick one Pl and stick with that Pl throughout the setup process). This should be the Pl who will receive the data and whose name will appear on the scheduling calendar.
- 2. After logging in, click on "Projects" on the left side of the page.
- 3. If this is a completely new project choose "Add New Project."
- 4. If you are adding a PET component to an already approved project choose "Use as a Template for New Project," and make all necessary changes.
- 5. After clicking "submit to database for storage," click "Add" at the bottom. You will then see another tab that says "submit for review." To submit this project for review, please select and upload a file that provides a one to five page scientific summary of your project. Uploaded files must be in PDF, RTF, plain text or Microsoft Word format.
- 6. After the submission is complete your project will be reviewed. The reviewers may respond with questions that will need to be answered before the study can be approved.
- 7. Scheduling tickets are generally issued shortly after a project has been approved. If all items on the Safety Training, IRB and Financial checklists detailed below have been completed, you will be able to schedule studies through the database once scheduling tickets have been issued.
- 8. After your project is approved and your scanning protocol has been established please complete a MRI Scanner Protocol Form.

IRB & MRSC/RDRC Approval

- Please make sure your project is also submitted to the <u>Institutional Review Board (IRB)</u>, and the Medical Radiation Safety Committee (MRSC)and/or Radioactive Drug Research Committee (RDRC). All applications must be approved before scans may begin.
 - Note: FDG scans are not considered investigational, so you do not need to complete the RDRC part of the MRSC application.
- It is recommended that you review your IRB materials with one of our technologists before submitting them to the IRB review process. This will reduce the likelihood that you will need to resubmit the IRB materials at a later date to conform to ALBMC requirements.
- 3. Once you have IRB approval, you should <u>enter your consent form and IRB approval information</u> in the <u>ALBMC database under the same Primary Pl's account.</u>

4. All consent forms and IRB approval notices must be reviewed by ALBMC staff prior to scanning. Once your protocol has been accepted at the ALBMC, please submit an electronic copy of the IRB approval notice and consent form(s) to Mary Susselman for review.

Safety Training Checklist

Click <u>here</u> for detailed information on safety training.

Click here for detailed information on MRI safety training

PET Acquisition

Scheduling:

If all items on the above checklists have been completed, you will be able to schedule studies through the <u>ALBMC database</u>.

Scanning Protocol:

To create a PET scanning protocol, please contact Mary Susselman (x64291) to set up a protocol meeting. Things to have ready/to think about before this meeting:

- 1. Which Radiopharmaceutical(s) are you injecting?
- 2. What is the dose (mCi) amount for the PET scan?
- 3. How many injections will there be?
- 4. Angiocatheter or butterfly needle?
- 5. Are there any blood draws associated with the PET scan? (i.e. is this study qualitative or quantitative)
- 6. Do you want to use a fiducial marker to label the left/right side of the brain?
- 7. Will there be an uptake period outside of the scanner? If yes, how long?
- 8. Which attenuation correction map do you want to use
 - 1. MRAC_Brain_HiRes
 - 2. MRAC_UTE
- 9. How long is the emission scan? How many emission scans?
- 10. Do you want to use sinogram or list mode for the emission(s) scan?
- 11. Do you want it reconstructed into frames? (i.e. 30min scan could be 5 frames x 6min each)
- 12. Output image type?
 - 1. both or uncorrected
- 13. Recon method?
 - 1. HD PET
 - 2. 3D Iterative
 - 3. Filtered Backprojection
- 14. How many iterations? (scanner has a set # of subsets = 21)
- 15. Do you want any X or Y offsets?
- 16. Matrix size?
 - 1. 128, 172, 256, 344, 512
- 17. What zoom do you want to use? (1.0 is standard)
- 18. Filter?
 - 1. All-pass
 - 2. Boxcar

- 3. Butterworth
- 4. Gaussian
- 5. Hamming
- 6. Hann
- 7. Parzen
- 8. Shepp
- 19. FWHM?
 - 1. 2.0 is the default
- 20. Are there any special needs regarding your project?
- 21. Who needs access to the scan data?
- 22. Who needs access to the building?

Radiopharmaceutical Prescription

All PET subjects must have a valid radiopharmaceutical prescription for each PET study.

1. Prescription requests (method is currently being updated)

Building and Data Access

- Bioreader access to the scanners is limited to individuals who have been fully safety certified and who have active MRI protocols. Please submit an <u>access request</u> <u>form</u> to <u>Ludmila Budilo</u> for building and scanner access.
 - Access areas include the 3T scanner, mMR scanner, changing room, prep room or NML lab, as appropriate for conduct of approved protocols.
 - Please note, <u>volunteers</u> must be processed through the UCLA Hospital Volunteer Office on-boarding program and will only be given limited access upon completion.
- 2. For data access, please submit a <u>Network Access Form</u> to <u>James Widanta</u> to request a network account.

Financial

- 1. Click here for mMR pricing.
- 2. Fund numbers to pay for scans must be on file and verified as a prerequisite for scanning. Fund transfers must be approved by the fund manager before scanning can begin. Tracking of fund numbers and fund transfers into an ALBMC credit account are handled through the <u>ALBMC database</u> where you will need to set up an external fund and a credit account <u>under the same Primary Pl's account</u>. For additional questions please contact <u>Ludmila Budilo</u>.