**AGENDA RED = in process**

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| **#** | **TOPIC** | **DESCRIPTION** | **OWNER** |
|  | “Always be SDing” | Currently: 4 PS19+ males, done on Sept 1st  On deck: 4x PS19+ DoB 7/7/17 aka 2mo on 9/7/17🡪SDC | Kaitlyn? |
|  | PS19 Chronic sleep disruption | **Have slides by Sept 8th**  AT100, Iba1, ThioS on 11mo, SDC3/5/6  2 mo PS19+ (adlib): is there AT8 in the brainstem?  LC injected mice: sack on Aug 9th & Aug 16th 🡪  Systematic tau pathology: AT8 where?, AT100 where?, MC-1 where?, ThioS where?  FIJI for IF co-localization cell counting  longitudinal rec: do postproc/spindle detect, add WT controls. Surgery done (6x sex matched), now the recs.  SDC rec: improve automated staging: remove spurious NREM/REM during extended W episodes | Ward/Korey |
|  | cFos staining | 10hr SD 🡪 cFos  1 session RR 🡪 cFos  sleep 🡪 cFos  stim 40Hz 1 hr 🡪 cFos  MTA UNC Viral Vectors: get AAV-halo, AAV | Ward |
|  | msSpindle-rotarod paper | manuscript outline (Target SLEEP?):   1. Spindle and slow oscillations 2. Spindle characteristics are not different in sleep after learning compared to baseline 3. Spindle occurrence is transiently elevated in early NREM sleep compared to baseline 4. Spindle-slow oscillation coupling with learning? Diff dist (learn vs bline; early vs late). 5. Spindle and slow oscillation associations with learning | Korey |
|  | rpS6 and rotarod paper | manuscript outline. IEG and rpS6 link? | Andrew |
|  | Gist learn: F-B rotarod | boost Ns for 10F SD, 10F SD, 10B  20 trials group: (10F,20 min break,10F, 10B?)  manuscript outline  cFos anterior cortex  inhibit PFC in NREM/REM/W…  Target: SciReports, BehaviorBrain, NB-LM | Ward |
|  | Optogenetics experiment | cFos pattern during SD  Test 40 Hz in W, NREM, REM  Test 1, 4, 8, 13 Hz in 3 states | Korey |
|  | Motor learning: tone reactivation | Do pilot run (5x/group).  ppt of results from Rebecca  consider single-subject exp design: record sleep, play tone recording during NREM sleep manually | Rebecca |
|  | Computed Tomography Imaging | lit search tau/vascular changes  send one WT, one 2mo SD WT  if works, try PS19 |  |
|  | IACUC | New IACUC for PS19 mice, sleep disrupt, food restrict for training (VR and mototrak) |  |
|  | huSpindle-tau paper | revise Andrew/Ricardo’s feedback, ApoE QA  discussion  spindle property literature search: mechanistically, how tau can alter density, duration. Ie. neuronal electrophysiological properties: resting membrane potential, input resistance, intrinsic excitability, and effects on T-type calcium channels and K+ channels that contribute to spindle generation  discussion | Korey |
|  | Boost sleep (ms models) | ~~SK2 overexpress:~~ [~~https://www.jax.org/strain/009602~~](https://www.jax.org/strain/009602)  Hmox-/-: <https://www.jax.org/strain/008660>  Sleepy gene: CRISPR gene edit, doi:10.1038/nature20142 |  |

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|  | GRANTS | **Andrew:** R01 human (@IRB approval), R01 mouse (@aims page)  **Korey**: BrightFocus Oct 13, F32 Dec 1, SRSF Dec 4. Draft an LC manipulation Aims page (spread, opto & DREADS oh my!) |  |
|  | Mouse VR Maze | Implant headposts (5x)  build forward rotation (locomotion)  test freely moving enclosure, avoid head fixation  train forward rotation  deliver peanut oil, tone with arduino @ end gate  test corridor  test VR-“open field”  Software:  UE4 to blink LED? | Korey |