**AGENDA RED = in process**

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| **#** | **TOPIC** | **DESCRIPTION** | **OWNER** |
|  | “Always be SDing” | On deck:  1x PS19+ 2mo, sacked 🡪 stain  4x PS19+ DoB 7/7/17 aka 2mo on 9/7/17🡪SDC | Kaitlyn? |
|  | PS19 Chronic sleep disruption | **Have slides by Sept 8th**  Iba1-DAB on cortex: floating sections, works?  LC injected mice: sack on Aug 9th & Aug 16th 🡪  AT100-DAB: floating sections, works?  ThioS: floating sections, works?  section 11mo PS19  Systematic tau pathology: AT8 where?, AT100 where?, MC-1 where?, ThioS where? Spread: different with cSD?  FIJI for IF co-localization cell counting  2 mo PS19+ (adlib): is there AT8 in the brainstem?  longitudinal rec: analyze spindles/sleep properties, add WT controls  SDC rec: improve automated staging: remove spurious NREM/REM during extended W episodes | Ward/Korey |
|  | cFos staining | 10hr SD 🡪 cFos  1 session RR 🡪 cFos  stim 40Hz 1 hr 🡪 cFos | Ward |
|  | 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  SWA QA: 0.7 R corr | Korey |
|  | msSpindle-rotarod paper | implant, experiment 4x more females  manuscript outline (Target SLEEP?):   1. Spindle characteristics are not different across post-learning sleep 2. Spindle occurrence is transiently elevated in early NREM sleep compared to bline 3. What about spindle-SWA coupling with learning? Diff dist (learn vs bline; early vs late) 4. What about spindles in transition to REM? Diff dist or properties (learn vs bline; early vs late) | Korey |
|  | rpS6 and rotarod paper | manuscript outline  Target: NB-LM? | 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 | Build design #1 at scale of 5 animals, test parameters (freq/dB)  test arousal from NREM @ defined parameters  Do pilot run (5x/group)  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) |  |
|  | Boost sleep (ms models) | SK2 overexpress: <https://www.jax.org/strain/009602>  Hmox-/-: <https://www.jax.org/strain/008660>  Sleepy: not available |  |

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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 |