**AGENDA RED = in process**

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| **#** | **TOPIC** | **DESCRIPTION** | **OWNER** |
|  | “Always be SDing” | Currently: 4x PS19 females done on 11/2/17  On deck: ???  Update on training Kaitlyn (Ward) | Kaitlyn |
|  | PS19 Chronic sleep disruption | tau IHC (T-tau, AT8, AT100, ThioS): Ward’s update  LC injected mice: none hit the LC  Patho collab: awaiting processing then blocking  longitudinal rec: manual stage, postproc/spindle detect, add WT controls (@ 3mo).  SDC rec: improve automated staging: remove spurious NREM/REM during extended W episodes  FIJI for IF co-localization cell counting | Ward/Korey |
|  | cFos staining | Sectioning: 3/4  10hr SD 🡪 cFos  1 session RR 🡪 cFos  sleep 🡪 cFos | Ward |
|  | msSpindle-rotarod paper | manuscript outline (Target SLEEP?):  spindle-slow oscillation processing all 11 animals   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?)  analyze data  manuscript outline  cFos anterior cortex  inhibit PFC in NREM/REM/W…  Target: SciReports, BehaviorBrain, NB-LM | Ward |
|  | Optogenetics experiment | MTA UNC Viral Vectors: ordered  cFos of VGAT 1 hr inhibition during SDC  Inject Chr2/Arch/Halo to LC of TH-cre | 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  2x SDC WT males (8d), 1x adlib control |  |
|  | 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  review by statistician | 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 |