

| hour slots / days | Day 0  | Day 1                                    | Day 2  | Day 3  | Day 4                                 | Day 5                                       | Day 6                                    | Day 7  | Day 8                                   | Day 9                      |
|-------------------|--|--|--|--|---------------------------------------|---|--|--|---|----------------------------|
| 8:00 - 8:30       |  | Breakfast                                | Breakfast  | Breakfast                                      | Morning run                           | Morning run                                 | Morning run                              | Morning run  | Morning run                             | Morning run                |
| 8:30 - 9:00       |  |  |  |  | Breakfast                             | Breakfast                                   | Breakfast                                | Breakfast  | Breakfast                               | Breakfast                  |
| 9:00 - 9:30       |  | Intro to light<br>(Florin Albeanu)       | Recap  | Widefield calcium imaging<br>(Tom Mrsic Fogel) |                                       |   | Multiphoton microscopy<br>(Chris Xu)     | What not to do<br>(with imaging data)?<br>(Georg Keller) | fUSI<br>(Emilie Mace)                   |                            |
| 9:30 - 10:00      |  |  | Resolution<br>(Priyanka Gupta)                   |  |                                       |   |  |  |   |                            |
| 10:00 - 10:30     |  | Coffee Break                             | Coffee Break                                     | Coffee Break                                   |                                       |   |  |  |   |                            |
| 10:30 - 11:00     |  | Image formation<br>(Fred Marbach)        | Coffee Break                                     | Noise<br>(Adam Kampff)                         | Widefiled build                       |   | Coffee Break                             | Coffee Break   | Coffee Break                            |                            |
| 11:00 - 11:30     |  |  | continue lecture                                 |  |                                       |   |  |  |   |                            |
| 11:30 - 12:00     |  | Image formation<br>(Fred Marbach)        | Benchtop optics -<br>image golgi slides          | Detectors<br>(Adam Kampff)                     |                                       |   | Light Sheet imaging<br>(Ruben Portugues) | SLMs and<br>deformable mirrors<br>(Benjamin Judkewitz)   | Make presentations                      | Adaptive optics<br>(Na Ji) |
| 12:00 - 12:30     |  |  |  |  |                                       |   |  |  |   |                            |
| 12:30 - 13:00     |  |  |  |  |                                       |   |  |  |   |                            |
| 13:00 - 14:00     |  | Lunch                                    | Lunch  | Lunch  | Lunch                                 | Lunch                                       | Lunch                                    | Lunch  | Lunch                                   | Lunch                      |
| 14:00 - 15:00     |  | Benchtop optics -<br>Lenses              | continue lab                                     | Recap?   | Intrinsic imaging<br>(Florin Albeanu) | Widefiled build                             | AB: 2p build<br>CD: scanning acq         | CD: 2p build<br>AB: scanning acq                         | Mini 2p<br>(Tobias Rose)                |                            |
| 15:00 - 15:30     |  |  |  | Epifluorescence<br>(Florin Albeanu)            |                                       |   |  |  |   |                            |
| 15:30 - 16:30     |  |  |  |  |                                       |   |  |  | in vivo 2p demo /<br>make presentations |                            |
| 16:30 - 16:45     |  | Coffee Break                             | Coffee Break                                     | Coffee Break                                   | Coffee Break                          | Coffee Break                                | Coffee Break                             | Coffee Break   | Coffee Break                            | Coffee Break               |
| 16:45 - 17:30     |  | continue lab                             | Epifluorescence<br>(Florin Albeanu)              | Make presentations                             | Widefield (noise)<br>calculations     | Confocal<br>Microscopy<br>(Ruben Portugues) | AB: 2p build<br>CD: scanning acq         | CD: 2p build<br>AB: scanning acq                         | in vivo 2p demo /<br>make presentations | LASERs<br>(Florian Engert) |
| 17:30 - 18:00     |  |  | Benchtop optics -<br>epifluorescence             |  |                                       |   |  |  |   |                            |
| 18:00 - 19:00     |  |  |  |  |                                       |   |  |  |   |                            |
| 19:00 - 20:00     | Dinner   | Dinner                                   | Dinner   | Dinner   | Dinner                                | Dinner                                      | Dinner                                   | Dinner   | Dinner                                  | Dinner                     |
| 20:00 - 20:30     | Introduction to<br>TENSS<br>(Florin, Raul &<br>Adam) | Koehler Illumination<br>(Priyanka Gupta) | Sonja Hofer<br>(Chalk Talk)                      | Basic Optics<br>Presentations                  | Ruben Portugues<br>(Chalk Talk)       | Widefield:<br>in vivo demo                  | Benjamin Judkewitz<br>(Chalk Talk)       | Florian Engert<br>(Chalk talk)                           | Final Optics<br>presentations           |                            |
| 20:30 - 21:30     |  |  |  |  | studen chalk talks?<br>2 students     |   | studen chalk talks?<br>2 students        | studen chalk talks?<br>2 students                        |   |                            |
| 21:30 - 22:30     |  | Benchtop optics -<br>set up Koehler      | continue lab:<br>image PSFs and<br>brain samples |  |                                       |   |  |  |   |                            |
| 22:30 - 24:00     |  |  |  |  |                                       |   |  | AB: continue 2p<br>build                                 | CD: continue 2p<br>build                |                            |

