

SOP Zeiss PALM MicroBeam

- Turn on the power switches in the following sequence: (1) UPS, (2) Laser key, (3) HBO 100 (only if you need), Power supply 232, Power Micro Beam, ApoTome.2 (only if you need), microscope power supply, microscope toggle, and computer.
- Enter Windows by logging in.
- Load your specimen slide onto the stage, select appropriate objective lens and focus the point of interest.
- Default camera is Axiocam MRC (Colour camera) on left hand, and for bright field/ monochrome / Fluorescence imaging there is Axiocam MRM on the right hand side.
- Objective lens can be controlled by touch screen software or manually.
- Don't switch from oil lens to dry lens. If it happens, remember to clean the dry lens!
- Click "Save" to save your image. Always save as ".zvi" format.
- To edit images, click "Scale bar" etc. to label, measure or change colors etc.
- Make sure to make log book entry at the end of the experiment.

For Laser Microdissection

1. **Make sure the Apotome slider is in "OUT" position.** To switch off Apotome, just pull out the slider one step (hear a click-sound).
2. **The power controller Apotome .2 should be turned off.**
3. Slides/samples should be kept in upright position.
4. Open **Palm Robo v.4.6** from software.
5. For cutting, you can use 20X, 40X, 63X objectives. Use 10X objective only for catapulting large samples.

For fluorescence imaging using Apotome

1. **Apotome power supply must be on when you start the microscope.**
2. **Then, carefully push the Apotome slider into the microscope.**
3. Open **Zen 2 Pro** software from system.
4. Slides should be inverted for imaging.
5. 40X oil button is actually 63X oil on touch screen.
6. Click "Live" to acquire the image and snap/process as normal operations.
7. The grid should be calibrated in each lens/filter combination. If not yet, please calibrate the grid focus (NOT Phase) now according to the instructions.
8. The Apotome slider should be off after use. To switch off Apotome, just pull out the slider one step (hear a click-sound).