

Leica LMD 7000

Note: This instrument was purchased with an NIH Shared Instrumentation Grant # 1S10OD016316-01. Please include this number in any published data generated on this equipment.

Starting up:

1. Turn on Turn on power strip.
2. Turn on Fluorescent lamp if needed (EL6000).
3. Turn laser key to on.
4. Turn on microscope controller.
5. Turn on computer if necessary.
6. Choose [LMD user]
7. Open Leica Laser Microdissection software.

Setting up the specimen:

8. Click on the first [unload] button.
9. Choose the sample holder you will use from the dropdown menu.
10. Place slide, sample side down on the holder.
11. Fit the slide holder to the top of the stage and slide in place. You should hear a click.
12. Choose [continue].
13. Click the second [unload] button and choose the type of collection device you will use from the dropdown menu.
14. Load the collection plate with the appropriate receptacles.
15. Put the plate in the substage holder and lock into position.
16. Click [ok].
17. Choose position of the slide from [Slide Holder] panel at the bottom of the screen.
18. Bring image into focus with the 1.25x lens.
19. Pull out light path rod to divert light to camera.
20. Find the region of interest and select desired magnification.

Cutting and collection:

21. Choose desired cut shape or freehand to trace area with either curser or stylus to outline area.
22. Choose fine or course x\y\z precision from panels on right side of screen.
23. You will be prompted to choose collection vessel for each cut.
24. Press [start cut].

25. To adjust laser power select [laser] from the top of your screen. Push [ok].
26. To dissect new areas, choose [erase all] from the shape list panel and return to step 21.

To shut down:

27. Click the second [unload] button and carefully remove the collected material.
28. Click the first [unload] button and remove slides.
29. Log out of computer
30. Turn off microscope controller.
31. Turn laser key to [off].
32. Turn off fluorescent lamp, if used.
33. Turn off power strip.
34. Record usage on the log sheet.