

To all IGTP Microscopy Platform users,

The purpose of this document is to aid with common potential issues with microscope use that may occur during the time periods (summer) when there is less direct support available.

Golden rule: if you encounter a type of problem not described here there, try shutting everything down according to instructions and restart the system from the beginning to see if the issue persists.

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Widefield imaging

Two widefield microscopes are available. They have similar capabilities and thus can be used interchangeably for most of the imaging tasks.

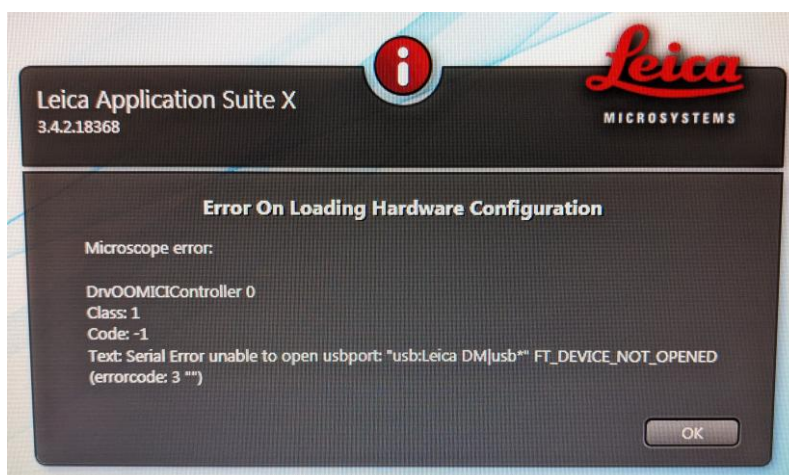
General issue: cannot maintain sample focus across the slide

Solution: This issue is most commonly due to the sample or the sample holder being placed incorrectly e.g. slight tilt caused by the fact that one side of the sample rests on the coverslip whereas the other side does not. Verify that sample holder is inserted correctly (no wobble) and try to reseat the sample again.

Leica DMI6000B

USB connection error

Description: When starting LasX software, Leica microscope hardware does not connect displaying error message (DEVICE_ NOT_OPENED or DEVICE_ NOT_FOUND)



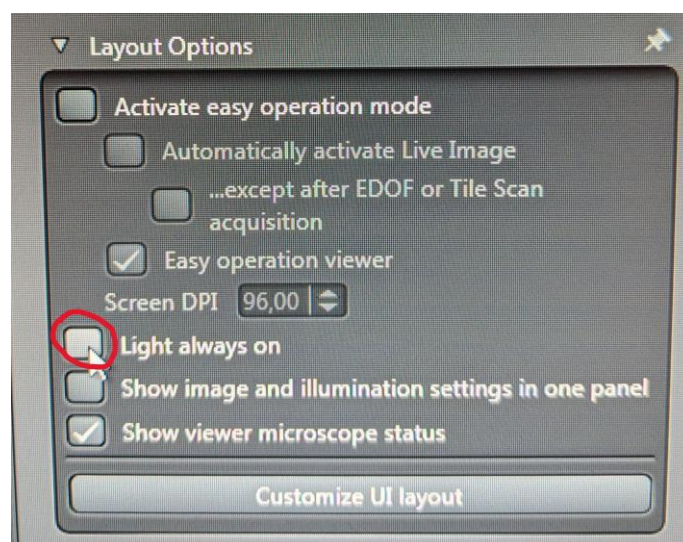
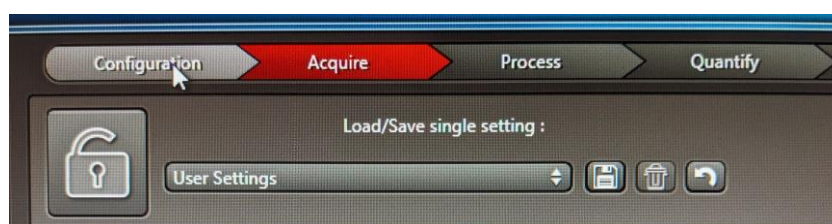
Solution: Restart the microscope control box (no need to restart anything else) and press OK on the error message. The microscope initialisation then should continue normally. If not, restart the entire system ie. the computer and the microscope, but not the fluorescence lamp

Brightfield illumination tiled imaging: first images are darker

Description: When performing brightfield imaging using LasX Navigator tiles, the first images in the tile are darker than the rest



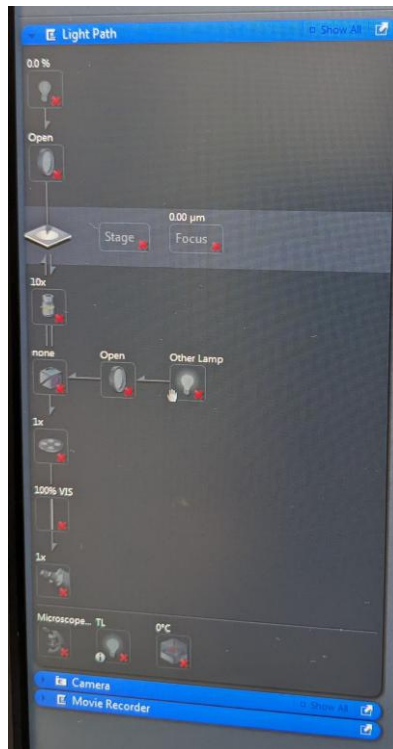
Solution: This issue arises due to the halogen brightfield lamp still turning on when the microscope is already taking the first pictures. This can be mitigated by setting “Light always on” in the microscope “Configuration” tab. With this setting on, after you start any imaging the brightfield lamp will remain on indefinitely. Please don’t forget to turn this off after you are done, as this setting will interfere with any fluorescence imaging done by subsequent users.



Zeiss Axio Observer Z1

Component connection error

Description: After starting Zen Blue microscope components are not detected



Solution: This problem can sometimes occur after logging out and relogging to Windows account when the system is already running (left on by a previous user). Shut down the entire system completely, including the computer (but not the fluorescence lamp) and restart.

Confocal imaging

Abberior STEDYCON is available for all fixed sample imaging. In addition, Leica STELLARIS 8 is available next door at IJC.

Confocal microscopy support and advice (summer 2026)

In case of any serious issues with STEDYCON or the need to use Leica STELLARIS 8 – Joaquim Grego (jgrego@carrerasresearch.org), head of IJC microscopy will be able to provide support for those in the second half of July and first half of August 2026.

Abberior STEDYCON

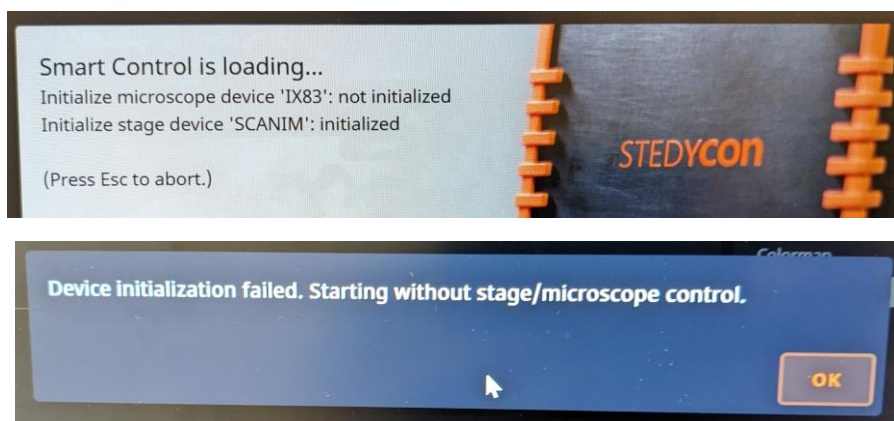
Tutorial: Extensive tutorial is available on YouTube covering all imaging procedures as well as common issues. Please refer to it when in doubt: <https://www.youtube.com/watch?v=PmQHktx1UBE>

Note on the sample focus: Standard coverslip sample should come in focus for all objectives at around 6000um Z height (shown on the IX83 touch control panel).

If you find that you cannot focus on the sample at this height, please check whether sample is positioned correctly or that the stage adapter is properly and evenly set it, by pushing it gently down on all sides.

Stage or microscopy body (IX83) not connecting during startup

Description: When starting the new session in STEDYCON software, there is an error showing either XY motorised stage or IX83 microscopy body connection issue.



Solution: This infrequent issue can be addressed by restarting the affected components. First finish the current session by clicking “Finish Session” in main UI, then “Finish session” in the pop up dialogue. After returning to the Welcome screen, press “Shut down” button and wait for the microscope to go back to Stand By mode:

For IX83 body error: restart the microscope body by restarting off IX83 control box on the shelf and IX83 touch control panel. Wait for the components to reinitialise (Reminder: Do not press “Start Operation” button when it appears on the touch control panel) and then initiate the new STEDYCON session as normal.



For stage controller error: restart the stage controller by restarting the TANGO Desktop controller on the shelf (switch is at the back). Verify that the light on the controller is solid green (it should not be flashing), then initiate new STEDYCON session as normal



If this does not help, shut down the microscope entirely (including the computer), according to instructions (specially making sure that STEDYCON is in “Standby” mode) then restart the system from the beginning.