MolecularDevices Nano

Objectives

- 4x
- 10x (pixel size 0.655 um)
- 20x

Filter specifications

Filter	Wavelengths	Shading correction plate
DAPI	Excitation: 377/50 nm Emission: 447/60 nm Dichroic: 409 nm	Green Pink
GFP	Excitation: 472/30 nm Emission: 520/35 nm Dichroic: 495 nm	Pink Red
Texas Red	Excitation: 562/40 nm Emission: 624/40 nm Dichroic: 593 nm	Red
Cy5	Excitation: 628/40 nm Emission: 692/40 nm Dichroic: 660 nm	Red

Plate calibration

Plate calibration is done in two steps:

1. Measure variation of plate bottom thickness
    - requires an empty plate
2. Measure required exposure time for autofocus laser
    - autofocus is based on the reflection of the laser from the plate and well bottom
    - reflection from the well bottom depends on the refractive index of the mounting media
    - requires a plate with relevant sample

The system has now these calibrated settings:

Manufacturer	Plate model	Objective and mounting
4titude	VisionPlate 96-well	
Costar	3596 96-well	10x PBS
Falcon	353072 96-well	10x, water
Greiner	Cellstar 655 180 96-well	20x PBS

Nunc	Optical 96-well	10x, air
PerkinElmer	CellCarrier Ultra 96-well	
PerkinElmer	ViewPlate 96-well	10x, PBS
PerkinElmer	CellCarrier Ultra 384-well	10x, PBS

If you use any other plates, you need to bring two plates for the training:

1. empty plate
2. a plate with sample (and media in the wells with no sample)

Starting the system

1. Power on the instrument.
2. Start computer.
3. Log in with account "Nano"
4. Mount L: disk
   a. Double-click "lmu-L-disk" on the Desktop.
   b. In the command window, write your university username in the format ATKK\username, press Enter.
   c. In the command window, write your university password, press Enter.
5. Start MetaXpress
   a. Double-click "MX" icon on the Desktop.
   b. Select your data source (named after your university username).

Troubleshooting network problems

1. Check with LMU staff that you have correctly mounted the L-disk.
   a. If L-disk is not available, use the local F disk (selector is in the "Run" tab).
2. Check if you can connect to your usual data source
   a. If your usual data source doesn't work, select data source **zzz_<username>_local**, which uses the local database.

Shutting down the system

1. Close software
2. Disconnect L: disk (to delete login credentials)
   a. Start Menu Computer
   b. Right-click Network Location lmu (L:)
   c. Select Disconnect
3. Shut down computer
4. Power off the instrument