



Date 2018-04-16

Regarding: LUDC confocal platform

The following microscope is part of the LUDC platform:

One **Zeiss LSM 800 with Airyscan** traded in for an older Zeiss LSM Pascal belonging to Maria Gomez (MG) in the autumn of 2017, and with support from EXODIAB (Excellence Of Diabetes Research in Sweden; https://www.exodiab.se/home/).

For an overview of the system please see:

https://www.zeiss.com/microscopy/int/products/confocal-microscopes/lsm-800-with-airyscan.html

For additional information about the confocal platform please see:

https://www.ludc.lu.se/resources/confocal-microscope

The microscope is located at the CRC, building 91, room 91 12 039. Users need granted permission to enter the room and updated CRC access cards.

Responsible contact person:

Anna-Maria Dutius Andersson (AMDA): anna-maria.dutius andersson@med.lu.se

Short description of what the system includes:

Our compact point scanning confocal LSM 800 is on an upright stand. The microscope is motorized in z and has a motorized reflector turret but a manual objective nosepiece. It is equipped with objectives for 5x, 10x, 20x and 63x (oil) magnification, DIC, epifluorescence to locate your sample and a manual xy stage. The scan head has two PMT detectors and a variable secondary dichroic which allows the user to fine tune the wavelengths that should be detected. Lasers for excitation at 405, 488, 561 and 640 nm are included. The system also has a detector for transmitted light. Finally it includes an Airyscan detector which gives 1,7x higher resolution in x,y,z. The Airyscan detector can also be used as a single highly sensitive GaAsP detector. A workstation and the ZEN software to control the system are included.

Running routines and costs

The system can be used by both internal (LUDC/LU) and external users.

We aim to cover service (~200,000 SEK/year) and running costs (i.e. immersion oil, lens paper, compressor oil, AMDA's time) by charging users an hourly fee. To prevent that fees inhibit the use of the system and because

there is no reason to charge for repairing costs in advance, the hourly fees are set at a lower level and any future maintenance or repairing costs will be charge the users in proportion to their usage time.

Policy

- 1) All users must undergo a tutorial, offered by AMDA when and if time allows, in order to obtain a "driver license" and authorization to use the system. AMDA will instruct users on how to use the system and has the right to revoke licenses if users do not comply with instructions and routines. Before starting using the system both the user and the responsible Principal Investigator (PI) must accept and sign the terms of this agreement.
- 2) After approved tutorial, users will get access to the online booking calendar and to the room. Users will need to update their access cards at the CRC reception.
- 3) User fees:

 $\begin{array}{cccc} \text{LUDC} & 0 & \text{SEK/hour} \\ \text{LU} & 400 & \text{SEK/hour} \\ \text{Externa} & 1200 & \text{SEK/hour} \end{array}$

- +1000 SEK/hour for assistance (tutorial; LUDC/LU)
- +2000 SEK/hour for assistance (tutorial; utanför LU)
- 4) In case of repairing or running costs not being covered by the service contract or if costs exceed the available funds in the confocal account, all users will share the costs in proportion to their usage time during a maximum of 2 years before the costs have incurred.
- 5) If a user damages the system, either intentionally or due to misuse, the user's research group will have to fully cover the repairing costs.
- 6) The computer associated to the LSM 800 system is designated as a "measuring computer" (or "mätdator" in Swedish). It is intentionally NOT connected to the Internet and lacks an antivirus program but can be accessed via LUs internal servers using the NovellClient. File can only be transferred using the LU servers. It is strictly forbidden to use USB memory sticks or any other type of external drive. Installation of new software or modification of existing software is not allowed. To read more about what a "mätdator" is and how these are connected please see:

 (https://www.med.lu.se/intramed/stoed_verktyg/it_service/maet_och_labbdatorer)
- 7) Whenever images or data generated using this system is published, the following text should be included in the acknowledgement: "This study was supported by the Swedish Research Council, Strategic Research Area Exodiab, Dnr 2009-1039, and by the Swedish Foundation for Strategic Research Dnr IRC15-0067."

User (first and last name):
Telephone number:
E-mail address:
Principal Investigator (first and last name)
Telephone number:
E-mail address:
Department:
K-ställe & aktivitet (or any other relevant billing information)
Approved tutorial JA NEJ
Driver license from date
Anna-Maria Dutius Andersson
For update of the user's CRC access card for room 91 12 039, please provide the following information:
Personal identification number (personnummer)
Position at LU
Office number (building-level-room)
I hereby agree to the terms of use of the confocal platform:
User's signature PI signature