

Flow Cytometry Facility, University of Zurich		
February 2013	Standard Operating Procedure <u>Operation of FCF LSR Fortessa</u>	Pages 1/1

Before getting started with LSR Fortessa:

- In order to book and use the Fortessa, you first need to be registered with the ZMB (www.zmb.uzh.ch) and the Sharedequipment-portal of the University of Zurich (www.sharedequipment.uzh.ch).

Switching the machine on:

- Press the green button on the right side of the flow cytometer, which switches both the fluidics cart and the cytometer on. The operating buttons will light on "Standby".
- Do a system prime by pressing the "Prime" button, with the sample arm being opened and no tube loaded.
- Switch on the computer, and login with your ZMB user name and password.
- Start FACSDiva and login with your personal account.
- Start measuring!

Between two users during the day:

- Run three minutes FACSClean and three minutes water with flow rate "High"
- Record the three-minute-wash with water at a FSC voltage of 450-500 volts
- Switch the machine to standby by pressing the "Standby" button and leave a tube with distilled water on the SIT
- Empty the little plastic container collecting the liquid from the SIT

Last user of the day:

- Run on flow rate "High" three minutes with FACSClean, three minutes with FACSRinse, three minutes with water. **Note: since there is no fluidics shutdown, it is really important to do these cleaning steps at the end of the day!**
- For the three-minute wash with water, record the events at a FSC voltage of 450-500 volts, and save a PDF printout of that dot plot at the local hard drive under "D:/LAST USER CLEAN/" with the current date and your name.
- Switch the machine to standby by pressing the "Standby" button and leave it with a tube of water on the SIT (to prevent the formation of salt crystals).
- Switch the flow cytometer off by pressing the green button on the side.

Refilling FACSFlow:

- If FACSFlow is empty, two indicators light up on the fluidics cart: "1.5 litres" and "empty", in addition you will hear a beeping sound. **This means you have to act immediately!**
- Place a fresh container with BD FACSFlow. At the same time, **empty the waste!**
- **Press the "Restart" button** on the fluidics cart and continue working.

Database:

- After measuring, export your data to the server and if possible, delete it from the database! (Note: having the database too large slows down the computer)
- **At the end of every month, the database will be emptied** by one of the responsible persons. For the next four month you will find your experiments in the folder "D:/Exported Data". **After that time they will be deleted!**

Penalty points:

- Any user not following the rules of usage will be given a penalty point. Three penalty points will lead to a ban of Fortessa usage for one month. Details of the penalty point system can be found in the respective SOP. If you feel insecure about any of these rules, feel free to ask the facility staff for help (in person or via fac@zmb.uzh.ch)