

CANTO II NEW USER TRAINING CHECKLIST

New Lab User Name _____

1. Acquire after hour, holiday and weekend access to 135 MRC Flow Lab via personal FOB through Todd Gillihan (todd-gilliahn@uiowa.edu). He will need your University badge number.
2. Acquire access to the online scheduler through Dr. Legge. He will need your HawkID user name, lab room number, contact phone number, and PIs name.
3. Be familiar with use of the online scheduler to reserve or cancel time. Sign-up/cancellation etiquette should be discussed. If you cancel your time late in the day please make certain the Canto is shut down if you were the last scheduled user.
4. If you are the last user of the day it is your responsibility to make sure the Canto is shut down.
5. Know how to check sheath fluid and waste levels in the reservoirs/waste tank and how to properly replenish/empty as needed. Know how to properly prepare stock 20% sheath fluid and prepare new supplies as needed. Know how to correctly disconnect and reconnect the fluid and sensor lines to the tanks and how to prime fluid tanks after tanks are swapped.
6. Know the proper startup sequence for the Canto II/PC workstation (BD engineer recommends PC be started first, then the cytometer). Know how to log onto the PC and start the FACS DIVA software.
7. Be aware that adequate warm up time for the cytometer is required and how to check the flow cell for bubbles. Know how to clear bubbles in the flow cell with the FACS DIVA software commands (de-gas flow cell).
8. Be familiar with opening and operating the software for data acquisition as well as how and where to export/backup data. Instruction for software use including common 'cleaning' functions is required. Consider the options for data backup.
9. Use of the proper tubes for sampling is critical.
10. Be aware of how to identify and clear plugs in the SIT with 10% Contrad, 10% bleach or the use of the fine wire for insertion into the SIT for breaking up resistant plugs when all else fails.
11. If Contrad is used to remove plugs or clean the flow cell, be knowledgeable of how to adequately remove it from the flow cell and lines.
12. Discuss the use of bleach after certain fluorochromes (PI) are used.
13. Know where common troubleshooting information can be found online or in the hard copy cytometer manual in the lab.
14. Some discussion of common error messages and 'glitches' that arise in the software should be discussed and the usual approaches in handling them.
15. Know how to contact Dr. Legge (kevin-legge@uiowa.edu) if major problems arise that cannot be dealt with by a senior user.
16. Be familiar with how to contact Dr. Legge and Remi technical services (866-296-4847) if Dr. Legge is not available. The instrument's serial number is required; it is located on both outside ends of the Canto instrument: V96100535.
17. For advice or troubleshooting through BD, call 877-232-8995, Ext. 2. BD will not send a repair engineer to fix major problems however. Remi should be contacted for on-site repairs.
18. Know how to properly perform the shutdown sequence if the last user for the day.
19. Know to NEVER leave tube on SIT when not running. This can damage the machine.
20. Never leave the lab while a tube is running on the instrument. If run dry damage to the flow cell can result.
21. Be aware of the requirement to filter samples prior to running through the Canto.
22. The manufacturer recommends that experimental folders in the software browser not be allowed to accumulate. The DIVA software can slow considerably if files accumulate in this browser interface. Move your files to another location within 2 weeks and then delete your files from the computer. Older files left on the instrument WILL be deleted.

Signature Senior Trainer

Signature Faculty Member

**LSR II
NEW USER TRAINING CHECKLIST**

New Lab User Name _____

1. Acquire after hour, holiday and weekend access to 135 MRC Flow Lab via personal FOB through Todd Gillihan. (todd-gilliahn@uiowa.edu). He will need your University badge number.
2. Acquire access to the online scheduler through Dr. Legge. He will need your HawkID user name, lab room number, contact phone number, and PIs name. Further he will need you to provide him with your requested username and password for the DIVA software
3. Be familiar with use of the online scheduler to reserve or cancel time. Signup/cancellation etiquette should be discussed. If you cancel your time late in the day please make certain the LSR II is shut down if you were the last scheduled user.
4. Know how to check sheath fluid and waste levels in the reservoirs/waste tank and how to properly replenish/empty as needed. Know how to correctly disconnect and reconnect the fluid and sensor lines to the tanks and how to prime fluid tanks after tanks are swapped. Know how to properly prepare stock 20% sheath fluid and prepare new supplies as needed.
5. Know the proper startup sequence for the LSR II/HP workstation (BD engineer recommends PC be started first, then the cytometer). Know how to log onto the PC using your hawkID/password and start the FACS DIVA software.
6. Know that one should only sign into the DIVA software using your unique login info. Persons using other users logon information will result in both individuals losing access to the cytometer.
7. Be aware that adequate warm up time for the cytometer is required and how to check the flow cell for bubbles. Know how to clear bubbles in the flow cell.
8. Be familiar with opening and operating the software for data acquisition as well as how and where to export/backup data. Consider the options for data backup. The manufacturer recommends that experimental folders in the software browser not be allowed to accumulate. The DIVA software can slow considerably if files accumulate in this browser interface. Move your files to another location within 2 weeks and then delete your files from the computer. Older files left on the instrument WILL be deleted.
9. Use of the proper tubes for sampling is critical.
10. Be aware of how to identify and clear plugs in the SIT with 10% Contrad, 10% bleach.
11. If Contrad is used to remove plugs or clean the flow cell, be knowledgeable of how to adequately remove it from the flow cell and lines.
12. Discuss the use of bleach after certain fluorochromes (PI) are used.
13. Know where common troubleshooting information can be found online or in the hard copy cytometer manual in the lab.
14. Some discussion of common error messages and 'glitches' that arise in the software should be discussed and the usual approaches in handling them.
15. Know how to contact Dr. Legge if major problems arise that cannot be dealt with by a senior user.
16. Be familiar with how to contact Dr. Legge and Remi technical services if Dr. Legge is not available. The instrument's serial number is required: H47100014, located on the front panel of the LSR.
17. Know how to properly clean the machine after every run and perform the shutdown sequence if the last user for the day.
18. Know that you are responsible for emptying the waste tank and refilling the sheath tank after EVERY run and that this must be completed within your allotted time.
19. Know to ALWAYS leave tube on SIT when not running or this can damage the machine. Know how to manually change between standby and run when acquiring samples

Signature Senior Trainer

Signature Faculty Member