

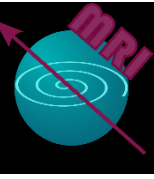


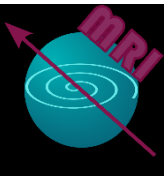
Acquisition

Data Management
Archive, Transfer, Import

Troubleshooting

Acquisition



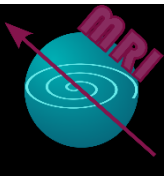


Users

- 1. KEEP YOUR BADGE, PHONE AND IN GENERAL ANY METALLIC OBJECT OUTSIDE THE 5Gauss YELLOW LINE ON THE FLOOR.**
- 2. PUT IN THE EARPLUGS OR USE THE HEADSET: NOISE IS MORE HARMFUL THAN EXPOSURE TO ELECTROMAGNETIC FIELD.**
- 3. IF YOU ARE SENSITIVE TO ISOFLURANE, PLEASE USE A BREATHING MASK (CONTACT IVIF STAFF IF YOU NEED A PERSONAL ONE).**

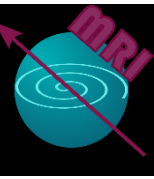
Animals

- 1. IF YOUR ANIMAL HAS :**
 - **Metallic implants**
 - **Metallic clips or staples**
 - **Electronic material**
 - **Large tattoos****GET IN CONTACT WITH IVIF STAFF BEFORE SCANNING**
- 2. REMOVE ALL ESTERNAL SENSORS, CABLES THAT MIGHT BE ATTACHED TO YOUR ANIMALS. IF THIS IS NOT POSSIBLE, GET IN CONTACT WITH IVIF STAFF BEFORE SCANNING.**



TURN ON:

1. **OXYGEN** : blue valves, pressure between 1.5 – 2 bar
2. **HEATER FOR WATER BATH**
3. **ISOFLUORANE** : adjust at ~3% for the induction chamber, 1.5-2% for MRI.
4. **EXHAUST** : the MRI exhaust should be always on to avoid accumulation and should be fully opened at the end of your session. The induction chamber exhaust should be opened at the end of your session.
5. **PHYSIOLOGICAL MONITORING** : connect the battery and start the monitoring software.

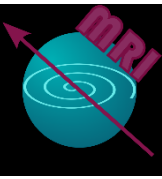


**IF NOT ALREADY ON, TURN THE PANEL KEY INTO ON POSITION.
WAIT UNTIL THE SYSTEM TURNS INTO STAND-BY MODE
(ORANGE RING LIGHT).
WAIT AT LEAST ONE MINUTE BEFORE TURNING ON THE SYSTEM.**

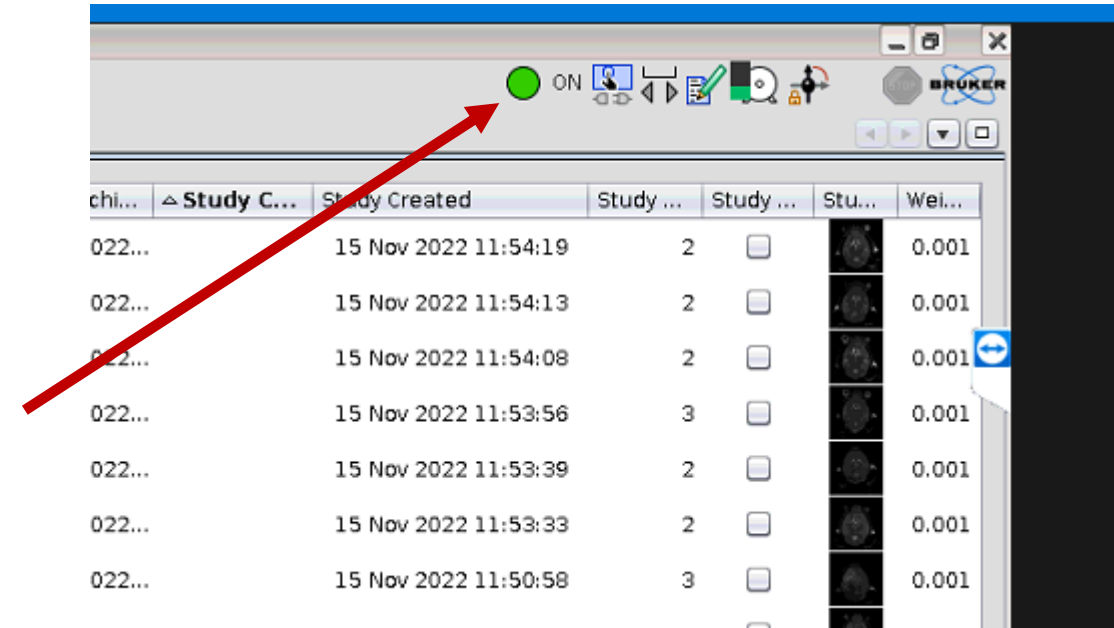
**THE SAME KNOB CAN BE USED TO FORCE A SHUT DOWN IN
CASE THE MRI IS NOT RESPONDING (ULTIMATE RESOURCE!).
IF YOU HAVE TO USE IT, ALWAYS WAIT AT LEAST ONE MINUTE
BEFORE TURNING IT ON AGAIN**

**IT IS NOT NECESSARY TO SWITCH OFF THE MRI AT THE END OF
YOUR SESSION NOR AT THE END OF THE DAY**





1. LOG IN AS MRIUSER (PASSWORD: **topspin**)
2. LAUNCH PARAVISION (IF NOT ALREADY ON)
3. TURN THE MRI INTO 'ON' STATE ON THE TOP RIGHT CORNER
This operation might take a few minutes





1. SUPERFICIAL BRAIN IMAGING: USE THE 82mm RESONATOR (VOLUME COIL USED AS TRANSMITTER) + SURFACE COIL (4 CHANNELS, HIGH SENSITIVITY BUT DEPTH DEPENDENT. WATER PUMP NECESSARY IN COMBINATION WITH THE HEATING PAD. GLOBAL AIR EXTRACTION FROM THE BACK OF THE MAGNET.

80mm coil



2. DEEP BRAIN IMAGING: USE 40mm VOLUME COIL (BOTH TRANSMITTER AND RECEIVER) + CLOSED CASSETTE. AIR PUMP NECESSARY. WATER PUMP NECESSARY BUT WITHOUT THE HEATING PAD. LOCAL AIR EXTRACTION FROM THE CLOSED CASSETTE BY MEANS OF THE AIR PUMP.

Surface coil



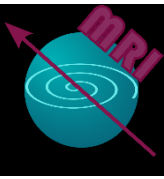
3. BODY IMAGING: USE 40mm VOLUME COIL (BOTH TRANSMITTER AND RECEIVER) + CLOSED CASSETTE. AIR PUMP NECESSARY. WATER PUMP NECESSARY BUT WITHOUT THE HEATING PAD. LOCAL AIR EXTRACTION FROM THE CLOSED CASSETTE BY MEANS OF THE AIR PUMP.

40mm coil





- 1. PLACE THE ANIMAL IN THE CRADLE.**
- 2. ON THE TOUCH SCREEN, PRESS ON THE CAMERA ICON, THEN VALIDATE.**
- 3. MOVE THE BED UNTIL THE CENTERING ON THE SCREEN IS SATISFACTORY.**
- 4. VALIDATE AND SEND THE ANIMAL TO THE MRI POSITION. CHECK THAT THE CABLES ARE OUT OF THE WAY AND DO NOT GET STUCK.**
- 5. DO NOT CLOSE THE COVER UNLESS YOU ARE RUNNING A SENSITIVE EXPERIMENT.**
- 6. VERIFY THE QUALITY OF PHYSIOLOGICAL TRACES AND THAT YOUR ANIMAL IS STABLE.**



1. CREATE A NEW STUDY

Should contain the initials of your PI and your initials

Select the desired protocol. Ask IVIF staff if you need something different/new

Tick this box

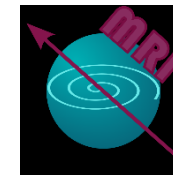
2. START THE SCAN. Run a localizer

3. IF THE LOCALIZER IS NOT CENTERED CORRECTLY, TAKE OUT THE BED AND REPEAT THE CENTERING PROCEDURE.



- 1. ARCHIVE AND TRANSFER YOUR DATA.**
- 2. LEAVE THE MRI IN HOME POSITION AND PUT IT BACK IN STANDBY**
(if another user is scanning after you, leave the MRI on)
- 3. TURN OFF**
 - Isoflurane
 - Heater for thermal bath
 - Oxygen
 - Exhaust line (leave it running fully open for 5 min)
- 4. CLEAN**
 - The cradle / bed
 - The induction box
- 5. DISCONNECT THE BATTERY PACK AND PUT IT BACK ON CHARGE**
- 6. REFILL ISOFLUORANE**
- 7. LOG OFF FROM PHYSIOLOGICAL MONITORING PC**

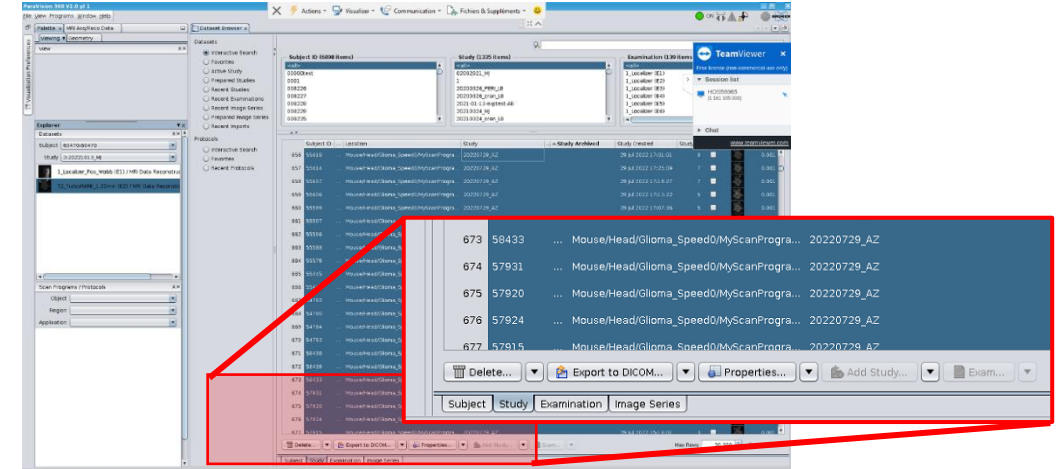
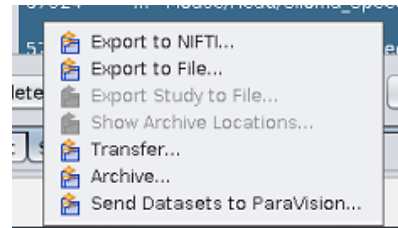
Data Management



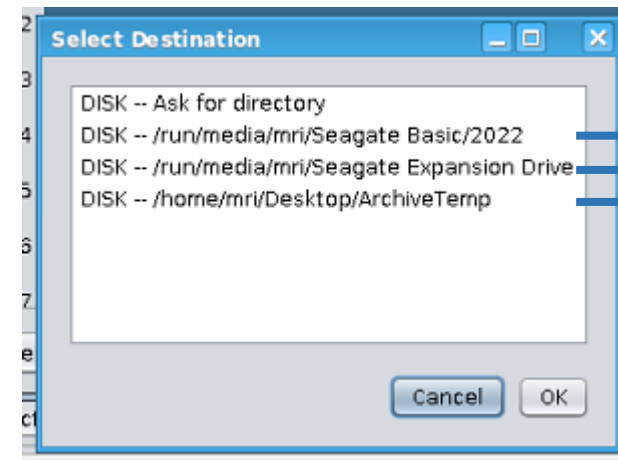


1. SELECT THE STUDIES TO BE ARCHIVED AND CLICK ON THE ARROW NEXT TO *Export DICOM...*

2. IN THE DROP-DOWN MENU, CHOOSE *Archive...*



3. A WINDOW WILL LET YOU SELECT THE DESTINATION FOLDER:



Johanna Joyce
Douglas Hanahan
all the others
(temporary solution)



IF YOU NEED TO RETREIVE AN OLD STUDIES (for example for image comparison or to get lost DICOMs) YOU CAN DO IT AS FOLLOWS :

- **Go to file → Import**
- **If your study was acquired in V3.3, select *Import Wizard***
- **If your study was acquired with an older version (before November 2022), select *Legacy Dataset***

