

Guidelines for the Gradual Transition from Coronavirus-Related Emergency Operations to Basic Operations

9.4 Tesla scanner area

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Change History

Date	Version	Author(s)	Description of change
24.04.2020	1.0	Sonia Waiczies, Mariya Aravina, Paula Ramos Delgado	First draft of document
27.04.2020	1.1.	Thoralf Niendorf	Made minor modifications
01.05.2020	1.2.	Thoralf Niendorf	Added text to make sure that masks are used which are MR safe

Guidelines for working at the 9.4 Tesla scanner area

Objectives:

- To start *basic operations mode* at the 9.4 Tesla scanner area¹
- To follow safety guidelines with respect to personal safety, especially concerning COVID-19 prevention
- To continue following guidelines and regulations with respect to animal welfare

General plan of operation and safety measures:

- There are no known timelines, it depends on the current state of affairs (MDC, local authorities).
- Face masks should be used at all times (provided by the MDC).² **Please make always sure that only mouth and nose masks are used which are MR safe.**
- Re-establishing basic operations mode will follow a 3-step procedure, with each step more complex experiments will be introduced.
- The number of people will be restricted to 2 persons at any given time.
- **A notice will always be on the door informing who is inside** and prohibiting entry to other colleagues.
- Phoning operator room (4501) and lab (4508) allowed, plan entry with person in the 9.4 Tesla scanner area
- Essential personnel, mainly the security officer, will always have the power to enter the lab, in agreement with the person present at the 9.4 Tesla scanner area.
- Before leaving the 9.4 Tesla scanner area used/touched surfaces and objects (e.g. keyboards, patient table, coils, door handles etc...) should be disinfected with appropriate disinfectant. Apart from the lab, disinfectants will be available in operator room (hand gels, non-alcoholic tissue swab dispensers, alcohol sprays).
- Self-explanatory instructions of disinfection measures (which surfaces and objects, which disinfectant to use and its effective exposure time) should be attached clearly visible at the inside of the doors of the operator room, as a guide and reminder.
- Please book your scanner session in a realistic time frame but generous timeframes will be used until the end of the crisis. Those scanning should organize with the person continuing on the following days to avoid unnecessary procedures (e.g. change of coils)

Step A

(Time-line: ca. 1-2 weeks)³

- Maximum 2 persons at the 9.4 Tesla scanner area.⁴ No visitors.⁵
- Keep a distance of at least 1.5 m.
- Phantom experiment should be grouped in a minimum of 2 day sessions to avoid contamination

Allowed operations:

- Starting up electronics
- Calibration tests

¹ Defined as area including scanner room, operator room, electronics room, animal rooms and animal preparation lab

² Personal ones maybe only be used in the operator room and electronics room until more MDC face masks are available

³ For now we do not know the duration of each step

⁴ Inform 1 or more colleagues (alternatively external persons) of your intended experiments (use mattermost)

⁵ Except in cases of emergency

- Simple experiments (phantom samples, containers with samples)

Phantom study		Phantom study		Phantom study	
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Whole day scan slots		Whole day scan slots		Whole day scan slots	

Step B

(Time-line: unknown depends on current MDC guidelines and local authorities)

- Maximum 2 persons at the 9.4 Tesla scanner area
- Keep a distance of at least 1.5 m.
- Available walkie-talkie should be used

Allowed operations:

- Simple in vivo experiments that will not require more than 2 persons at one given time
- 1 person in operator room, 1 person in preparation lab (oral gavage, cannulation, alter isoflurane)
- Possibility of remote desktop can be considered for including more people for scanning procedure
- Same person should set up coil and prepare animal holder
- Same person should prepare and transfer animal to animal holder

Simple in vivo exp		Simple in vivo exp		Simple in vivo exp	
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Whole day scan slots		Whole day scan slots		Whole day scan slots	

Step C

(Time-line: unknown depends on current MDC guidelines and local authorities)

- Maximum 4 persons in all 9.4 Tesla scanner area
- Keep a distance of at least 1.5 m.
- Max 2 persons allowed per room (including magnet room) at one given time
- Available walkie-talkie should be used

Allowed operations:

- More complex in vivo experiments (that will require more than 2 persons at one given time) can start being incorporated in the week's plan
- 1-2 person in operator room, 1-2 person in preparation lab (operations, cannulation)
- Possibility of remote desktop can be considered to include more people for scanning procedure
- Same person should set up coil and prepare animal holder
- Same 1-2 person should prepare and transfer animal to animal holder

Complex in vivo exp			Simple in vivo exp		Phantoms
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Whole day scan slots			Whole day scan slots		