



SOP Number      **OCMR\_002**  
SOP Title         **Scanner Operator Training**

	<b>NAME</b>	<b>TITLE</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>Author</b>	Dr Oliver Rider	Deputy Clinical Director	<i>O. Rider</i>	18/08/16
<b>Reviewer</b>	Jane Francis	Head of Imaging Applications	<i>J. Francis</i>	18/08/16
<b>Authoriser</b>	Prof. Stefan Neubauer	Clinical Director	<i>S. Neubauer</i>	23/08/16

<b>Effective Date:</b>	September 2016
<b>Review Date:</b>	September 2018

## 1. PURPOSE

The intention of this SOP is to standardise training to ensure a minimum level of knowledge and skill for all operators engaged in MR Scanning within OCMR.

## 2. SCOPE

This SOP applies to all OCMR staff and collaborators who wish to train to operate the MR scanners within OCMR.

## 3. INTRODUCTION

Training to run the MR scanners requires successful completion of the Scanner Operator Training Programme and Final Assessment. This includes demonstration of enough experience to be confident and competent in all aspects of MR safety and data acquisition that are relevant to the project being undertaken. Two of the staff assessors listed at the end of the scanner operator training record must sign the assessor sheet to certify completion of training. **Under no circumstances should an operator carry out a scan unsupervised unless they have successfully completed the appropriate training and assessment.** Operators must adhere to the safe working practices of OCMR at all times (see OCMR induction pack for full details).

## 4. RESPONSIBILITIES

### Operators

To operate the scanner in accordance with the principles laid out in this document and to comply with the safe working practices as detailed in the appropriate documentation which is set out in the OCMR induction pack.

### Assessors

To be satisfied that the operator has sufficient knowledge of the scanner, understanding of the risks and appropriate training in dealing with emergency situations to be able to scan safely for the studies they are authorised to scan for.

## 5. OPERATOR TRAINING PROCEDURE

- 5.1 All operators will be expected to complete the operator training programme and pass the final assessment. The Scanner Operator Training Programme typically involves a period of training and the completion of a minimum number of 30 scans (observed and then supervised). The final assessment involves practical demonstrations and a question and answer based session with a named assessor (see Scanner Operator Training Record which can be found on the website <http://www.ocmr.ox.ac.uk/documents>). Training may differ depending on the intended scan operator category (see Minimum Attendance SOP OCMR\_004)
- 5.2 Operator Trainees will be required to complete the Scanner Operator Training Record to record their development. Under specific circumstances it may be possible to accelerate the training programme for individuals with extensive experience of the MRI environment and clinical MRI equipment. Such cases will be dealt with on an individual basis and at the

discretion of approved staff assessors. The relevant previous experience should be recorded on the log sheet.

- 5.3 Operator trainees will be given a copy of the Scanner Operator Training Record and the information necessary to answer the questions during the training phase. During the final assessment, knowledge will be assessed by an approved assessor at a mutually convenient time. The decision about whether an operator is ready to be signed off will be made by the assessor.
- 5.4 Operator trainees will be required to attend an emergency evacuation demonstration session and be confident in the safe and rapid evacuation of subjects from the scanner. It is the responsibility of the trainee to keep this training up to date subsequently.
- 5.5 Operator trainees (with the exception of those wishing to scan phantoms only) will be required to attend a life support course appropriate for the category of subject (as outlined in the Minimum Attendance SOP OCMR\_004) and to keep this training up to date subsequently.
- 5.6 Depending on the type of study being undertaken operators may be required to undertake additional specific training; this will be recorded on the Scanner Operator Training Record.

## 6. ONGOING EVALUATION

Emergency evacuation procedures, life support training and magnet safety training should all be kept up to date. It is the responsibility of the individual operators to keep a record of training and be able to produce this record upon request.

To ensure all operators are up to date with software / hardware upgrades, any operator who has not scanned at least once in any three month period should arrange a brief supervised session before resuming scanning unsupervised. Any operator who has not scanned in the last 12 months will be required to demonstrate competence before resuming scanning unsupervised.

Requests to move between operator categories should be addressed to the staff assessors who will evaluate requests on a case by case basis. Operators who are found to be scanning protocols without the appropriate operator status may have their operator license rescinded with immediate effect.

**Operator status may be rescinded if individuals do not comply with the above requirements.**

## 7. IDEA PULSE PROGRAMMERS

IDEA is a Siemens software environment which allows customized programming of the scanner (e.g. changing the magnetic gradients). Researchers who program in the IDEA environment (typically physicists and engineers) are contractually required to either attend, or work under someone who has attended, the IDEA programming course. They are also reminded of the proprietary nature of the IDEA environment.

**8. INTERNAL AND EXTERNAL REFERENCES**Scanner Operator Training Record <http://www.ocmr.ox.ac.uk/documents>Minimum Attendance Policy <http://www.ocmr.ox.ac.uk/documents>**9. CHANGE HISTORY**

SOP no.	Effective Date	Significant Changes	Previous SOP no.
OCMR_002	September 2016	New Version	OCMR_003-V1