

Policy for using WIP Pulse Sequences

Pulse sequences not provided by the scanner vendors are generically known as Works in Progress (WIPs). Use of WIPs on the two CBI scanners is subject to the following conditions:

For Siemens 3T scanner:

- 1) WIPs provided directly by Siemens upon request are allowed. These must be installed on our system by CBI staff. PIs who request such WIPs are responsible for adhering to any special use requirements imposed by Siemens (e.g., providing feedback) and for keeping track of any expiration dates.
- 2) WIPs provided by third parties (e.g., a research group at another university) must be approved by the CBI director prior to being used as well as by MUSC's Information Security Office. Some WIPs also require a "C2P" agreement letter to be fully executed in advance as required by Siemens, which can be a lengthy process taking as long as several months. If you are not familiar with this, it is recommended that the CBI director be contacted for advice at cbi@musc.edu. Other WIPs are available through a Siemens website known as teamplay. A list of available teamplay sequences is provided below. Requests to obtain any of these should be sent to cbi@musc.edu.
- 3) The PIs will be responsible for keeping a copy of the C2P agreement, following its terms, and keeping track of any expiration dates. The WIP must be installed by CBI staff.
- 4) WIPs coded in-house must be approved by the CBI director prior to being used on the scanner.

For Bruker 7T scanner:

- 1) Third party and in-house WIPs are allowed subject to prior approval of the CBI director. Third party WIPs also require approval by MUSC's Information Security Office.

Please send questions about this policy to cbi@musc.edu.

WIPS available from Siemens teamply

<u>Sequence</u>	<u>Full Name</u>	<u>Institution</u>	<u>Application</u>
SPECIAL sequence	Spin-Echo full Intensity Acquired Localized sequence)	Douglas	NEUR, Spectro, UHF
2D pCASL	2D EPI pCASL for brain applications	USC	NEUR
3D pCASL	3D GRASE pCASL for brain applications	USC	NEUR
Pulseq	Pulseq interpreter sequence	Uniklinik Freiburg Medizin Physik	N/A
T1rho	Tfl with T1rho preparation	Royal Ottawa	MSK / Ortho
MREG	MR-Encephalography	Uniklinik Freiburg Medizin Physik	NEUR
MEGA-PRESS Sequence	Mescher-Garwood J-difference editing for GABA MRS	Douglas	NEUR, Spectro
MDME	Synthetic MRI	Karolinska Institutet	MSK / Ortho, NEUR, Pediatric
QA Sequence	Quality Assurance EPI Sequence and reconstruction	CEA NeuroSpin	NEUR, UHF
AFI	Actual Flip angle Imaging – B1 mapping sequence and reconstruction	CEA NeuroSpin	NEUR, UHF
T1-rho, T2-rho, RAFFn	Multi-slice adiabatic T1-rho, T2-rho, and RAFFn relaxation mapping sequence	CMRR	NEUR, UHF
sSPECIAL	Semi-adiabatic version of the Spin Echo full-Intensity Acquired Localized (SPECIAL) sequence	Douglas	NEUR, Spectro, UHF
ZOOM-EPI for DWI with SMS	Echo-Planar Imaging Pulse Sequence for Inner-Field-of-View Diffusion-Weighted Imaging with Simultaneous Multi-Slice Acceleration	UKE Hamburg	NEUR
Localised COSY	Localised COSY	HMRI Newcastle Australia	Spectro
PASTeUR	Package of Anatomical Sequences using parallel Transmission UniveRsal pulses.	CEA NeuroSpin	NEUR, UF

GRASE	GRASE myelin water imaging	SNU	NEUR
EPI with z-Shim for Spinal fMRI	Echo-Planar Imaging Pulse Sequence with Slice-Specific z-Shim Gradient Pulses for Spinal Cord fMRI	UKE Hamburg	NEUR
ViSTa	ViSTa myelin water weighted imaging	SNU	NEUR
GRE Virtual Coil	GRE Virtual Coil	Prais Brain Institute (ICM)	NEUR
ihMT	ihMT-RAGE for myelin imaging	CRMBM Marseille	NEUR
Blood Oximetry	Vessel T1 (MOLLI) and T2 (T2-prepared SSFP) Measurement	SickKids	CARD
greMT	SPGR with MT-preparation module and CSMT readout pulse	CRMBM Marseille	NEUR
ihMT	ihMT-GRE for myelin imaging	CRMBM Marseille	NEUR
Radial POCC PMT Sequence	Radial Phase-Only Cross Correlation (POCC) Passive Marker Tracking Sequence	Uniklinik Freiburg Medizin Physik	THP iMRI
FAIR True-FISP	2D pulsed ASL for extracranial applications	ExpRad Tubingen	N/A
VASO fMRI (VB)	Vascular space occupancy sequence to measure blood volume changes on VB scanners (E.g. classical MAGENTOM 7T, Trio))	Masstricht Brain Imaging Center	NEUR, UHF
Ns_fid_calib	Voltage calibration using a fid	CEA NeuroSpin	NEUR, Spectro
2D PCASL SE-EPI	2D PCASL with BS and SE-EPI for renal applications	UNAV Pamplona	N/A
IceLuva	ICE program for image postprocessing scripts	Universitatspital Basel	N/A
GRE with GRPC	Artifact-free phase combination for older software versions	Universitatspital Basel	N/A
PhysioC2P	Makes extra image plot of ECG, Resp, TriggerTriangles and Datawindows during scan.	Royal Brompton Hospital	CARD

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Restricted SAR package	Testing head coils in vivo with very low power deposition	CEA NeuroSpin	NEUR, UHF
TRAPS-DW-HASTE	Half Fourier Acquisition Single Shot Turbo Spin Echo Diffusion Encoding with Transition between Pseudo-Steady States for 3T	Donders Centre for Cognitive Neuroimaging	N/A