

McLeod Pavilion

Protocol: adult\_head\_MS Brain w/wo readybrain

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	48Ch Head Coil	Imaging Options	Seq, EDR, TRF, Fast, SS, ARC
Plane	3-PLANE	<b>SCAN RANGE</b>	
Series Description	3-Plane Localizer	FOV	30.0
<b>SCAN TIMING</b>		Slice Thickness	10.0
TE	80.0	Slice Spacing	5.0
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	1200.0	Freq	256
Receiver Bandwidth	83.33	Phase	128
<b>IMAGE ENHANCE</b>		Freq DIR	Unswap
Filter Choice	None	# of Acq. Before Pause	0
<b>GATING/TRIGGER</b>		Phase FOV	1.00
Auto Trigger Type	Off	Auto Shim	Auto
<b>FMRI</b>		Phase Correction	No
PSD Trigger	Internal	<b>USER CVS</b>	
View Order	Bottom/Up	User CV1	1.00
# of Repetitions REST	0	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	0	Seperate Series	0
<b>SAT</b>		Mask Phase	0
Tag Type	None	Mask Pause	0
<b>TRICKS</b>		<b>DIFFUSION</b>	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	<b>CONTRAST</b>	
Auto SCIC	Off	Contrast Yes/No	No

3-Plane Localizer

3-Plane Localizer

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3D Ready Brain Localizer	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	3D
	Patient Position	Supine	Pulse Sequence	SPGR
	Coil Configuration	Head;Neck	Imaging Options	Fast
	Plane	AXIAL	IDEAL	1
	Series Description	3D Ready Brain Localizer	<b>SCAN RANGE</b>	
	<b>SCAN TIMING</b>		FOV	30.0
	Flip Angle	10	Slice Thickness	3.0
	TE	Minimum	Location per Slab	72
	Number of Echoes	1	Overlap Locations	0
	Receiver Bandwidth	16.67	<b>ACQ TIMING</b>	
	<b>IMAGE ENHANCE</b>		Freq	72
	Filter Choice	None	Phase	72
	<b>GATING/TRIGGER</b>		Freq DIR	A/P
	Auto Trigger Type	Off	NEX	1.00
	<b>FMRI</b>		Phase FOV	1.00
	PSD Trigger	Internal	Auto Shim	Auto
	Slice Order	Interleaved	Phase Correction	No
	View Order	Bottom/Up	<b>USER CVS</b>	
	# of Repetitions REST	0	User CV6	2.00
# of Repetitions ACTIVE	0	User CV23	100.00	
<b>SAT</b>		<b>MULTI-PHASE</b>		
Tag Type	None	Seperate Series	0	
<b>TRICKS</b>		Trigger Delay without AV	0	
Pause On/Off	On	Mask Phase	0	
Auto Subtract	0	Mask Pause	0	
Auto SCIC	Off	<b>DIFFUSION</b>		
<b>OTHERS</b>		Recon All Images	On	
Protocol Notes	Tips: -For Ready Brain 3D Localizer, please cover a few slices above and below the brain.			
		<b>CONTRAST</b>		
		Contrast Yes/No	No	

3D Ready Brain Localizer

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast, ARC, T2flair
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	SAG T2 FLAIR	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	3.0
Flip Angle	160	Slice Spacing	0.0
TE	139.5	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	260
TR	12000.0	Phase	224
TI	2711	Freq DIR	A/P
Echo Train Length	21	Fat Shift DIR	Normal (A)
Receiver Bandwidth	41.67	NEX	1.00
<b>IMAGE ENHANCE</b>		Phase FOV	1.00
Filter Choice	G	Auto Shim	On
<b>GATING/TRIGGER</b>		Phase Correction	No
Auto Trigger Type	Off	<b>USER CVS</b>	
<b>FMRI</b>		User CV22	1.00
PSD Trigger	Internal	<b>MULTI-PHASE</b>	
View Order	Bottom/Up	Seperate Series	0
# of Repetitions REST	0	Mask Phase	0
# of Repetitions ACTIVE	0	Mask Pause	0
<b>SAT</b>		<b>DIFFUSION</b>	
Tag Type	None	Recon All Images	On
<b>TRICKS</b>		<b>CONTRAST</b>	
Pause On/Off	On	Contrast Yes/No	No
Auto Subtract	0		
Auto SCIC	On		

SAG T2 FLAIR

SAG T2 FLAIR

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Ax DWI ALL B-1000	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	Spin Echo
	Coil Configuration	48Ch Head Coil	Imaging Options	EDR, EPI, DIFF, Asset
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	Ax DWI ALL B-1000	FOV	24.0
	<b>SCAN TIMING</b>		Slice Thickness	4.0
	TE	Minimum	Slice Spacing	0.4
	Number of Echoes	1	<b>ACQ TIMING</b>	
	TR	9450.0	Freq	120
	Number of Shots	1	Phase	180
	<b>IMAGE ENHANCE</b>		Freq DIR	R/L
	Filter Choice	None	Phase FOV	1.00
	<b>GATING/TRIGGER</b>		Auto Shim	Auto
	Auto Trigger Type	Off	Phase Correction	Yes
	<b>FMRI</b>		<b>USER CVS</b>	
	PSD Trigger	Internal	User CV0	1.00
	View Order	Bottom/Up	User CV5	1.00
	# of Repetitions REST	0	User CV7	1.00
	# of Repetitions ACTIVE	0	User CV17	1.00
	<b>SAT</b>		User CV18	1.00
	Tag Type	None	TR Min	2000.0
	Fat/Water Saturation	Fat	TR Max	17000.0
	<b>TRICKS</b>		<b>MULTI-PHASE</b>	
	Pause On/Off	On	Seperate Series	0
Auto Subtract	0	Mask Phase	0	
Auto SCIC	2	Mask Pause	0	
		<b>DIFFUSION</b>		
		Optimized TE	Yes	
		Diffusion Directions	All	
		Number of Diffusion Directions	3	
		Number of T2 Images	1	
		Dual Spin Echo	Off	
		Recon All Images	On	
		<b>CONTRAST</b>		
		Contrast Yes/No	No	

Ax DWI ALL B-1000

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Gradient Echo
Coil Configuration	48Ch Head Coil	Imaging Options	EDR
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	Ax T2* GRE	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	4.0
Flip Angle	15	Slice Spacing	1.5
TE	Min Full	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	256
TR	509.0	Phase	160
Receiver Bandwidth	20.83	Freq DIR	A/P
<b>IMAGE ENHANCE</b>		NEX	2.00
Filter Choice	None	Phase FOV	1.00
<b>GATING/TRIGGER</b>		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	No
<b>MULTI-PHASE</b>		<b>FMRI</b>	
Seperate Series	0	PSD Trigger	Internal
Mask Phase	0	Slice Order	Interleaved
Mask Pause	0	View Order	Bottom/Up
<b>DIFFUSION</b>		# of Repetitions REST	0
Recon All Images	On	# of Repetitions ACTIVE	0
<b>CONTRAST</b>		<b>SAT</b>	
Contrast Yes/No	No	Tag Type	None
		<b>TRICKS</b>	
		Pause On/Off	On
		Auto Subtract	0
		Auto SCIC	On

Ax T2\* GRE

Ax T2\* GRE

McLeod Pavilion

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast, ARC, T2flair
Plane	OBLIQUE		
Series Description	Ax T2 FLAIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	24.0
TE	140.0	Slice Thickness	4.0
Number of Echoes	1	Slice Spacing	1.5
TR	12000.0		
TI	2711	ACQ TIMING	
Echo Train Length	21	Freq	260
Receiver Bandwidth	41.67	Phase	224
IMAGE ENHANCE		Freq DIR	A/P
Filter Choice	A	Fat Shift DIR	Normal (A)
GATING/TRIGGER		NEX	1.00
Auto Trigger Type	Off	Phase FOV	1.00
FMRI		Auto Shim	On
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV22	1.00
# of Repetitions ACTIVE	0	MULTI-PHASE	
SAT		Seperate Series	0
Tag Type	None	Mask Phase	0
TRICKS		Mask Pause	0
Pause On/Off	On	DIFFUSION	
Auto Subtract	0	Recon All Images	On
Auto SCIC	2	CONTRAST	
		Contrast Yes/No	No

Ax T2 FLAIR

Ax T2 FLAIR

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Cube T2 FLAIR
Coil Configuration	Head;Neck	Imaging Options	EDR, Fast, ZIP512, ZIP2, T2P, ARC, IrP
Plane	OBLIQUE		
Series Description	3D Sag T2 FLAIR Cube		
SCAN TIMING		SCAN RANGE	
TE	105.0	FOV	25.6
Number of Echoes	1	Slice Thickness	1.4
TR	6300.0	Location per Slab	120
TI	1782	Overlap Locations	0
Echo Train Length	180		
Receiver Bandwidth	50.00	ACQ TIMING	
		Freq	256
		Phase	256
		Freq DIR	S/I
		NEX	1.00
		Phase FOV	0.95
		Auto Shim	Auto
		Phase Correction	No
IMAGE ENHANCE		USER CVS	
Filter Choice	G	User CV5	1.00
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	Off	Seperate Series	0
		Mask Phase	0
		Mask Pause	0
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
Slice Order	Interleaved		
View Order	Bottom/Up	CONTRAST	
# of Repetitions REST	0	Contrast Yes/No	No
# of Repetitions ACTIVE	0		
SAT			
Tag Type	None		
Fat/Water Saturation	Fat		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

3D Sag T2 FLAIR Cube

3D Sag T2 FLAIR Cube

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	Ax T1 FSE Optimized	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	4.0
Flip Angle	111	Slice Spacing	1.5
TE	11.0	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	320
TR	750.0	Phase	192
Echo Train Length	3	Freq DIR	A/P
Receiver Bandwidth	41.67	Fat Shift DIR	Normal (A)
<b>IMAGE ENHANCE</b>		NEX	1.00
Filter Choice	G	# of Acq. Before Pause	0
<b>GATING/TRIGGER</b>		Phase FOV	1.00
Auto Trigger Type	Off	Auto Shim	Auto
<b>FMRI</b>		Phase Correction	Yes
PSD Trigger	Internal	<b>USER CVS</b>	
View Order	Bottom/Up	User CV16	1.00
# of Repetitions REST	0	User CV22	1.00
# of Repetitions ACTIVE	0	TR Min	750.0
<b>SAT</b>		TR Max	950.0
SAT Location	I	<b>MULTI-PHASE</b>	
Tag Type	None	Seperate Series	0
<b>TRICKS</b>		Mask Phase	0
Pause On/Off	On	Mask Pause	0
Auto Subtract	0	<b>DIFFUSION</b>	
Auto SCIC	2	Recon All Images	On
		<b>CONTRAST</b>	
		Contrast Yes/No	No

Ax T1 FSE Optimized

Ax T1 FSE Optimized



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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	PROPELLER
Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast, ARC
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	Ax T2 PROPELLER	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	4.0
Flip Angle	142	Slice Spacing	1.5
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	6694.0	Freq	320
Echo Train Length	32	Freq DIR	A/P
Receiver Bandwidth	50.00	Fat Shift DIR	Normal (A)
<b>IMAGE ENHANCE</b>		NEX	2.00
Filter Choice	None	Auto Shim	Auto
<b>GATING/TRIGGER</b>		Phase Correction	No
Auto Trigger Type	Off	<b>USER CVS</b>	
<b>FMRI</b>		User CV5	1.00
PSD Trigger	Internal	TR Min	3000.0
View Order	Bottom/Up	TR Max	10000.0
# of Repetitions REST	0	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	0	Seperate Series	0
<b>SAT</b>		Mask Phase	0
Tag Type	None	Mask Pause	0
<b>TRICKS</b>		<b>DIFFUSION</b>	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	<b>CONTRAST</b>	
Auto SCIC	2	Contrast Yes/No	No

Ax T2 PROPELLER

Ax T2 PROPELLER

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Protocol: adult\_head\_MS Brain w/wo readybrain

Cor T2 PROPELLER	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		Cor T2 PROPELLER
	Patient Entry	Head First	Imaging Mode	2D	
	Patient Position	Supine	Pulse Sequence	PROPELLER	
	Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast, ARC	
	Plane	OBLIQUE	<b>SCAN RANGE</b>		
	Series Description	Cor T2 PROPELLER	FOV	24.0	
	<b>SCAN TIMING</b>		Slice Thickness	4.0	
	Flip Angle	111	Slice Spacing	1.5	
	Number of Echoes	1	<b>ACQ TIMING</b>		
	TR	7025.0	Freq	256	
	Echo Train Length	32	Freq DIR	S/I	
	Receiver Bandwidth	50.00	Fat Shift DIR	Normal (I)	
	<b>IMAGE ENHANCE</b>		NEX	2.00	
	Filter Choice	None	Auto Shim	Auto	
	<b>GATING/TRIGGER</b>		Phase Correction	No	
	Auto Trigger Type	Off	<b>USER CVS</b>		
	<b>FMRI</b>		User CV5	1.00	
	PSD Trigger	Internal	TR Min	3000.0	
	View Order	Bottom/Up	TR Max	10000.0	
	# of Repetitions REST	0	<b>MULTI-PHASE</b>		
	# of Repetitions ACTIVE	0	Seperate Series	0	
	<b>SAT</b>		Mask Phase	0	
	Tag Type	None	Mask Pause	0	
	<b>TRICKS</b>		<b>DIFFUSION</b>		
	Pause On/Off	On	Recon All Images	On	
Auto Subtract	0	<b>CONTRAST</b>			
Auto SCIC	2	Contrast Yes/No	No		

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<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	48Ch Head Coil	Imaging Options	Seq, EDR, TRF, Fast, SS, ARC
Plane	3-PLANE	<b>SCAN RANGE</b>	
Series Description	--Contrast--	FOV	30.0
<b>SCAN TIMING</b>		Slice Thickness	10.0
TE	80.0	Slice Spacing	5.0
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	1200.0	Freq	256
Receiver Bandwidth	83.33	Phase	128
<b>IMAGE ENHANCE</b>		Freq DIR	Unswap
Filter Choice	None	# of Acq. Before Pause	0
<b>GATING/TRIGGER</b>		Phase FOV	1.00
Auto Trigger Type	Off	Auto Shim	Auto
<b>FMRI</b>		Phase Correction	No
PSD Trigger	Internal	<b>USER CVS</b>	
View Order	Bottom/Up	User CV1	1.00
# of Repetitions REST	0	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	0	Seperate Series	0
<b>SAT</b>		Mask Phase	0
Tag Type	None	Mask Pause	0
<b>TRICKS</b>		<b>DIFFUSION</b>	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	<b>CONTRAST</b>	
Auto SCIC	Off	Contrast Yes/No	No

McLeod Pavilion

Protocol: adult\_head\_MS Brain w/wo readybrain

+ C 3D Ax T1 FSPGR	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	3D
	Patient Position	Supine	Pulse Sequence	SPGR
	Coil Configuration	48Ch Head Coil	Imaging Options	EDR, Fast, ZIP512, ZIP2, Asset, IrP
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	+ C 3D Ax T1 FSPGR	FOV	24.0
	<b>SCAN TIMING</b>		Slice Thickness	1.2
	Flip Angle	12	Location per Slab	130
	TE	Min Full	Overlap Locations	0
	Number of Echoes	1	<b>ACQ TIMING</b>	
	TI	450	Freq	256
	Receiver Bandwidth	31.25	Phase	256
	<b>IMAGE ENHANCE</b>		Freq DIR	Unswap
	Filter Choice	G	NEX	1.00
	<b>GATING/TRIGGER</b>		Phase FOV	1.00
	Auto Trigger Type	Off	Auto Shim	Auto
	<b>FMRI</b>		Phase Correction	No
	Initial State	Control	<b>USER CVS</b>	
	PSD Trigger	Internal	User CV6	2.00
	View Order	Bottom/Up	User CV23	90.00
	# of Repetitions REST	0	<b>MULTI-PHASE</b>	
	# of Repetitions ACTIVE	0	Seperate Series	0
	<b>SAT</b>		Trigger Delay without AV	0
	Tag Type	None	Mask Phase	0
	<b>TRICKS</b>		Mask Pause	0
Pause On/Off	On	<b>DIFFUSION</b>		
Auto Subtract	0	Recon All Images	On	
Auto SCIC	2	<b>CONTRAST</b>		
		Contrast Yes/No	Yes	

+ C 3D Ax T1 FSPGR

Protocol: adult\_head\_MS Brain w/wo readybrain

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	48Ch Head Coil	Imaging Options	EDR, TRF, Fast
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	+C Ax T1 FSE	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	4.0
Flip Angle	111	Slice Spacing	1.5
TE	11.0	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	256
TR	750.0	Phase	192
Echo Train Length	3	Freq DIR	A/P
Receiver Bandwidth	41.67	Fat Shift DIR	Normal (A)
<b>IMAGE ENHANCE</b>		NEX	1.00
Filter Choice	G	# of Acq. Before Pause	0
<b>GATING/TRIGGER</b>		Phase FOV	1.00
Auto Trigger Type	Off	Auto Shim	Auto
<b>FMRI</b>		Phase Correction	Yes
PSD Trigger	Internal	<b>USER CVS</b>	
View Order	Bottom/Up	User CV16	1.00
# of Repetitions REST	0	User CV22	1.00
# of Repetitions ACTIVE	0	TR Min	750.0
<b>SAT</b>		TR Max	950.0
SAT Location	I	<b>MULTI-PHASE</b>	
Tag Type	None	Seperate Series	0
<b>TRICKS</b>		Mask Phase	0
Pause On/Off	On	Mask Pause	0
Auto Subtract	0	<b>DIFFUSION</b>	
Auto SCIC	2	Recon All Images	On
		<b>CONTRAST</b>	
		Contrast Yes/No	Yes

+C Ax T1 FSE

+C Ax T1 FSE