

1.5T WRIST MRI - UW MADISON													1/24/11 Desmet/Robichaud/Trotter			
													MEV updated 5-9-2018			
COIL: 8ch knee. HD wrist, 16ch FLEX			Positioning = PALM DOWN Arm at side: Feet 1st or Head 1st (However patient is positioned) Arm overhead not midline = Select Head 1st, *Annotations INCORRECT Arm overhead midline = Select Feet 1st, Annotations CORRECT													
BASIC WRIST			FOV	Pfov	slthk/sp	frq dir	TR	TE	ETL	TI	Sat	Matrix	NEX	BW	ADVANCED	
1	3 pl loc	2d std loc	Seq, fast, NP	30 x 30	pfov 1	7 / 2	def	TR def	TE def			256 x 128	2 nex			
2	Ax T1 FSE	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .7	3 / .5	swap	TR 600	TE 20	ETL 3		256 x 192	2 nex	BW 15	blur 0	
3	Ax T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .7	3 / .5	swap	TR 3000	TE 80	ETL 10		cl fat	256 x 224	2 nex	BW 20	blur 0, f eff 1
4	Sag T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	3 / .5	unswap	TR 3000	TE 80	ETL 10		cl fat	256 x 224	3 nex	BW 20	blur 0, f eff 1
5	Cor T1 FSE	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 575	TE 20	ETL 3		256 x 224	2 nex	BW 15	blur 0	
6	Cor T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 3000	TE 80	ETL 10		cl fat	256 x 224	3 nex	BW 20	blur 0, f eff 1
S/L Ligament - line up proximal surfaces of lunate and scaphoid bones and scan perpendicularly to the ligament seen on the coronal view (Radial side)																
	obl Ax PD fat	2d FSE-XL	TRf, Fast, ZIP 512, NP	12 x 12	pfov 1	2 / .2	unswap	TR 1800	TE 17 (26.0 22)	ETL 4		dk fat	256 x 224	1 nex	BW 20	blur 0, f eff 1
T/L Ligament - line up proximal surfaces of triquetrum and lunate bones and scan perpendicularly to the ligament seen on the coronal view (Ulnar side)																
	obl Ax PD fat	2d FSE-XL	TRf, Fast, ZIP 512, NP	12 x 12	pfov 1	2 / .2	unswap	TR 1800	TE 17 (26.0 22)	ETL 4		dk fat	256 x 224	1 nex	BW 20	blur 0, f eff 1
Fx scan sagittally along the long axis of scaphoid bone																
	Sag T1 FSE	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .7	2 / .2	swap	TR 600	TE 11	ETL 3		256 x 192	2 nex	BW 15	blur 0	
	Cor T1 3d	3d GRE	NPW, Fast, Zip512, Zip 2	12 x 12	pfov 1	1 / 0	unswap	TR 58	TE 12	Flip 10	Prep Auto	256 x 160	1 nex	BW 15	trial...	
Tumor ONLY:																
	PRE ax T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .7	3 / .5	swap	TR 575	TE 20	ETL 3		FAT	256 x 192	1 nex	BW 15	blur 0, f eff 1
Optional Post contrast																
+C	ax T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .7	3 / .5	swap	TR 575	TE 20	ETL 3		FAT	256 x 192	2 nex	BW 15	blur 0, f eff 1
+C	sag T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	3 / .5	unswap	TR 575	TE 20	ETL 3		FAT	256 x 192	2 nex	BW 15	blur 0, f eff 1
+C	cor T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 575	TE 20	ETL 3		FAT	256 x 224	2 nex	BW 15	blur 0, f eff 1
WRIST: Synovitis and Erosions																
Entire wrist thru MCP joints																
				FOV	Pfov	slthk/sp	frq dir	TR	TE	ETL	TI	Sat	Matrix	Nex	BW	ADVANCED
1	3 pl loc	2d std loc	Seq, fast, NP	30 x 30	pfov 1	7 / 2	def	TR def	TE def				256 x 128	2 nex		
2	Ax T1 FSE	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov .7	3 / 1	swap	TR 575	TE 20	ETL 3		256 x 192	2 nex	BW 15	blur 0	
3	Ax T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov .7	3 / 1	swap	TR 3000	TE 80	ETL 10		cl fat	256 x 224	3 nex	BW 20	blur 0, f eff 1
4	Sag T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	3 / 1	unswap	TR 3000	TE 80	ETL 10		cl fat	256 x 224	3 nex	BW 20	blur 0, f eff 1
5	Cor T1 FSE	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 575	TE 20	ETL 3		256 x 224	2 nex	BW 15	blur 0	
6	Cor STIR	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 3000	TE 44	ETL 8		256 x 224	2 nex	BW 15	blur 0, f eff 1	
7	+C Cor T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	2 / .2	unswap	TR 550	TE 20	ETL 3		FAT	256 x 224	2 nex	BW 15	blur 0
8	+C Ax T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov .7	3 / 1	swap	TR 550	TE 20	ETL 3		FAT	256 x 192	2 nex	BW 15	blur 0, f eff 1
9	+C Sag T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 - 16	pfov 1	3 / 1	unswap	TR 550	TE 20	ETL 3		FAT	256 x 192	2 nex	BW 15	blur 0, f eff 1
WRIST: Arthrogram																
				FOV	Pfov	slthk/sp	frq dir	TR	TE	ETL	TI	Sat	Matrix	Nex	BW	ADVANCED
1	+C 3 pl loc	2d std loc	Seq, fast, NP	30 x 30	pfov 1	4 / 2	def	TR def	TE def				256 x 128	1 nex		
2	+C Cor T1 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 12	pfov 1	2 / .2	unswap	TR 575	TE 20	ETL 2		cl fat	256 x 224	1 nex	BW 12	blur 0, f eff 1
3	+C Cor T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 12	pfov 1	2 / .2	unswap	TR 3000	TE 68	ETL 6		cl fat	256 x 224	2 nex	BW 12	blur 0, f eff 1
4	+C Sag T1 FSE no fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 12	pfov 1	3 / 1.5	unswap	TR 550	TE 20	ETL 2		256 x 224	2 nex	BW 12	blur 0	
5	+C Ax T1 FSE cl fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .8	3 / .5	swap	TR 575	TE 20	ETL 2		cl fat	256 x 224	2 nex	BW 12	blur 0, f eff 1
6	+C Ax T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	12 x 9	pfov .8	3 / .5	swap	TR 3000	TE 68	ETL 6		cl fat	256 x 224	3 nex	BW 12	blur 0, f eff 1
7	+C 3d PD CUBE Fat	3D Cube	EDR, Fast, Zip 512, Zip 2, FR ARC	14 x 14	pfov 1	1/0	unswap	TR 1500	TE 30	ETL 50		fat	224 x 224	1 nex	BW 62	f eff .7, center k 70 cube enh1
old	Cor T1 3d fat	3d SPGR		12 x 12	pfov 1	1.2 / 0	unswap	TR def 17	TE 25	Flip 25		FAT	256 x 256	2 nex	BW 31	
Additional optional sequences																
	FSTIR	2d FSE-IR	Seq, ZIP 512, fast	12 x 12	1		unswp	TR 3000	TE 44	ETL 8	TI 160		256 x 224	2 nex	BW 12	
	T2 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 x 14	1		unswp	TR 2700	TE 68	ETL 8		FAT	256 x 224	3 nex	BW 20	blur 0, f eff 1
	T2 cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 x 14	1		unswp	TR 3000	TE 80	ETL 8		cl fat	256 x 192	3 nex	BW 20	blur 0, f eff 1

	PD cl fat	2d FSE-XL	TRf, Fast, ZIP 512	14 x 14	1		unswp	TR 2000	TE 20	ETL 4		cl fat	256 x 224	1 nex	BW 15	blur 0, f eff 1	
	PD no fat	2d FSE-XL	TRf, Fast, ZIP 512	14 x 14	1		unswp	TR 2000	TE 20	ETL 4			256 x 224	1 nex	BW 15	blur 0	
+C	T1 dk fat	2d FSE-XL	TRf, Fast, ZIP 512	14 x 14	1		unswp	TR 575	TE 20	ETL 4		FAT	256 x 224	2 nex	BW 15	blur 0, f eff 1	
	T2* GRE	2d GRE	ZIP 512	14 x 14	1	3 / 1.5	unswp	TR 500	TE 15	Flip 20			256 x 192	3 nex	BW 10		
	Cor T1 3d dkfat	3d SPGR		12 x 12	pfov 1	1 / 0	unswp	TR 58	TE 12	Flip 10		FAT	256 x 160	1 nex	BW 15		