

750w 26.0 3T MSK PELVIS and HIPS - UW MADISON										2/1/13 Desmet/Blankenbaker/Robichaud			MEV Updated 3-8-18							
8ch CADIAC or 8ch Body LOWER GEMS 30 Small				***all FSE scans have c/c ann sup 1 and adon lvl 1 under						*ZIP 512: If matrix is >256 scan will be auto zipped to 512										
PELVIS - BONY or FX	FOV	pfov	slthk/sp	frqdr	TR	TE	TI	ETL	SCIC	Matrix	Nex	BW	Accel	Advanced	Sat					
<b>All views should include all of sacrum to below lesser trochanters.</b>																				
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane	min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240 echo sp 1, RG 1				
2	Cor T1	2d FSE	NP, TRF, fast, ARC	body width	pfov1	5 / 2.5	unsp	TR 575	TE 20			ETL 4	PURE	320 x 224	2 nex	BW 31	2			
3	Cor FSTIR	2d FSE	NP, Seq, TRF, fast, IRP	body width	pfov1	5 / 2.5	unsp	TR 5000	TE 40	TI 180		ETL 8	PURE	320 x 192	2 nex	BW 31	2	hlf nh 1		
4	Ax T1	2d FSE	EDR, TRF, fast	body width	pfov.8	5 / 2.5	unsp	TR 575	TE 20			ETL 4	PURE	320 x 224	2 nex	BW 31	2			
5	Ax T2 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	5 / 2.5	unsp	TR 4225	TE 85			ETL 16	PURE	320 x 224	2 nex	BW 41	2	enh fl 1, fs eff 1	FAT	
<b>Unilateral: Hip thru greater trochanter</b>																				
6	Sag PD cl fat	2d FSE	NP, EDR, TRF, fast, FR	18 x 18	pfov1	4 / 1	unsp	TR 2200	TE 25			ETL 8	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	cl fat	
7	Cor T2 cl fat	2d FSE	NP, TRF, ZIP 512, fast	20 x 20	pfov1	4 / 1	unsp	TR 2800	TE 60			ETL 10	PURE	320 x 192	5 nex	BW 31	2	enh fl 1, fs eff 1	cl fat	
<b>Synovitis: (lg FOV, thinner slices, include unilateral hip views above)</b>																				
8	+Cor T1 dk fat	2d FSE	NP, TRF, ZIP 512, fast	body width	pfov1	4/1	unsp	TR 650	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	FAT	
9	+Ax T1 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	4/5	unsp	TR 600	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	FAT	
<b>Rapid ED Hip FX</b>																				
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane	min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240				
2	Cor T1	2d FSE	NP, TRF, fast, ARC	body width	pfov1	5 / 2.5	unsp	TR 575	TE 20			ETL 4	PURE	320 x 224	2 nex	BW 31	2			
3	Cor FSTIR	2d FSE	NP, Seq, TRF, fast, IRP, ARC	body width	pfov1	5 / 2.5	unsp	TR 5000	TE 40	TI 180		ETL 8	PURE	320 x 192	2 nex	BW 31	2	hlf nh 1		
for Ax coverage---above sacrum to below lesser trochanter (don't overscan)																				
4	Ax T2 dk fat	2d FSE	TRF, ZIP 512, fast, ARC	body width	pfov.8	5 / 2.5	unsp	TR 4225	TE 85			ETL 16	PURE	320 x 224	2 nex	BW 41	2	enh fl 1, fs eff 1	FAT	
<b>HIP - ARTHROGRAM</b>																				
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane	min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240 echo sp 1, RG 1				
2	Cor T1 cl fat	2d FSE	NP, TRF, ZIP 512, fast	20 x 20	pfov1	4 / .4	unsp	TR 625	TE MF			ETL 4	PURE	320 x 192	3 nex	BW 31	2	fs eff=1	cl fat	
3	Cor T2 cl fat	2d FSE	NP, TRF, ZIP 512, fast	20 x 20	pfov1	4 / .4	unsp	TR 3150	TE 60			ETL 10	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	cl fat	
4	SagPD cl fat	2d FSE	NP, TRF, ZIP 512, fast	18 x 18	pfov1	4 / 1	S/I	TR 2000	TE 25			ETL 6	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	cl fat	
<b>Series 5 is prescribed on the coronal, parallel to the femoral neck</b>																				
5	Obl Ax T1 cl fat	2d FSE	NP, TRF, ZIP 512, fast	18 x 18	pfov1	4 / .4	unsp	TR 600	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	cl fat	
6	Ax T1 No fat	2d FSE	NP, TRF, ZIP 512, fast	18 x 18	pfov1	4 / .4	R/L	TR 600	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2			
7	Ax T2 cl fat	2d FSE	NP, TRF, ZIP 512, fast	18 x 18	pfov1	4 / .4	R/L	TR 3150	TE 85			ETL 17	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	cl fat	
8	SAG 3d FSPGR IDEAL	3d SPGR	EDR, Fast, Zip2, Asset	20 x 20	pfov1	1.6	60 sls	def	min full			FLIP 14		350 x 350	1 nex	BW 31	2	Turbo 2		
IDEAL																				
Accel 2, IDEAL: FAT & WATER																				
old	Radial PD cl fat	2d FSE	NP, TRF, ZIP 512, fast	22 x 22	pfov1	2 / 0	swap	TR 2000	TE 42			ETL 6	PURE	320 x 192	3 nex	BW 31	2	fs eff=1	cl fat	
<b>HIP: Labrum Scope</b>																				
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane	min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240 echo sp 1, RG 1				
<b>Coronals-center at lesser trochanter</b>																				
2	Cor T1	2d FSE	NP, TRF, fast	20 x 20	pfov1	4 / 1	S/I	TR 575	TE 18			ETL 4	PURE	320 x 224	3 nex	BW 31	2			
3	Cor T2 cl fat	2d FSE	NP, TRF, fast	20 x 20	pfov1	4 / 1	S/I	TR 3150	TE 60			ETL 10	PURE	320 x 192	3 nex	BW 31	2	fs eff=1	cl fat	
<b>Sagittal-center on joint</b>																				
7	Sag PD cl fat	2d FSE	NP, EDR, fast, FR, ARC	18 x 18	pfov1	3/2	S/I	TR 2000	TE 25			ETL 6	PURE	384 x 320	3 nex	BW 31	2	fs eff=1	cl fat	
<b>Axials-cover 3 cm above superior hip joint to below lesser trochanter</b>																				
4	Ax T1	2d FSE	NP, TRF, fast	22 x 22	pfov1	4 / 1	R/L	TR 575	TE 18			ETL 4	PURE	288 x 224	2 nex	BW 31	2			
5	Ax T2 cl fat	2d FSE	NP, TRF, fast	22 x 22	pfov1	4 / 1	R/L	TR 3150	TE 80			ETL 10	PURE	320 x 224	2 nex	BW 31	2	fs eff=1	cl fat	
<b>Oblique Axials-parallel to femoral neck</b>																				
6	Obl Ax PD cl fat	2d FSE	NP, TRF, fast,	22 x 22	pfov1	3/3	unsp	TR 2200	TE 42			ETL 6	PURE	320 x 192	3 nex	BW 31	2	fs eff=1	cl fat	
7	Sag 3D Merge	3d Merge	FC NPW, EDR, Fast, Zip2	18 x 18	pfov 1	1.6 mm	32 locs	TR MIN	TE min full			Flip 5	none	488 x 384		BW 41	2	apod lev 1		
ARC																				
old	SAG 3d FSPGR IDEAL	3d SPGR	EDR, Fast, Zip2, Asset	20 x 20	pfov1	1.6	60 sls	def	min full			FLIP 14		350 x 350	1 nex	BW 31	2	Turbo 2		
IDEAL																				
, IDEAL: FAT & WATER																				
<b>PELVIS - OSTEOMYELITIS / ABSCESS / TUMOR</b>																				
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane	min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240 echo sp 1, RG 1				
2	Cor T1	2d FSE	NP, TRF, ZIP 512, fast	body width	pfov1	5 / 2.5	unsp	TR 575	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2		3:00	
3	Cor FSTIR	2d FSE-IR	NP, Seq, ZIP 512, fast	body width	pfov1	5 / 2.5	unsp	TR 3400	TE 40	TI 180		ETL 8	PURE	320 x 192	2 nex	BW 31	2		4:00	
4	Sag T1	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	7/3	unsp	TR 600	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2		3:10	
5	Sag FSTIR	2d FSE-IR	Seq, ZIP 512, fast	body width	pfov.8	7/3	unsp	TR 3400	TE 40	TI 180		ETL 8	PURE	320 x 192	1 nex	BW 31	2		4:30	
6	Ax T1	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	5 / 2.5	unsp	TR 600	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2		4:10	
7	Ax T2 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	5 / 2.5	unsp	TR 3200	TE 85			ETL 16	PURE	320 x 192	2 nex	BW 41	2	fs eff=1	FAT	4:50
TUMOR:	Ax T1 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	5 / 2.5	unsp	TR 600	TE 18			ETL 4	PURE	320 x 192	1nex	BW 31	2	fs eff=1	FAT	2:00
<b>Give IV contrast:</b>																				
8	Cor T1 dk fat	2d FSE	NP, TRF, ZIP 512, fast	body width	pfov1	5 / 2.5	unsp	TR 650	TE 18			ETL 4	PURE	320 x 192	2 nex	BW 31	2	fs eff=1	FAT	3:30

9	Sag T1 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	7/3	unsp	TR 600	TE 18		ETL 4	PURE	320 x 192	2 nex	BW 31		fs eff=1	FAT	4:00
10	Ax T1 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov.8	5 / 2.5	unsp	TR 600	TE 18		ETL 4	PURE	320 x 192	2 nex	BW 31		fs eff=1	FAT	3:30
<b>OPTIONAL SEQUENCES</b>																			
	FSTIR	2d FSE-IR	Seq, ZIP 512, fast		pfov1		unsp	TR 4000	TE 40	TI 180	ETL 9	PURE	320 x 224	2 nex	BW 31				
	PD no fat	2d FSE	TRF, *zip 512, fast		pfov1		unsp	TR 1800	TE 20		ETL 5	PURE	320 x 224	2 nex	BW 31				
	PD cl fat	2d FSE	TRF, *zip 512, fast, EDR		pfov1		unsp	TR 2200	TE 27		ETL 5	PURE	320 x 224	2 nex	BW 31		fs eff=1	cl fat	
	T2 cl fat	2d FSE	TRF, ZIP 512, fast		pfov1		unsp	TR 3150	TE 80		ETL 10	PURE	320 x 224	2 nex	BW 31		fs eff=1	cl fat	
	T2 dk fat	2d FSE	TRF, ZIP 512, fast	body width	pfov1	5 / 2.5	unsp	TR 2800	TE 60		ETL 6	PURE	320 x 224	2 nex	BW 41		fs eff=1	FAT	
	Cor 3d	3D tof SPC	ZIP 2		pfov1	2.4/0	S/I	TR 18	TE 2 fr			PURE	512 x 384	1 nex	BW 31				
<b>SPORTS HERNIA / OSTEITIS PUBIS / PUBALGIA</b>																			
1	3 pl loc	2d SE	Seq, EDR, Fast, SS, ARC	48 x 48	pfov1	5/5 9sl each plane		min	80	-	-	-	256 x 128	1 nex	62	2	coll all 1, max # 240	-	
																	echo sp 1, RG 1		
2	Cor FSTIR	2d FSE-IR	NP, Seq, ZIP 512, fast	body width	pfov1	5 / 2.5	unsp	TR 5000	TE 40	TI 180	ETL 9	PURE	320 x 192	2 nex	BW 31				
3	Cor T1	2d FSE	NP, TRF, ZIP 512, fast	24 X 24	pfov1	4 / 1	unsp	TR 600	TE 20		ETL 4	PURE	320 x 224	2 nex	BW 31				
4	Cor FSTIR	2d FSE-IR	NP, Seq, ZIP 512, fast	24 X 24	pfov1	4 / 1	unsp	TR 4850	TE 40	TI 180	ETL 9	PURE	320 x 224	2 nex	BW 31				
5	Sag T2 cl fat	2d FSE	NP, TRF, ZIP 512, fast	24 X 24	pfov1	4 / 1	unsp	TR 4000	TE 80		ETL 20	PURE	320 x 224	2 nex	BW 31		fs eff=1	cl fat	
6	Ax T2 dk fat	2d FSE	NP, TRF, ZIP 512, fast	20 X 20	pfov1	4 / 1	unsp	TR 3000	TE 60		ETL 8	PURE	320 x 224	2 nex	BW 41		fs eff=1	FAT	
7	<Ax T2 dk fat	2d FSE	NP, TRF, ZIP 512, fast	20 X 20	pfov1	4 / 1	unsp	TR 3000	TE 80		ETL 20	PURE	320 x 224	2 nex	BW 41		fs eff=1	FAT	
8	<Ax PD	2d FSE	NP, TRF, ZIP 512, fast	20 X 20	pfov1	4 / 1	unsp	TR 2200	TE 20		ETL 5	PURE	320 x 224	2 nex	BW 31				
	old test sequences for faster Hip Fx protocol.																		
6	Ax T1 Lava Flex	3d Lava-Fl	EDR, Fast, Zip512, Zip2 ARC	36	0.9	3.2mm	96 locs	Def	Min Full	Flip 15			280 x 224	1 nex	BW 142		Accel 2/1.5	Turbo 1	
7	Cor T1 Lava Flex	3d Lava-Fl	NPW, EDR, Fast, Zip512, Zip2 ARC	36	1	3.2mm	60 locs	Def	Min Full	Flip 15			280 x 224	1 nex	BW 142		Accel 2/1.5	Turbo 1	