

Date	Test	Researchers	Major Results			
7/1/2015	Prestock	Kate,Anjelica,Alivia,Rushi	First day of experiments!			
	Working Stocks(close AB,A'C,B'C',open AB, Contaminated PS AB)					
7/2/2015	Salt gradient 12-26mM (2.5 day ramp)	Devan,Kishan,Anjelica	Structures fold at 6mM MgCl ₂ , folds best at 18mM MgCl ₂			
7/5/2015	Gels	Rushi,Anjelica,Kate				
7/7/2015	Gels - one closed B'C',one open AB	Rushi				
7/7/2015	TEM grids	Rushi	Monomers were formed!			
7/8/2015	Rapid fold 60-40 gradient (one open, one closed)	Kishan,Devan	Structure folds best at 53 degrees celsius			
7/9/2015	Gels	Anjelica,Alivia				
7/9/2015	TEM grids	Anjelica,Alivia,Devan				
7/10/2015	4 degree gradient rapid fold	Kate,Kishan,Devan				
7/11/2015	Gels	Kishan,Devan,Kate				
7/15/2015	Prestock, working stocks (higher closing,dimer/trimer)	Kate,Kishan,Rushi				
7/16/2015	rapid fold 53 degrees higher closing/dimer/trimer	Alivia, Anjelica				
7/17/2015	gel on dimer AB-A'B', AB-AC' and trimer AB-AC'-B'C'- TEM grids	Anjelica,Devan,Rushi	Dimers were formed!			
	dimer AB-A'B', AB-AC' and trimer AB-AC'-B'C' after purifying AB,A'C,B'C' and A'B' seperately- TEM grids					
7/21/2015	Learn how to PEG	Kate,Anjelica				
7/22/2015	TEM grids, rapid fold 53 degree all open working stocks, (attempted) gels	Kate,Kishan				
7/22/2015	Gel, purified shaker dimer/trimer	Anjelica,Alivia	Find incubation times for trimer formation			
7/25/2015	Unpurified dimer/trimer	Devan,Anjelica				
	1st Gels AB, leading/lagging	Kishan	Extensive testing for double band meaning			
	2nd Gels AB, leading/lagging	Kishan				
7/28/2015	PEG,Shake,TEM, closed,open rapid folds	Anjelica,Alivia, Kishan,Shabaz				
7/29/2015	Shake/incubate, gel	Kishan, Kate, Shabaz	First Trimer formed!			
7/29/2015	TEM (after PEG purification and gel)	Anjelica,Alivia				
7/30/2015	PEG, shake(vary temp), gel (third band), TEM	Devan, Alivia	Testing incubation temperatures and times			
7/31/2015	redo gel, make PEG, grids	Anjelica,Kishan,Devan				
8/1/2015	redo gel of PEG RT samples, grids	Kishan,Anjelica	Trimers do not form well at room temp			
8/2-8/3	work on wiki/study for exams					
8/4/2015	all open, b'a open, ca closed working stocks (ws3-7), 53 rapid fold, 4hr	Devan	Optimal trimerization conditions			
8/5/2015	purify everything w peg (all rapid folds), PEG again, mix dimers/trimers, shake and incubators 30 min 37degrees, TE	Kishan, Shabaz, Kate				
8/6/2015	b'c' closed testing - peg (after combo), add staples for extra closing, grids, rerun some gels	Devan Kishan Kate	First test of closing monomers			
8/7/2015	rerun 4 degree gel (52-56deg)	Anjelica				
8/10/2015	Gel of polymers w/o shake/incubate	Anjelica				
8/11/2015	prestocks, working stocks, rapid folds 2x each structure					
8/12/2015	2X Peg each structure, gel check peg and supernatant,high voltage survival gel check,	Kishan, Kate	Structures survive at high voltage			
8/13/2015	Tilbit scaffold gel check	Kishan, Devan, Anjelica	Extensive testing for double band reasoning			
8/14/2015	Redo Tilbit gel					
8/14/2015	Check gel of dimer/trimer formation after incubation @ RT	Kishan, Anjelica, Devan	Extensive testing for double band reasoning			
8/15/2015	PEG purification, Prestocks	Kishan, Devan				
8/17/2015	Mix lead and lagging bands of gel for dimers - check for band shift	Anjelica, Kishan, Devan				
8/18/2015	Two gels of leading and lagging bands from previous gel (purify twice)	Anjelica, Kishan, Devan, Kate, Alivia	Extensive testing for double band reasoning			
8/18/2015	2X PEG using 2mM Mg resuspension, salt gradient rapid fold (Mg & Na)	Anjelica, Kishan, Devan, Kate, Alivia	Extensive testg for double band reasoning			
8/19/2015	Check gel of PEG; closing strand added in excess relative to overhangs	Devan, Kishan, Kate	Testing closing of structure			
8/19/2015	TEM Grids of closing strands prepared	Kishan				
8/20/2015	work on wiki/study for exams	OhioMOD				
8/21/2015	Gels of salt variances (2M Na, 24nM Mg)	Devan, Kishan, Kate				
8/22/2015	Thermocycler closed ssDNA structures w and w/o staples, TEM grids after 16 hr incubation/thermal ramps	Kishan, Anjelica	Testing closing of structure			
8/23/2015	OSU move-in day!					
8/25/2015	Form dimers at salt gradient 6-42 mM Mg, run gel, 1% agarose gel, 1000x and 10,000x closing strands conc.	Anjelica, Kishan, Alivia	Test closing with excessing staples			
8/26/2015	Redo dimer gel for salt gradient 6-42 mM Mg, PEG purify structures	Kishan				
8/29/2015	2X PEG, trimer optimization (incubate 30 min, 1 hr, 4 hr, @ 37 deg), TEM grids	Anjelica				
8/31/2015	Prepared 10nM solution of structures for 9/01	Kishan	Trimer incubation time optimaztion			
9/1/2015	Add 1000x, 10,000x closing ssDNA & low affinity staples (incubate 4hrs 34 deg C), gel purification	Kishan	Closing - didn't work			
9/8/2015	Testing for closing Hinge with High affinity staples	Kishan	First closed structure!			
9/8/2015	Monomer negative staining (TEM grids)	Anjelica				
9/14-15/2015	Close Hinges at 1x,10x,100x w closing strand and HA staples, prepare hinge at 1x HA staple w/o clo strand, TEM gri	Kishan	Closing optimization			
9/14/2015	trimer neagative staining, 2 wick, 1 wick techniques	Anjelica				
9/20/2015	trimer negative staining, dilute 20x, trimer images more clear	Anjelica				
9/28/2015	closing attempt w 300uL of 6nM structure, PEG, grids (check if still closed)	Kishan	Check if structure is still closed			
9/29/2015	Carry 56-52 thermal ramp w open structure, run gel	Kishan				

10/1/2015	closed PEG purified strucure w HA and Closing strand, incubate 3 hrs, PEG, TEM grids	Kishan	Closing optimization			
10/2/2015	Folding rxn for B'C' open	Kishan	*Future Work/ Opening closed structures			
10/6/2015	2X PEG folded structure, open structure (20uL of 6nM structure, use 10x, 100x, 1000x conc of opening strands relat	Kishan				