

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1	2	3
Week 32	4	5	6	7	8	9	10
Week 33	11	12	13	14	15	16	17
Week 34	18	19	20	21	22	23	24
Week 35	25	26	27	28	29	30	31

Draft timeline v1
Draft timeline for Tuesday review;
bring printed and digital copies.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 36	1	2	3	4	5	6	7
				Serve fore	Suit Send fo	Advance to candidacy Ensure doctoral candidacy status is confirmed (should already be completed by 5th year).	
Week 37	8	9	10	11	12	13	14
			Restore amplified output to 130 mW (previous benchmark)		Define proposal... Lab culture...	Update committee membership Update committee membership if needed and file 'Request for Change in Doctoral Committee' form if required.	
Week 38	15	16	17	18	19	20	21
	Expand proposal draft Write 12page Research Strategy from outline per BME guidelines.						
Week 39	22	23	24	25	26	27	28
							Confirm exam date Oral exam date scheduled. Must send final proposal to committee 2 weeks prior to exam.
Week 40	29	30					

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1 Data backup...	2 Surgical...	3 +1 more	4	5
Week 41	6	7	8 Complete...	9 Calibrate...	10	11	12
Week 42	13	14	15 Laser system ready Confirm laser and optics meet live imaging requirements.	16	17	18	19
Week 43	20	21 Design AAV vectors	22 Reserve exam...	23	24	25	26
Week 44	27	28 Draft Specific Aims and Research Strategy Write 1-page Specific Aims and 12-page Research Strategy sections for proposal.	29	30	31		

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0						1	2
Week 45	3	4	5	6	7	8	9
Week 46	10	11	12	13	14	15	16
Week 47	17	18	19	20	21	22	23
Week 48	24	25	26	27	28	29	30

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 49	1	2	3	4	5	6	7
	Finalize proposal draft and formatting Complete full proposal document (~13 pages) with proper formatting and submit for review.						
Week 50	8	9	10	11	12	13	14
	Prepare presentation Create slide deck and practice oral exam presentation. Aim for two practice runs with lab members.						
Week 51	15	16	17	18	19	20	21
					Poster Defense	AAV vectors ready Receive AAV vectors; ready for injections.	
Week 52	22	23	24	25	26	27	28
		Address committee feedback Incorporate committee revisions into proposal and submit signed approval form for final approval.					
Week 1	29	30	31				

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
				Data backup...			
				Maintain...			
				+1 more			
Week 2	5	6	7	8	9	10	11
Week 3	12	13	14	15	16	17	18
Week 4	19	20	21	22	23	24	25
Week 5	26	27	28	29	30	31	

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1 <div>Cranial window surgeries (3 mice) Install cranial windows and inject AAV in three pilot mice with staggered timing (1 week apart).</div>
Week 6	2	3	4	5	6	7	8
Week 7	9	10	11	12	13	14	15
Week 8	16	17	18	19	20	21	22
Week 9	23	24	25	26	27 <div>Post-operative recovery and monitoring Monitor/medicate mice; maintain analgesia schedule.</div>	28	

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1
Week 10	2	3	4	5	6	7	8
Week 11	9	10	11	12	13	14	15
Week 12	16	17	18	19	20	21	22
Week 13	23	24	25	26	27	28	29
Week 14	30	31					

Pilot imaging sessions (3 mice)
Acquire in vivo images for all three mice comparing AAV fluorescence vs traditional dye injection methods.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1	2	3	4	5
			Equipment maintenance log - Q3 2026 Maintain detailed rig log for any alignment changes and communicate modifications to colleagues.				
Week 15	6	7	8	9	10	11	12
Week 16	13	14	15	16	17	18	19
			Pilot datasets complete Complete 3 pilot twophoton datasets				Draft...
							Configure...
							+1 more
Week 17	20	21	22	23	24	25	26
		Process pilot data Perform image registration and SNR analysis. Calculate contrast metrics and refine imaging protocols.					
Week 18	27	28	29	30			

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1	2	3
Week 19	4	5	6	7	8	9	10
Week 20	11	12	13	14	15	16	17
Week 21	18	19	20	21	22	23	24
Week 22	25	26	27	28	29	30	31

Design U-Net architecture and training data
Design U-Net architecture for vascular segmentation and prepare training datasets from pilot images.

Configure LSCI for blood flow measurements
Configure LSCI for bloodflow measurements.

Compare labeling methods
Systematically compare imaging depth; SNR; and contrast across different labeling methods (AAV vs dye) in vivo.

Implement and test segmentation pipeline
Implement UNet pipeline; test on pilot data.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 23	1	2	3	4	5	6	7
Week 24	8	9	10	11	12	13	14
Week 25	15	16	17	18	19	20	21
Week 26	22	23	24	25	26	27	28
Week 27	29	30					

Establish stroke protocol
Complete training and IACUC approval for stroke induction method (photothrombosis). Ensure all regulatory approvals are in place.

Induce stroke
Induce stroke in cohort to start Aim 3 imaging.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1	2	3	4	5
			Equipment maintenance log - Q4 2026 Maintain detailed rig log for any alignment changes and communicate modifications to colleagues.				
Week 28	6	7	8	9	10	11	12
			Acute-phase imaging Conduct two-photon + LSCI imaging sessions in acute phase (0-1 week post-stroke) to capture immediate vascular changes.				
Week 29	13	14	15	16	17	18	19
		Adapt ML pipeline for stroke data Adapt machine learning segmentation pipeline for stroke dataset analysis and vascular feature detection				Submit...	
						Enhanced AAV...	
Week 30	20	21	22	23	24	25	26
	Transition-phase imaging Transition-phase imaging (24 wks).						
Week 31	27	28	29	30	31		

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0						1	2
Week 32	3	4	5	6	7	8	9
Week 33	10	11	12	13	14	15	16
Week 34	17	18	19	20	21	22	23
Week 35	24	25	26	27	28	29	30
Week 36	31						

Optimize MRI protocols for early chronic phase (2-4 weeks post-stroke) to detect microbleeds and white matter changes.

Stabilization-phase imaging
Conduct imaging sessions in early chronic phase (5-8 weeks post-stroke) to observe vascular remodeling processes.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1 <div>Annual progress...</div> <div>Maintain...</div>	2	3	4	5	6
Week 37	7	8	9	10	11	12	13
Week 38	14	15	16 <div>Extended chronic imaging Extended chronic imaging (~12 wks)</div>	17	18	19	20
Week 39	21 <div>Stroke data complete Completion of all planned longitudinal imaging sessions for stroke st</div>	22	23	24	25	26 <div>Integrate flow data Integrate LSCI flow with twophoton data.</div>	27
Week 40	28	29	30				

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
Week 41	5	6	7	8	9	10	11
Week 42	12	13	14	15	16	17	18
Week 43	19	20	21	22	23	24	25
Week 44	26	27	28	29	30	31	

Equipment maintenance log - Q1 2027
Maintain detailed rig log for any alignment changes and communicate modifications to colleagues.

Analyze neurovascular coupling
Quantify microvascular network changes and neurovascular coupling dynamics from post-stroke imaging data.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1
Week 45	2	3	4	5	6	7	8
Week 46	9	10	11	12	13	14	15
Week 47	16	17	18	19	20	21	22
Week 48	23	24	25	26	27	28	29
Week 49	30						

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1	2	3	4	5	6
Week 50	7	8	9	10	11	12	13
				Prepare...			
				Draft second...			
Week 51	14	15	16	17	18	19	20
						Draft...	
						PhD...	
						+1 more	
Week 52	21	22	23	24	25	26	27
Week 53	28	29	30	31			

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1	2	3
					Apply for...		
					Maintain...		
					+1 more		
Week 1	4	5	6	7	8	9	10
Week 2	11	12	13	14	15	16	17
Week 3	18	19	20	21	22	23	24
Week 4	25	26	27	28	29	30	31

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 5	1	2	3	4	5	6	7
			Draft Methods...				
			Draft...				
Week 6	8	9	10	11	12	13	14
Week 7	15	16	17	18	19	20	21
Week 8	22	23	24	25	26	27	28

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 9	1	2	3	4	5	6	7
Week 10	8	9	10	11	12	13	14
Week 11	15	16	17	18	19	20	21
Week 12	22	23	24	25	26	27	28
Week 13	29	30	31				

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
Week 14	5	6	7	8	9	10	11
Week 15	12	13	14	15	16	17	18
Week 16	19	20	21	22	23	24	25
Week 17	26	27	28	29	30		

Equipment maintenance log - Q3 2027

Maintain detailed rig log for any alignment changes and communicate modifications to colleagues.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0						1	2
Week 18	3	4	5	6	7	8	9
Week 19	10	11	12	13	14	15	16
Week 20	17	18	19	20	21	22	23
Week 21	24	25	26	27	28	29	30
Week 22	31						

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1	2	3	4	5	6
		Request final...					
		Maintain...					
Week 23	7	8	9	10	11	12	13
Week 24	14	15	16	17	18	19	20
						Dissertation draft complete Complete PhD dissertation draft compiled and ready for committee review.	
Week 25	21	22	23	24	25	26	27
Week 26	28	29	30				

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
Week 27	5	6	7	8	9	10	11
Week 28	12	13	14	15	16	17	18
Week 29	19	20	21	22	23	24	25
Week 30	26	27	28	29	30	31	

Equipment maintenance log - Q4 2027
Maintain detailed rig log for any alignment changes and communicate modifications to colleagues.

PhD Defense
Defend dissertation in oral exam.

Revise dissertation
Incorporate committee feedback and revisions after defense. Obtain final approval signatures.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1
Week 31	2	3	4	5	6	7	8
Week 32	9	10	11	12	13	14	15
Week 33	16	17	18	19	20	21	22
Week 34	23	24	25	26	27	28	29
Week 35	30	31					

Submit dissertation

Upload approved dissertation PDF and submit all required forms to Graduate School by deadline.