● PROPOSAL ● LASER

2025 Q3 August

July | September

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 31					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

Align se
Achieve 30
in fiber core
configura
stable laser

Submit proposal outline
MILESTONE:
Send initial proposal draft to advisor for review before Monday deadline.

● PROPOSAL ● ADMIN ● IMAGING ● LASER

2025 Q3 September

August | October

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 36	1	2	3	4	5	6	7
Week 37	8	9	10	11	12	13	14
Week 38	15	16	17	18	19	20	21
Week 39	22	23	24	25	26	27	28
Week 40	29	30					

Identify cor
schedule

Align amplifier
Restore amplified output to 130 mW (previous benchmark performance level).

Annual...

Check pulse compres
Verify 200 fs pulse duration and
record specifications in equi

...

Calibrate...

Laser...

+1 more

● ADMIN ● IMAGING

2025 Q4 October

September | November

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 40			1	2	3	4	5
Week 41	6	7	8	9	10	11	12
Week 42	13	14	15	16	17	18	19
Week 43	20	21	22	23	24	25	26
Week 44	27	28	29	30	31		

Design AAV vectors
Design and order AAV-mScarlet (vascular) and jRGECO1b (neuronal) vectors. Finalize constructs and submit production orders to core facility.

● PROPOSAL

2025 Q4 November

October | December

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 44						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

Complete proposal draft
Write full proposal document (~13 pages) including all aims and research strategy for committee review.

● PROPOSAL

2025 Q4 December November

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 49	1	2	3	4	5	6	7
Week 50	8	9	10	11	12	13	14
Week 51	15	16 **Send proposal to committee** MILESTONE: Email proposal to committee 2 weeks before exam date (satisfies pre-exam requirement).	17	18	19	20	21
Week 52	22	23	24	25	26	27	28
Week 1	29	30	31				

● PROPOSAL ● IMAGING

2026 Q1 January February

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1				1	2	3	4 **Prepare presentation** Create slide deck and practice oral exam presentation. Aim for two practice runs with lab members.
Week 2	5	6	7	8	9	10	11
Week 3	12	13	14	15 **AAV vectors ready** MILESTONE: AAV vectors received	16	17	18
Week 4	19	20 **PhD Proposal Exam** Qualifying Exam: Defend dissertation proposal in oral exam with committee members.	21	22 injections to begin expression studies.	23	24	25 **Address committee feedback** Incorporate committee revisions into proposal and submit signed approval form for final approval.
Week 5	26	27	28	29	30	31	

● IMAGING

2026 Q1 February

January | March

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 5							1 **Cranial window surgery #1** Install cranial window
Week 6	2 **Post-op recovery #1** Monitor and medicate Mouse #1 after surgery. No imaging during recovery period to allow healing.	3	4	5	6	7	8 **Cranial window surgery #2** Install cranial window
Week 7	9 **Post-op recovery #2** Monitor and medicate Mouse #2 after surgery. Maintain analgesia schedule during recovery.	10	11	12	13	14	15 **Cranial window surgery #3** Install cranial window
Week 8	16 **Post-op recovery #3** Monitor and medicate Mouse #3 after surgery. Complete recovery period before imaging.	17	18	19	20	21	22 **Pilot imaging session #1** Acquire in vivo images for Mouse #1 comparing AAV fluorescence vs traditional dye injection methods.
Week 9	23	24	25	26	27	28	

● IMAGING

2026 Q1 March

February | April

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 9							1 Pilot imaging... Order enhanced AAV
Week 10	2	3	4	5	6	7	8 **Pilot imaging session #3** Acquire in vivo images for Aim 1 validation.
Week 11	9	10 Pilot... Process pilot data	11	12	13	14	15 Develop U-Net... Optimize... Complete
Week 12	16	17	18	19	20	21	22
Week 13	23	24	25	26	27	28	29
Week 14	30	31					

● IMAGING ● PUBLICATION

2026 Q2 April

March | May

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

Draft methodology paper
Write manuscript on AAV-based vascular imaging methodology and pilot results from Aim 1 studies.

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

● IMAGING ● PUBLICATION

2026 Q2 May

April | June

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 18					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

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

● IMAGING ● PUBLICATION

2026 Q2 June

May | July

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 23	1 **Submit methodology paper** Submit Aim 1 imaging methodology paper to journal for peer review and publication consideration.	2	3	4	5	6 **Induce stroke** Perform stroke induction surgeries on experimental animal cohort to initiate Aim 3 longitudinal imaging study.	7
Week 24	8	9	10	11	12	13	14
Week 25	15	16	17	18 Acute-phase... Refine ML pipeline	19	20	21
Week 26	22	23	24	25	26	27	28
Week 27	29	30					

● IMAGING

2026 Q3 July

June | August

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

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

● IMAGING

2026 Q3 August

July | September

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 31						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 **Extended chronic imaging** Conduct imaging at ~12 weeks post-stroke (if needed) to capture long-term vascular remodeling and recovery patterns.	26	27	28	29	30
Week 36	31 **Stroke data complete** MILESTONE: Completion of all planned longitudinal imaging sessions for stroke						

● ADMIN ● IMAGING

2026 Q3 September

August | October

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 36		1	2	3	4	5	6
Week 37	7	8	9	10	11	12	13
Week 38	14	15	16	17	18	19	20
Week 39	21	22	23	24	25	26	27
Week 40	28	29	30				

Integrate flow...

Annual progress...

● IMAGING

2026 Q4 October

September | November

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 40				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	

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

● IMAGING ● PUBLICATION

2026 Q4 November

October | December

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 44							1
Week 45	2	3	4	5	6	7	8
Week 46	9	10	11	12	13	14	15 Draft second... Prepare...
Week 47	16	17	18	19	20	21	22
Week 48	23	24	25	26	27	28	29
Week 49	30						

● DISSERTATION ● PUBLICATION

2026 Q4 December November

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 49		1	2	3	4	5	6
Week 50	7	8	9	10	11	12	13
Week 51	14	15	16	17	18	19	20
Week 52	21	22	23	24	25	26	27
Week 53	28	29	30	31			

PhD Dissertation & Defense
Complete dissertation write-up; final defense; and all graduation requirements by Summer 2027.

Draft Introduction

Submit second...

● DISSERTATION

2027 Q1 January February

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 53					1	2	3
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

Draft Aim 1 chapter
Write chapter detailing Aim 1 (AAV imaging) methods; experiments; and results for dissertation.

Draft Aim 2 chapter
Write chapter detailing Aim 2 (dual-color imaging platform) methods and results for dissertation.

● DISSERTATION

2027 Q1 February

January | March

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 5	1	2	3	4	5	6	7
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

Draft Aim 3 chapter
Write chapter detailing Aim 3 (stroke model imaging study) methods; data; and findings for dissertation.

● DISSERTATION

2027 Q1 March

February | April

	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				

Draft Conclusions
Write final dissertation chapter summarizing findings; implications; and future research directions.

● DISSERTATION

2027 Q2 April

March | May

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 13				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		

● DISSERTATION

2027 Q2 May

April | June

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 17						1 **Dissertation draft complete** MILESTONE: Complete PhD dissertation draft compiled and ready for committee review.	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						

● DISSERTATION

2027 Q2 June

May | July

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

● DISSERTATION

2027 Q3 July

June | August

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 26				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	

PhD Defense
Defend PhD dissertation in oral exam with committee (must occur 2 weeks before final submission deadline).

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

● DISSERTATION

2027 Q3 August

July | September

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 30							1 **Submit dissertation** Upload approved dissertation PDF and submit all required forms to Graduate School by deadline.
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					