	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 **Draft Timeline v1** Draft comprehensive timeline for advisor review with printed and digital copies	30	31

● PhD Proposal

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 36	**1** Maintain Rig — Maintain equipment maintenance	**2** Align Seed Lase... / Develop...	**3** Submit Annu... — Submit annual	**4** Complete Tea... — Complete Teach	**5** Submit Outlin... — Submit detailed review and app	**6** Confirm Doctoral Candidacy — Verify and confirm doctoral candidacy status	**7**
Week 37	**8** SPIE Student... — Plan and execute SPIE Student Chapter activities	**9** Meet with... / Restore...	**10** Define... / Maintain Lab...	**11**	**12**	**13** Update Committee Membership — Update committee membership and file necessary change forms if required	**14**
Week 38	**15** Write Research Strategy — Write comprehensive Research Strategy section following BME format requirements	**16**	**17**	**18**	**19**	**20**	**21**
Week 39	**22**	**23**	**24**	**25**	**26** Align Laser Through Microsc... — Align laser beam through microsc system	**27**	**28** Confirm Exam Date — Confirm oral exam date and ensure committee receives proposal with sufficient notice
Week 40	**29**	**30**					

● Microscope Setup ● Final Submission Graduation ● Committee Management ● Data Management
Analysis ● Laser System ● PhD Proposal

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1 Image… Verify… +2 more	2	3	4	5
Week 41	6	7 Acquire… Write…	8 **Align Imaging System** Align imaging system using USAF target for optimal resolution validation	9	10	11	12
Week 42	13	14 Plan Pilot… Condense…	15 **Confirm Live Imaging Requirements** Validate laser and optics system meets live imaging performance requirements	16	17	18	19
Week 43	20	21 **Design & Order AAV Vectors** Design and order AAV vectors for vascular and neuronal labeling	22	23	24	25	26
Week 44	27	28 **Finalize Proposal & Schedule** Finalize draft and schedule defense with committee	29	30	31		

● Microscope Setup   ● Final Submission Graduation   ● Data Management Analysis   ● Laser System   ●
PhD Proposal   ● Aim 1 - AAV-based Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0						1	2
Week 45	3	4	5	6	7	8	9
Week 46	10	11 **Write Metho** Write detailed	12 **Send Proposal to Committee** Distribute proposal to committee	13	14	15	16
Week 47	17	18	19	20	21	22	23
Week 48	24	25	26	27	28 **Email Proposal to Committee** Distribute final proposal to committee members with sufficient advance notice	29	30

● Final Submission Graduation   ● Data Management Analysis   ● PhD Proposal   ● Aim 1 - AAV-based
Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 49	1 — Complete… / Create…	2	3	4	5	6	7
Week 50	8 — **Create Presentation** Create comprehensive presentation and practice oral exam delivery	9	10	11	12	13	14
Week 51	15	16	17 — **Submit Final Proposal Document** Submit Final Proposal Document	18	19 — **PhD Proposal oral examination** Successfully defend examination before committee	20 — **Receive AAV Vectors** Receive AAV vectors and prepare for in vivo injections	21
Week 52	22	23 — **Incorporate Revisions** Address committee feedback and obtain final approval for proposal	24	25	26	27	28
Week 1	29	30	31				

● Final Submission Graduation   ● Data Management Analysis   ● PhD Proposal   ● Aim 1 - AAV-based
Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
				Maintain…			
				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	

● Final Submission Graduation ● Data Management Analysis ● PhD Proposal ● Aim 1 - AAV-based Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							**1** **Install Cranial Windows & Inject AAV** Perform cranial window surgeries and AAV injections in pilot mice cohort
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 **Monitor & Medicate Mice** Monitor post-operative recovery and maintain appropriate analgesia	28	

● Final Submission Graduation   ● Data Management Analysis   ● Aim 1 - AAV-based Vascular Imaging

	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 **Acquire In Vivo Images** Acquire in vivo two-photon images comparing AAV and dye labeling methods
Week 14	30	31					

● Final Submission Graduation   ● Data Management Analysis   ● Aim 1 - AAV-based Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1	2	3	4	5
			Maintain Rig Log Q3 2026 — Maintain equipment maintenance log for Q3 2026				
Week 15	6	7	8	9	10	11	12
Week 16	13	14	15	16	17	18	19
				Complete Pilot Datasets — Complete comprehensive two-photon imaging datasets from pilot cohort			Configure… / Design… / +1 more
Week 17	20	21	22	23	24	25	26
		Process Pilot Data — Process pilot imaging data and optimize imaging protocols					
Week 18	27	28	29	30			

● Final Submission Graduation   ● Methodology Paper   ● Aim 2 - Dual-channel Imaging Platform   ● Data Management Analysis   ● Aim 1 - AAV-based Vascular Imaging

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1 **Design U-Net Architecture** Design U-Net architecture and prepare training datasets for vascular segmentation	2	3
Week 19	4	5	6	7	8	9	10
Week 20	11	12	13	14	15	16	17
Week 21	18 **Configure LSCI** Configure Laser Speckle Contrast Imaging for blood flow measurements	19	20	21	22	23 **Compare Imaging Methods** Compare imaging performance across different labeling methods in vivo	24
Week 22	25	26	27	28 **Implement U-Net Pipeline** Implement and validate U-Net segmentation pipeline on pilot data	29	30	31

● Final Submission Graduation   ● Methodology Paper   ● Aim 2 - Dual-channel Imaging Platform   ● Data Management Analysis

	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 **Establish Stroke Model** Establish photothrombotic stroke	19 model with IACUC approval	20	21
Week 26	22	23	24	25	26 **Induce Stroke** Induce photothrombotic stroke in	27 study cohort	28
Week 27	29	30					

● Final Submission Graduation   ● Methodology Paper   ● Aim 2 - Dual-channel Imaging Platform   ● Data Management Analysis   ● Aim 3 - Stroke Study Analysis

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1 **Maintain Rig Log Q4 2026** Maintain equipment maintenance log for Q4 2026	2	3	4	5
Week 28	6	7	8 **Acute Phase Imaging** Acquire acute-phase imaging data (0-1 week post-stroke)	9	10	11	12
Week 29	13	14 **Adapt ML Pipeline** Adapt ML pipeline for stroke imaging data analysis	15	16	17	18 **Dual-Color…** / **Receive…** +1 more	19
Week 30	20 **Transition Phase Imaging** Acquire transition-phase imaging data (2-4 weeks post-stroke)	21	22	23	24	25	26
Week 31	27	28	29	30	31		

● Final Submission Graduation   ● Methodology Paper   ● Aim 2 - Dual-channel Imaging Platform   ● Data Management Analysis   ● Aim 3 - Stroke Study Analysis

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0						1 **AR Vascular Platform** Develop AR platform and draft methods paper	2
Week 32	3	4	5	6	7	8	9
Week 33	10	11 **Develop SLAVV-T Codebase** Develop improved codebase for temporal analysis	12	13	14	15	16
Week 34	17	18 **Optimize ML** Optimize and v	19 **Early Chronic Phase Imaging** Acquire early chronic-phase imaging data (5-8 weeks post-stroke)	20	21	22	23
Week 35	24	25	26	27	28	29	30
Week 36	31						

● Final Submission Graduation ● AR Platform Development ● Data Management Analysis ● Aim 3 - Stroke Study Analysis ● SLAVV-T Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1	2	3	4	5	6
		Complete…					
		Maintain…					
Week 37	7	8	9	10	11	12	13
Week 38	14	15	16 **Extended Chronic Imaging** Acquire extended chronic-phase imaging data if required	17	18	19	20
Week 39	21 **Complete Longitudinal Imaging** Complete comprehensive longitudinal stroke imaging study	22	23	24	25	26 **Integrate LSCI Data** Integrate Laser Speckle Contrast Imaging flow data with two-photon data	27
Week 40	28	29	30				

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Aim 3 -
Stroke Study Analysis   ● Dissertation Writing   ● SLAVV-T Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1 **Maintain Rig** **Log Q1 2027** Maintain equipment maintenance log for Q1 2027	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 **Analyze Stroke Data** Analyze neurovascular coupling and microvascular changes post-stroke	27	28	29	30	31	

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Aim 3 - Stroke Study Analysis   ● SLAVV-T Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1
Week 45	2	3	4	5	6	7	8
Week 46	9	10	11 **Draft SLAVV-T Manuscript** Draft SLAVV-T manuscript	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						

● Final Submission Graduation ● AR Platform Development ● Data Management Analysis ● Aim 3 - Stroke Study Analysis ● SLAVV-T Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1	2	3	4	5	6
Week 50	7	8	9 **Data Acquisition Complete - Complete all planned imaging studies** Complete comprehensive data acquisition for all research aims	10 Prepare... Write...	11	12	13
Week 51	14	15	16	17	18	19 Submit... Write...	20
Week 52	21	22 **Submit SLAV** Submit MS on	23 **Manuscript Submissions Complete - All planned manuscripts submitted** Complete all planned manuscript submissions	24 oved temporal analysis method	25	26	27
Week 53	28	29	30	31			

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1 **Submit…** **Draft…** +2 more	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

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Dissertation
Writing   ● SLAVV-T Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 5	1	2	3 Write... / Write...	4	5	6	7
Week 6	8	9	10	11	12	13	14
Week 7	15	16 **Draft Aim 1 Chapter** Draft Aim 1 Chapter utilizing the completed manuscript	17	18	19	20	21
Week 8	22	23	24	25	26	27	28

● Final Submission Graduation ● AR Platform Development ● Data Management Analysis ● Dissertation
Writing ● SLAVV-T Development

	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 **Draft Aim 2/3 Chapter** Draft Aim 2/3 Chapter utilizing the completed manuscript	17	18	19	20	21
Week 12	22	23	24	25	26	27	28
Week 13	29	30	31				

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Dissertation
Writing

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1	2	3	4
				Maintain Rig Log Q3 2027 Maintain equipment maintenance log for Q3 2027			
Week 14	5	6	7	8	9	10	11
Week 15	12	13	14	15	16	17	18
					Draft Dissertation Conclusions Draft Dissertation Conclusions		
Week 16	19	20	21	22	23	24	25
Week 17	26	27	28	29	30		

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Dissertation
Writing

	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 **Complete Dissertation Draft** Complete dissertation draft for committee review
Week 20	17 **Final Committee Meeting** Final Committee Meeting	18	19	20	21	22	23
Week 21	24	25	26	27	28	29	30 **Final Revisions** Incorporate Final Revisions
Week 22	31						

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0		1 Submit Final… Maintain…	2	3	4	5	6
Week 23	7	8	9	10	11	12	13
Week 24	14	15	16	17	18	19 **Complete Dissertation Draft** false	20
Week 25	21	22	23	24	25	26	27
Week 26	28	29	30 **Dissertation Complete - Complete dissertation draft for committee review** Complete comprehensive dissertation draft				

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Committee
Review Defense   ● Dissertation Writing

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0				1 **Maintain Rig Log Q4 2027** Maintain equipment maintenance log for Q4 2027	2	3	4
Week 27	5	6	7	8	9	10	11
Week 28	12	13	14	15	16 **Final Submiss** Submit final dissertation	17 **PhD Defense...** **Defend...**	18
Week 29	19	20	21 **Incorporate Committee Feedback** Address committee feedback and obtain final approval	22	23	24	25
Week 30	26	27	28	29	30	31	

● Final Submission Graduation ● AR Platform Development ● Data Management Analysis ● Committee
Review Defense

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0							1
Week 31	2	3	4	5 **Submit Final Dissertation** Submit final dissertation and complete graduation requirements	6	7	8
Week 32	9	10	11 **Graduation - Complete PhD program and graduate** Complete PhD program and graduate	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					

● Final Submission Graduation   ● AR Platform Development   ● Data Management Analysis   ● Committee
Review Defense

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1	2	3	4	5
Week 36	6	7	8	9	10	11	12
Week 37	13	14	15	16	17	18	19
Week 38	20	21	22	23	24	25	26
Week 39	27	28	29	30			

● AR Platform Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0					1	2	3
Week 40	4	5	6	7	8	9	10
Week 41	11	12	13	14	15	16	17
Week 42	18	19	20	21	22	23	24
Week 43	25	26	27	28	29	30	31

● AR Platform Development

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

● AR Platform Development

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 0			1	2	3	4	5
Week 49	6	7	8	9	10	11	12
Week 50	13	14	15	16	17	18	19
Week 51	20	21	22	23	24	25	26
Week 52	27	28	29	30	31		

● AR Platform Development