	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 31					1	2	3
Week 31	4	5	6	7	8	9	10
Week 32	11	12	13	14	15	16	17
Week 33	18	19	20	21	22	23	24
Week 34	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 35	1 **Maintain Rig** Maintain equipment maintenance	2 **Align Seed Lase**	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
		Develop Specific Aims & Outline					
Week 36	8 **SPIE Student** Plan and execute SPIE Student Chapter activities	9 **Meet with Advi**	10 **Define Committee & Schedule Exam**	11	12	13 **Update Committee Membership** Update committee membership and file necessary change forms if required	14
		Restore Amplifie	**Maintain Lab Responsibilities**				
Week 37	15 **Write Research Strategy** Write comprehensive Research Strategy section following BME format requirements	16	17	18	19	20	21
Week 38	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 39	29	30					

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

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 39			1	2	3	4	5
			Image USAF Target				
			Verify Pulse Duration				
			Implement Automated Backups				
			Maintain Surgical Training				
Week 40	6	7	8	9	10	11	12
		Acquire Prelimi	**Align Imaging System** Align imaging system using USAF target for optimal resolution validation				
		Write Specific Aims & Research Strategy					
Week 41	13	14	15	16	17	18	19
		Plan Pilot Mice	**Confirm Live Imaging Requirements** Validate laser and optics system meets live imaging performance requirements				
		Condense Proposal Draft					
Week 42	20	21	22	23	24	25	26
		Design & Order AAV Vectors Design and order AAV vectors for vascular and neuronal labeling					
Week 43	27	28	29	30	31		
		Finalize Proposal & Schedule Finalize draft and schedule defense with committee					

- 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 44						1	2
Week 44	3	4	5	6	7	8	9
Week 45	10	11 **Write Metho** Write detailed	12 **Send Proposal to Committee** Distribute proposal to committee	13	14	15	16
Week 46	17	18	19	20	21	22	23
Week 47	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 48	1 **Complete Proposal Document** **Create Proposal Presentation**	2	3	4	5	6	7
Week 49	8 **Create Presentation** Create comprehensive presentation and practice oral exam delivery	9	10	11	12	13	14
Week 50	15	16	17 **Submit Final Proposal Docur** Submit Final Proposal Document	18	19 **PhD Proposa oral examinat** Successfully def examination before committee	20 **Receive AAV Vectors** Receive AAV vectors and prepare for in vivo injections	21
Week 51	22	23 **Incorporate Revisions** Address committee feedback and obtain final approval for proposal	24	25	26	27	28
Week 52	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 1				1	2	3	4
				Maintain Rig Log Q2 2026			
				Maintain Spring 2026 Registration			
				Maintain Automated Backups			
Week 1	5	6	7	8	9	10	11
Week 2	12	13	14	15	16	17	18
Week 3	19	20	21	22	23	24	25
Week 4	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 5							1 **Install Cranial Windows & Inject AAV** Perform cranial window surgeries and AAV injections in pilot mice cohort
Week 5	2	3	4	5	6	7	8
Week 6	9	10	11	12	13	14	15
Week 7	16	17	18	19	20	21	22
Week 8	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 9							1
Week 9	2	3	4	5	6	7	8
Week 10	9	10	11	12	13	14	15
Week 11	16	17	18	19	20	21	22
Week 12	23	24	25	26	27	28	29 **Acquire In Vivo Images** Acquire in vivo two-photon images comparing AAV and dye labeling methods
Week 13	30	31					

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

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 13			1	2	3	4	5
			Maintain Rig Log Q3 2026 Maintain equipment maintenance log for Q3 2026				
Week 14	6	7	8	9	10	11	12
Week 15	13	14	15	16	17	18	19
				Complete Pilot Datasets Complete comprehensive two-photon imaging datasets for pilot cohort			**Configure Dual Channel**
							Design Enhanced AAV
							Write Methodology Manuscript
Week 16	20	21	22	23	24	25	26
		Process Pilot Data Process pilot imaging data and optimize imaging protocols					
Week 17	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 18					1 **Design U-Net Architecture** Design U-Net architecture and prepare training datasets for vascular segmentation	2	3
Week 18	4	5	6	7	8	9	10
Week 19	11	12	13	14	15	16	17
Week 20	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 21	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 22	1	2	3	4	5	6	7
Week 23	8	9	10	11	12	13	14
Week 24	15	16	17	18 **Establish Stroke Model** Establish photothrombotic stroke model with IACUC approval	19	20	21
Week 25	22	23	24	25	26 **Induce Stroke** Induce photothrombotic stroke in study cohort	27	28
Week 26	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 26			1 **Maintain Rig Log Q4 2026** Maintain equipment maintenance log for Q4 2026	2	3	4	5
Week 27	6	7	8 **Acute Phase Imaging** Acquire acute-phase imaging data (0-1 week post-stroke)	9	10	11	12
Week 28	13	14 **Adapt ML Pipeline** Adapt ML pipeline for stroke imaging data analysis	15	16	17	18 **Dual-Color Platform Operational - Achieve operational status of the** **Receive Enhanced AAV** **Submit Methodology Paper**	19
Week 29	20 **Transition Phase Imaging** Acquire transition-phase imaging data (2-4 weeks post-stroke)	21	22	23	24	25	26
Week 30	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 31						1 **AR Vascular Platform** Develop AR platform and draft methods paper	2
Week 31	3	4	5	6	7	8	9
Week 32	10	11 **Develop SLAVV-T Codebase** Develop improved codebase for temporal analysis	12	13	14	15	16
Week 33	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 34	24	25	26	27	28	29	30
Week 35	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 35		1	2	3	4	5	6
		Complete Progress Review					
		Maintain Fall 2026 Registration					
Week 36	7	8	9	10	11	12	13
Week 37	14	15	16	17	18	19	20
			Extended Chronic Imaging Acquire extended chronic-phase imaging data if required				
Week 38	21	22	23	24	25	26	27
	Complete Longitudinal Imaging Complete comprehensive longitudinal stroke imaging study					**Integrate LSCI Data** Integrate Laser Speckle Contrast Imaging flow data with two-photon data	
Week 39	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 39				1 **Maintain Rig Log Q1 2027** Maintain equipment maintenance log for Q1 2027	2	3	4
Week 40	5	6	7	8	9	10	11
Week 41	12	13	14	15	16	17	18
Week 42	19	20	21	22	23	24	25
Week 43	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 44							1
Week 44	2	3	4	5	6	7	8
Week 45	9	10	11 **Draft SLAVV-T Manuscript** Draft SLAVV-T manuscript	12	13	14	15
Week 46	16	17	18	19	20	21	22
Week 47	23	24	25	26	27	28	29
Week 48	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 48		1	2	3	4	5	6
Week 49	7	8	9 **Data Acquisition Complete - Complete all planned imaging studies** Complete comprehensive data acquisition for all research aims	10 Prepare Conference Presentation / Write Research Paper	11	12	13
Week 50	14	15	16	17	18	19 Submit Research Paper / Write Introduction Chapter	20
Week 51	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 52	28	29	30	31			

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1					1 Submit Graduation Application Draft Dissertation Introduction & Methods Maintain Rig Log Q2 2027 Maintain Spring 2027 Registration	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 Methods & Results Chapters	4	5	6	7
			Write Discussion & Conclusions				
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 13				1 **Maintain Rig Log Q3 2027** Maintain equipment maintenance log for Q3 2027	2	3	4
Week 14	5	6	7	8	9	10	11
Week 15	12	13	14	15	16 **Draft Dissertation Conclusions** Draft Dissertation Conclusions	17	18
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 18						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						

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

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 22		1	2	3	4	5	6
		Submit Final Oral Exam Request					
		Maintain Summer 2027 Registration					
Week 23	7	8	9	10	11	12	13
Week 24	14	15	16	17	18	19	20
						Complete Dissertation Draft false	
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 26				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 disserta	17 **PhD Defense - Successfully defend PhD dissertation** **Defend Dissertation**	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 31							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 35			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 39					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 48			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