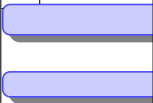


| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|-----------|----------|--------|----------|--------|
| Week 31 | | | | | 1 | 2 | 3 |
| Week 32 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Week 33 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Week 34 | 18 | 19 | 20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



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**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 <div>PROPOSAL</div> | 2 <div>Identify core schedule</div> | 3 <div>LASER</div> | 4 <div>Restore amplified output to 130 mW (previous benchmark performance level).</div> | 5 <div>Align amplifier</div> | 6 <div>LASER</div> | 7 <div>LASER</div> |
| | | | | Annual... | | | |
| Week 37 | 8 | 9 | 10 <div>Check pulse compression Verify 200 fs pulse duration and record specifications in equipment log.</div> | 11 <div>PROPOSAL</div> | 12 <div>PROPOSAL</div> | 13 <div>...</div> | 14 <div>PROPOSAL</div> |
| | | | | | Calibrate... | | |
| | | | | | Laser... | | |
| Week 38 | 15 | 16 | 17 | 18 | 19 <div>+1 more</div> | 20 | 21 |
| Week 39 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Week 40 | 29 | 30 | | | | | |

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|--|----------|--------|----------|--------|
| Week 40 | | | 1 | 2 | 3 | 4 | 5 |
| | | | Design AAV vectors Design and order AAV-mScarlet (vascular) and jRGECO1b (neuronal) vectors. Finalize constructs and submit production orders to core facility. | | | | |
| 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 | | |

| | 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.

| | 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 | 17 | 18 | 19 | 20 | 21 |
| Week 52 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Week 1 | 29 | 30 | 31 | | | | |

Send proposal to committee
MILESTONE: Email proposal to committee 2 weeks before exam date (satisfies pre-exam requirement).

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|--------|---------|-----------|----------|--------|----------|--------|
| Week 1 | | | | 1 | 2 | 3 | 4 |
| 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 | |

Prepare presentation
Create slide deck and practice oral exam presentation. Aim for two practice runs with lab members.

AAV vectors ready
MILESTONE: AAV vectors received from core facility. Ready for in vivo animal injections to begin expression studies.

PhD Qualification
Qualify presentation with committee members.

Address committee feedback
Incorporate committee revisions into proposal and submit signed approval form for final approval.

● IMAGING

2026 Q1 February

January | March

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|--|---------|-----------|----------|--------|----------|--|
| Week 5 | | | | | | | 1 Cranial window surgery #1 Install cranial window and inject |
| 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 and inject |
| 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 and inject |
| 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 | |

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

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|---|----------|---|----------|--------|
| Week 14 | | | 1 | 2 | 3 | 4 | 5 |
| | | | Draft methodology paper Write manuscript on AAV-based vascular imaging methodology and pilot results from Aim 1 studies. | | | | |
| 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 | Compare labeling methods Systematically compare imaging depth; SNR; and contrast across different labeling methods (AAV vs dye) in vivo. | | |

| | 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.

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

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|---------------|---------------|-------------------------------------|--|---------------|---------------|---------------|
| Week 27 | | | <div>1</div> <div>Enhanced...</div> | <div>2</div> <div>Transition-phas...</div> | <div>3</div> | <div>4</div> | <div>5</div> |
| Week 28 | <div>6</div> | <div>7</div> | <div>8</div> | <div>9</div> | <div>10</div> | <div>11</div> | <div>12</div> |
| Week 29 | <div>13</div> | <div>14</div> | <div>15</div> | <div>16</div> | <div>17</div> | <div>18</div> | <div>19</div> |
| Week 30 | <div>20</div> | <div>21</div> | <div>22</div> | <div>23</div> | <div>24</div> | <div>25</div> | <div>26</div> |
| Week 31 | <div>27</div> | <div>28</div> | <div>29</div> | <div>30</div> <div>Stabilization-phase imaging Conduct imaging sessions in early chronic phase (5-8 weeks post-stroke) to observe vascular remodeling processes.</div> | <div>31</div> | | |

| | 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 | 26 | 27 | 28 | 29 | 30 |
| Week 36 | 31 | | | | | | |

Extended chronic imaging
Conduct imaging at ~12 weeks post-stroke (if needed) to capture long-term vascular remodeling and recovery patterns.

Stroke data complete
MILESTONE: Completion of all planned longitudinal imaging sessions for stroke study (Aim 3).

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|--------------------|-----------|----------|--------|----------|--------|
| Week 36 | | 1 | 2 | 3 | 4 | 5 | 6 |
| | | Integrate flow... | | | | | |
| | | Annual progress... | | | | | |
| 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 | | | | |

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---------|--------|---------|-----------|--|--------|----------|--------|
| Week 40 | | | | 1 <div>Analyze neurovascular coupling</div> <div>Quantify microvascular network changes and neurovascular coupling dynamics from post-stroke imaging data.</div> | 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 | |

| | 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 <div>Draft second...</div> <div>Prepare...</div> |
| 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 49 | | 1 | 2 | 3 | 4 | 5 | 6 |
| | | PhD Dissertation & Defense Complete dissertation write-up; final defense; and all graduation requirements by Summer 2027. | | | | | |
| Week 50 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Week 51 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | | Draft Introduction | | | | | |
| | | Submit second... | | | | | |
| Week 52 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Week 53 | 28 | 29 | 30 | 31 | | | |

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 |

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---|---------|-----------|----------|--------|----------|--------|
| Week 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Draft Aim 3 chapter Write chapter detailing Aim 3 (stroke model imaging study) methods; data; and findings for dissertation. | | | | | | |
| 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 |
| | Draft Conclusions Write final dissertation chapter summarizing findings; implications; and future research directions. | | | | | | |
| 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 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 | 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
draft complete**
MILESTONE: Complete
PhD dissertation draft
compiled and ready
for committee review.

| | 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 | | | | |

| | 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 | |

Defend PhD with committee before final submission.

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 |
| 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.