

BME Design: Progress reports

VET Stand: Adjustable bite block assembly for radiation therapy for pet

Date: September 4, 2026 - September 10, 2026

Client: Dr. James Sohn

Advisor: Prof. Randy Bartels

Team Members:

Norah Greer (njgreer2@wisc.edu) - Co-Leader

Cole Hwang (nahwang@wisc.edu) - Co-Leader

Zhien Luo (zluo244@wisc.edu) - Communicator

Bridget Jensen - (bcjensen2@wisc.edu) - BSAC

Ethan Abitz - (eabitz@wisc.edu) - BWIG

Isabel Hillwalker - (hillwalker@wisc.edu) - BPAG

Problem statement

Veterinary radiation oncology requires dogs and cats to undergo sedation during every treatment session. A common tool used to secure an anesthesia delivery hose and hold the animal's head still is a bite block, however, common bite blocks are cumbersome and lack adjustability. This project aims to create an adaptable bite block with a wide range of widths and heights, allowing technicians to precisely and repeatedly position the block for each patient over multiple treatment sessions.

Brief status update

- Assigned team roles
- Compiled a list of questions to ask the client
- Contacted and set up a meeting with the client
- Researched existing designs
- Researched what goes into a VET Stand and requirements.

Difficulties / advice requests

None at this time

Current design

No design at this time

Materials and expenses

Item	Description	Manufac-turer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								TOTAL:	\$0.00	

Goals

Major team goals for the next week

1. Continue researching
2. Compile a list of questions for the client as a group
3. Complete PDS
4. Research existing designs and find areas for improvement

Next week's individual goals

- Norah Greer
 - Continue researching existing designs, meet with the client, meet with team to discuss client's specifications, and start PDS.
- Cole Hwang
 - Continue with research, find some competitive designs. Think of and draw out some potential designs/ideas.
- Luo Zhien
 - Continue researching existing designs/requirements, dig deeper into the issue we're trying to solve, and keep the client informed.
- Bridget Jenson
 - Continue doing research, start coming up with designs, meet with the client, brainstorm design ideas with the team.
- Ethan Abitz
 - Research competing designs, update website with progress report and PDS draft, meet with client
- Isabel Hillwalker
 - Learn more about thermoplastics
 - Come up with designs for bite block

Timeline

Task	Jan	Feb				March					April				May	
	26	2	9	16	23	1	8	15	22	29	5	12	19	26	3	10
Project R&D																
Empathize																
Background...																
Prototyping																
Testings																
Deliverables																
Progress Reports																
Prelim presentation																
Final Poster																
Meetings																
Client																
Advisor																
Website																
Update																

Filled boxes = projected timeline

X = task was worked on or completed

Detailed accomplishments

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Cole Hwang	9/4/26 9/10/26	First week activities Research	1 1	2	2
Norah Greer	9/9/26	Went over project description and researched existing designs	2	2	2
Ethan Abitz	9/9/26	Research, Group Meeting, Progress Report	2	2	2
Zhien Luo	9/4/26	Drafted emails and sent them to the client.	.25	2	2
Zhien Luo	9/7/26	Drafted emails and sent them to the advisor.	.25	2	2
Zhien Luo	9/9/26	Researched previous methods for bite blocks and how to ensure proper immobilization.	1.5	2	2
Bridget Jensen	9/4/26	Talked with a veterinarian about current designs and issue with the designs	1	1	1

