

# CAPSTONE PROJECT AUTHORIZATION PACKET

Instructions for the MHA student. Updated: Thursday, January 30, 2025. Please peruse this document and the Capstone Project Documentation Site before speaking to potential Capstone Mentors. Once you have identified a Mentor and Capstone Chair, review each form with the indicated signee(s) and sign where indicated. Write up the Scope of Work with your Mentor and your Capstone Chair. Once you have finalized the Scope of Work and obtained all of the indicated signatures in all of the required forms, you can then register for Capstone. Submit the completed Authorization Package to the Capstone Canvas Page. Submit the Capstone Registration Form to Jennifer Thurston.

#### Overview

This packet includes all the necessary forms required to initiate your Capstone Project. These forms must all be completed and signed before you can register for the Capstone Project for the first time.

The Capstone Project is a mentored research project that is part of the Modern Human Anatomy Curriculum. For a capstone project, each student works with a mentor to come up with a hypothesis and the methods to test that hypothesis. Capstone Projects should culminate in a novel or significantly enhanced deliverable which enhances or adds to the field of knowledge. These projects should reflect a level of scholarship and creativity that demonstrates a deep and profound understanding of a specific subject.

## **Required Forms and Documents**

- 1. Advisor Sign off
- Mentor-Student Agreement Form
- 3. Capstone Project Timeline Form
- 4. Digital Resource-Sharing Acknowledgement
- 5. Capstone Project Scope of Work

### **Capstone Committee and Advisement Team**

The Capstone Project represents an inflection point in your academic advisement. In the first year of the program, you are assigned an advisor. In the second year (and beyond), you build your own team of advisors in the form of the Capstone Committee. This committee is comprised of the following members:

- The Capstone Mentor: the person who helps design the project and provides most of the training
- 2. **The Capstone Chair:** an MHA faculty member who can provide feedback on the project and ensure that the project meets MHA requirements and deadlines. Can be the same as the First-Year advisor.
- 3. **Third Committee member:** at least one additional member who can provide feedback on the capstone project, review written documents, and provide training as needed.

NOTE: All Committee members will grade your capstone project assignments and determine your final capstone project grade

To help keep track of this information, please enter the following names:

Student Name	
Mentor Name	
Mentor Email	
First Year Advisor	
Capstone Committee Chair	
Third Committee Member (may be identified later)	



# Advisor Sign-Off Form

## **First-Year Advisor Agreement**

My advisee has:			
<ul> <li>□ Completed and passed 4 out of 6 core courses:         <ul> <li>(ANAT 6111, ANAT 6205, ANAT 6310, ANAT 6321, ANAT 6330, ANAT 6412).</li> <li>□ Passed core courses that are relevant to the proposed capstone project.</li> <li>□ Demonstrated professionalism by regularly attending seminars and has met with me (their MHA faculty advisor) at least 3 times</li> </ul> </li> </ul>			
	Signature		
Therefore, my advisee	First-Year Advisor Name		
is DOT	First-Year Advisor Signature	Date	
ready to undertake the Capstone Project			

## **Capstone Chair Agreement**

As the Capstone Chair and Advisor, I agree to:

- · Take on the Academic Advising Responsibilities of the undersigned student.
- · Provide feedback on Capstone workshop assignments in a timely fashion
- · Evaluate my advisee's performance at the end of each semester
- · Provide feedback on the written report and poster drafts
- · Provide academic and career guidance to my advisee
- · Keep track of my advisee's progress and ensure they have met their Project timeline milestones.

Regarding the Capstone Project Mentor and Scope of Work

I have met in person (or virtually) with the Mentor and the Student to review the proposed Project Scope
of Work (always recommended, but only required if the Mentor has not previously participated in an MHA
Capstone Project).

Signatures	
Capstone Chair Name	
Capstone Chair Signature	Date
Student Signature	Date



# MENTOR-STUDENT AGREEMENT FORM

# **STUDENT**

As a diligent and proactive MHA student, I acknowledge that I have the primary responsibility for the successful completion of my project and I agree to:

- Work with my mentor to design a rigorous capstone project that meets the requirements of the MHA program.
- Be fully engaged in my capstone project.
- Be a good citizen in the lab, clinic, or work environment and represent MHA with utmost professionalism.
- Work with my mentor to establish a project timeline (standard or alternate timeline).
- Complete all capstone assignments in accordance with my project timeline.
- Be proactive in establishing regular meetings with my mentor. At a minimum, I will meet with my mentor and/or co-mentor every other week.
- Convene my committee in a timely manner if I fall behind on my timeline and establish a timeline with set milestones for the project.

#### **MENTOR**

As a mentor to the MHA student, I agree to:

- Provide the necessary supervision, training, and safety instruction for the duties and responsibilities of the student to successfully complete their project.
- Help my student construct a rationale, hypotheses, or goals, and a project approach for a
  project with the understanding that the student will take the majority of responsibility for
  completing the project.
- Ensure the success of the student's scholarly experience by providing regular feedback on their performance (e.g. monthly, or at the end of each semester).
- Review and provide feedback on their scaffolded capstone assignments (e.g. Proposal, written report, poster drafts).
- Notify the committee chair in a timely manner if any problematic situations arise.
- Notify the committee chair in a timely manner if the student has any unexcused absences, concerning behaviors or professionalism issues, or is failing to sufficiently progress towards the project objective.

Signatures	
Student	Date
Mentor	Date



# CAPSTONE TIMELINE AGREEMENT FORM

#### Standard Timeline

Capstone Projects are typically started in the first summer of the first year and completed in the second semester of the second year of their master's tenure, immediately prior to graduation. This is known as the <a href="Standard Timeline">Standard Timeline</a>. In order to complete the Capstone Project in alignment with the Standard Timeline students must:

- · Attend the Capstone Workshop and participate in class activities.
- Complete all Capstone Assignments as detailed on the Capstone Canvas Page and Capstone Project Resource site
- · Complete Milestone Assignments by the following deadlines:
  - · Select a third member of my Capstone committee no later than November 1st
  - · Submit a fully completed Capstone Proposal by December of the second year
  - Submit to their committee a completed draft of the Capstone Project Written Report no later than two weeks prior to the Capstone presentation
  - Publicly present the outcomes of the Capstone Project at the annual MHA poster session (in April of the second year) or in a format determined by my Capstone Committee
  - Submit to the Capstone Committee the final Capstone Project Written Report no later than 2 weeks after the Capstone Presentation
  - Submit required digital assets, as described on the Capstone Canvas Page, by the end of the final semester.

### **Alternate Timeline**

Depending on the circumstances, not all students finish their Capstones on the Standard Timeline. For example, students in the Pathways to Dentistry Track are generally unavailable to complete the Capstone project by their second year. Other MHA students extend their Master's coursework over more than two years and plan to extend their Capstone Project Timeline accordingly. In order to complete the Capstone Project in alignment with the <a href="Alternate Timeline">Alternate Timeline</a>, the student must:

- Have attended the MHA Weekly Seminars (even part-time Students)
- Complete all Capstone Assignments as detailed on the Capstone Canvas Page and the Capstone Project Resource site
- Work with their Capstone Committee to develop their own deadlines for the Major Capstone Assignment milestones, such as the Capstone Proposal, the draft of the Written report, and the Capstone Presentation.
- Abide by the deadlines established in their personal timeline or work with their committee to adjust the milestone deadlines as needed.

	Signature	
For my capstone project, I intend to follow the:	Student	Date
☐ Standard Timeline		
□ Alternate Timeline		
I understand that I can switch timelines at any time, but to remain on the Standard Timeline, I must submit the Milestone assignments by the set deadlines of the current academic year.	Chair	Date



# DIGITAL RESOURCE-SHARING ACKNOWLEDGEMENT

The Modern Human Anatomy (MHA) program is committed to the distribution of educational materials through the **Open Educational Resources (OER) model**. **OER** are teaching, learning, and research materials intentionally created and licensed to be free for the end user to own, share, and modify. Using OER licensing allows products generated by MHA students and faculty to be easily distributed worldwide, helping fulfill the MHA program's primary mission of Education. More importantly, OER can be used and built upon by future generations of MHA students or by the modern anatomy community at large.

The majority of OER created by the MHA program is licensed under the CC-BY-NC-SA license. This license enables users of OER content to distribute, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator. Any digital resource that remixes, adapts, or builds upon a previously OER-licensed digital resource must be licensed under identical terms. More information about Creative Commons licenses can be found at this link: <a href="mailto:creativecommons.org">creativecommons.org</a>.

To ensure that your work can be easily shared, we request that you acknowledge the distribution of any MHA assignments, including the Capstone Project, using the CC-BY-NC-SA license by signing the following release form. For any work that you do not wish to share using the CC-BY-NC-SA license, you can choose to opt-out when submitting the assignment.

I herein authorize the Modern Human Anatomy to use, edit, copy, exhibit, and distribute any material created for any MHA course assignment, including the capstone project and independent studies under the CC-BY-NC-SA license.
The authorization that I provide herein extends to all languages, formats, and media that have been discovered now or will be discovered in the future.
The term of the authorization is indefinite unless I explicitly opt-out of sharing my material as OER.
I understand that opting out of distributing my material as OER will not in any way affect my standing in the MHA program or my grade on an assignment.

Signatures	
Student	Date
Mentor	Date



# CAPSTONE PROJECT SCOPE OF WORK

**Instructions for the MHA student:** Work with your Mentor to complete the Scope of Work document, elaborating on the following enumerated items. Be sure to include the numbered items and sub-headings in your written response. Once you have written up the Scope of Work, review the response with your Capstone Chair and revise as necessary to ensure that your project meets the MHA requirements. Be sure to include the completed Scope of Work document (as a PDF) when submitting the Authorization Packet.

#### 1. Overall Goal of the Project

Prompt: The overall goal of this project is to...

### 2. Anatomy to be characterized

Describe the anatomy to be characterized, the scale at which that anatomy will be examined (molecular, cellular, histological, medical CT volumes, gross anatomical etc.), and any scientific, clinical or educational relevance. Be as specific as possible.

### 3. Rationale and Hypothesis or Goals

State the rationale of the project and the overall hypothesis to be tested or goals derived from the rationale.

# 4. Project approach

**Scope:** Describe what the student will work on or create to test the Project Hypotheses or Goals. For projects involving some aspect of a funded grant, identify how the student's contributions differ from what might be performed by a PRA in the lab, in terms of creativity, intellectual contribution, and scholarship. Note: the student should contribute to the design of the project approach.

**Imaging**: An imaging component is required for all Capstone Projects. Be sure to detail the imaging involved in this project (e.g. 2D Images, 3D Images, Animation, 3D Models) and explain specifically how these images will be used in the approach

Approach Barriers and Plans to Overcome: In the past, some projects have been delayed by circumstances such as obtaining COMIRB approval; purchase of new equipment; access to desired technology; obtaining antibodies, fresh brains/or cell lines; obtaining collaborative agreements for multicenter projects and other variables of this type. Identify here many of these potential barriers in advance and develop a strategy (Plan B) around these should problems arise. For protocols already approved, enter the Protocol Number and Expiration Data. Identify any funding constraints that may limit what can be accomplished in the Approach. Students should not be required to

If this project requires **IRB** or **IACUC** approval, please provide the approved protocol number and **expiration date** *OR* an assurance letter provided by mentor indicating that the approval will be completed by early November (if the student is on the Standard Timeline). For projects that are Exempt (typically in Educational Settings, <u>see guidance document</u>), the student can reach out to <u>COMIRB</u> themselves for guidance on getting Exempt status.

### 5. Outcomes:

What new scholarly contribution (deliverable) will this project produce? e.g. a publication or an educational resource that will be used?

What is novel about the contribution that is different or significantly enhanced from the currently existing content?

What will the student Learn by the end of the project? Be specific. For example, describe any Techniques, Data analysis, manuscript preparation, literature search, visual representation of data such as making figures or creating and displaying a 3D model that would be learned?



### 6. Grading Agreement

- List the Capstone accomplishments required to earn an "A."
- List the minimum accomplishments required to earn an "B-."

Note: anything below a "B-" is considered failing. Consider minimal accomplishments that should be expected if a student spent 8 credit hours' worth of time working on the project (roughly 1 credit hour = 45 hours of work) even if expected and unexpected barriers were encountered.

# 7. Budget

Outline any funding constraints that limit what can be accomplished.

List any budget items needed to complete the capstone project. Be sure to detail the rationale for each such item. Make sure that your budget does not exceed \$1000. Budget Proposals will be considered by the Finance Committee.

If you do not intend to request funds, please state that No Funds will be requested.

## 8. Track / Certificate Requirements

Students that are part of the Teaching Certificate or AIM Track have additional requirements for their Capstone Projects. Detail here how you plan to meet these requirements with your capstone project. If you are not in a track or certificate, state "Not in a Track / Certificate" The teaching or AIM components should be discussed with your mentor at the beginning of the Capstone work, and their suggestions should be incorporated into the Capstone plan.

### 9. Third Committee Member / Co-mentoring agreements

List your third committee member here. If you have two Co-Mentors, detail their designated role in the project. For example, will you be working equally with each mentor, or will one mentor provide most of the training.

Signatures		
The completed Scope of Work Document outlines a Capstone Project that represents new scholarly work and meets the requirements of the MHA program.		
Student Signature	Date	
Capstone Chair Signature	Date	
Mentor Signature	Date	