

Ernesto Salcedo PhD, FALL

CAPSTONE WORKSHOP



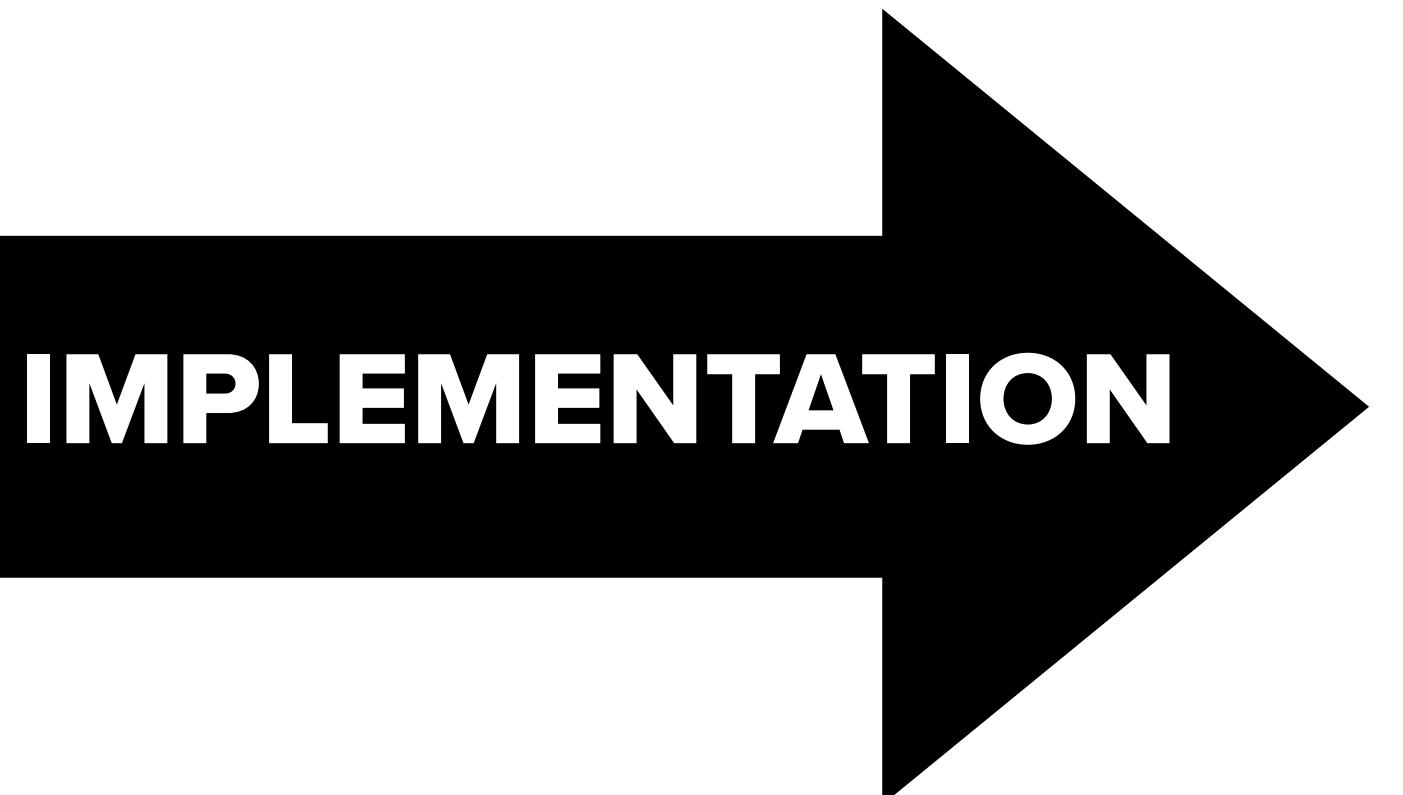
Fall Overview
Background and Rationale



THE GOAL OF THE CAPSTONE PROJECT

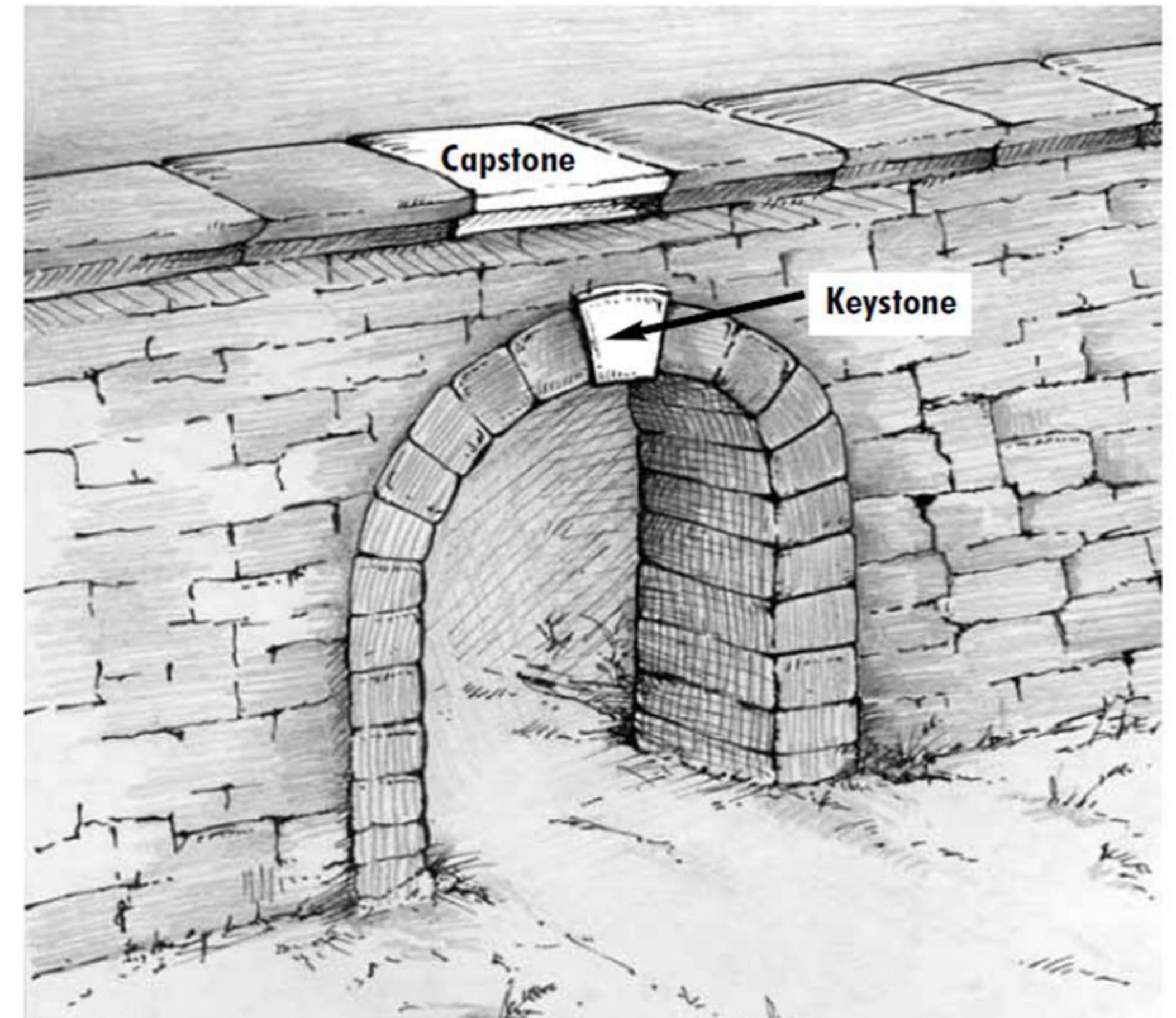
- Your chance to drive your own agenda
- Hone your ability to integrate and apply information:
 - Anatomical Knowledge, research capabilities, professional skills
- To give you the experience of
 - Brainstorming
 - Planning
 - Implementing
 - Presenting in a public forum

**Project
Management**



CAPSTONE REQUIREMENTS

- A Capstone project should
 - result in a tangible product or deliverable
 - demonstrate scholarship and creativity
 - exhibit expertise
 - be anatomically related
 - examine some kind of structure
 - from molecular level to gross
 - be Visually enhanced
 - Images and/or 3D models



A capstone is a finishing stone atop an exterior wall or roof or other exterior architectural feature.

DELIVERABLES

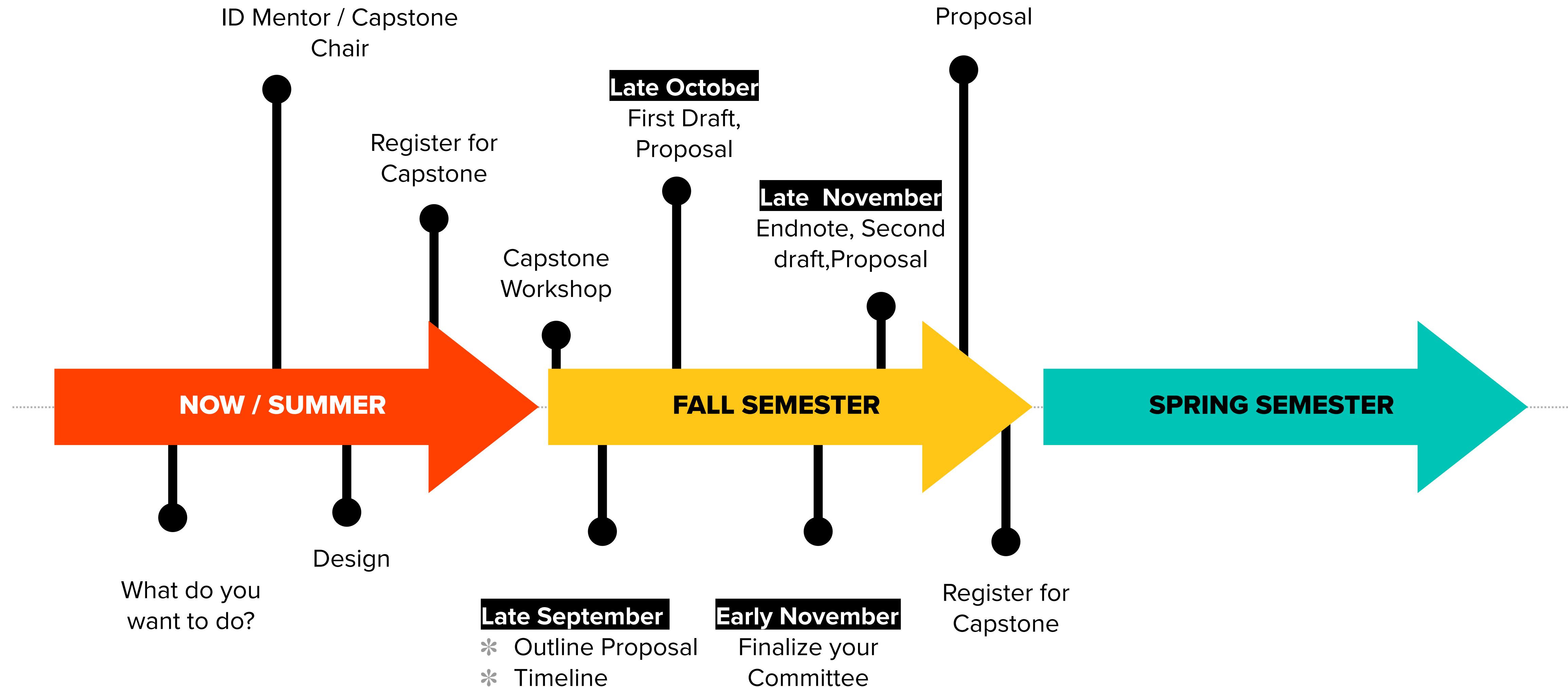
- Fall Semester
 - Capstone Proposal
- Spring Semester
 - Full Written Report
 - Poster Presentation



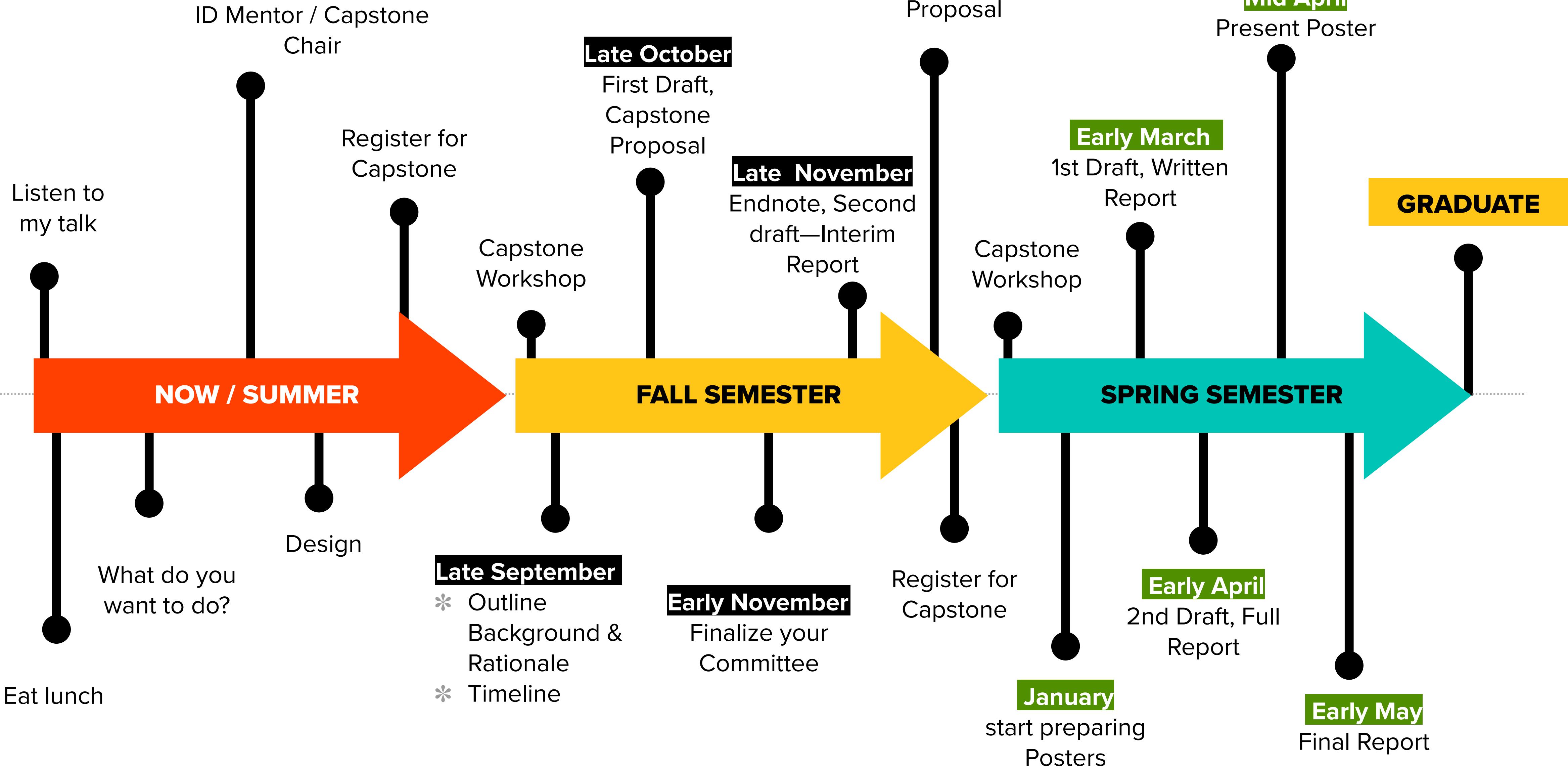


APRIL IS COMING

TIMELINE



TIMELINE



Just what are
you proposing,
anyway?

CAPSTONE PROPOSAL

—

CAPSTONE PROPOSAL

Modeled after an NIH Proposal

- Title
- Significance
- Innovation
- Approach
- Budget
- Timeline
- Citations

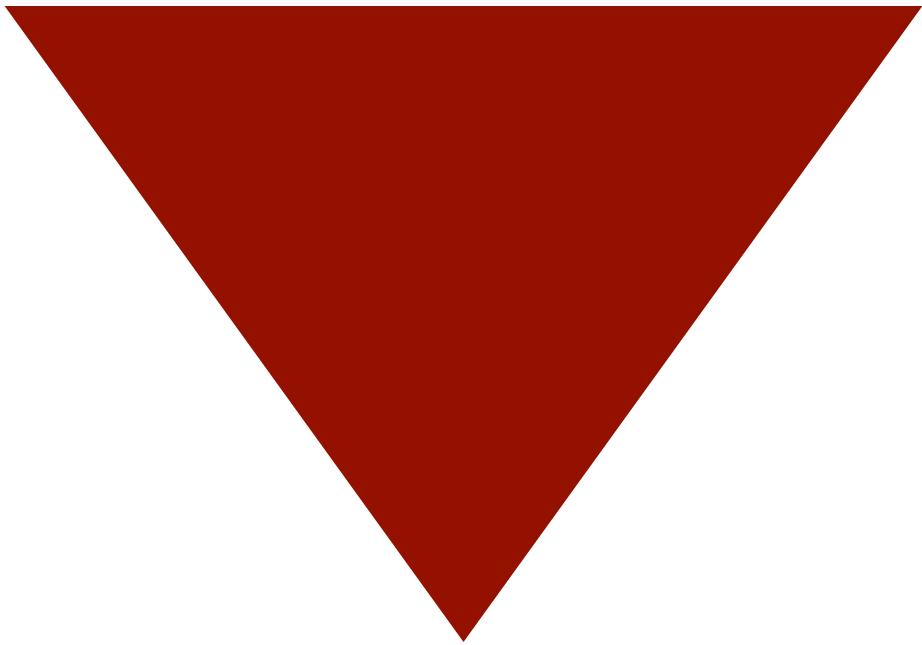
SIGNIFICANCE

Sets the stage — why are proposing what you are proposing

MAIN PARTS

- **Background information.** What is known.
- **Rationale.** What is not known (and something should be done about this)
- **Hypothesis.** A testable statement
- **Specific aims.** Stated objectives or goals
- **Outlook.** Why is this important?

SIGNIFICANCE



■ Background

- A summary of the current state of affairs
- Think **AND** Statements: “We know this and that and this.”
- Only include the background necessary to understand the project
 - Watch out for DATA DUMPS. We do not want Wikipedia entries here. Just the info we need to understand the rationale and hypothesis
 - Don’t forget to mention ANATOMY. We are an anatomy program here.

■ Rationale:

- Hint at problems with the current state of affairs
- State what’s missing and how your project is going to swoop in and save the day.
- Think **BUT** statements. “We know this and that, but...”
- Your rationale sets up your specific aims and hypothesis

■ OUTLOOK:

- Why should we care?

SIGNIFICANCE

- **Central Hypothesis:**
 - Hypotheses are testable statements.
 - “Our new 3D model will improve learning outcomes”
 - Be specific:
 - **NOT:** social networking sites are harmful (Too general)
 - **HOT:** Twitter users experiences more privacy issues than users not on such social network
 - Your hypothesis should clearly inform the type of experiment that you will be performing
- **Specific Aims:** Your Specific Aims are your objective statements
 - Now that you have set up the problem (in the rationale), you state how you plan to solve this problem
 - Specific Aims are single sentences that summarize what you plan to do

INNOVATION

- How does your project add new information?
- What is new and exciting about your project.
- How is this different from a wikipedia entry
- Reframe your rationale so you discuss what's new

APPROACH

- In the approach section, you will outline the things that you will actually do.
- Basically, you will expand on your Specific Aims
- Every proposed approach should have a rationale on why you are doing it.
 - Because of this, we plan to do this and that
 - Because of that, we will do this other thing



BUDGET

- Do you need money for your project?
- Well, then you are going to need to a budget
 - Create a Line-item budget for things that you may need to purchase
 - Creating a budget doesn't mean that you will actually request the funds — your mentor may be able to provide the supplies
 - To actually receive the funds, you will need to fill out a form and submit it to the finance committee
- If you don't know yet, simply write "No budget Anticipated"



TIME LINE

- Create deadlines for your Approach
 - By this Date, I will collect the data
 - Part 1
 - Part 2
 - Part 3
 - By this date, I will analyze the data
 - By this date, I will start writing the report
 - ...



ASSIGNMENT - ENDNOTE

- EndNote is a citation manager
- A citation manager:
 - organizes your references
 - simplifies the process of citing a reference in a manuscript
 - formats a bibliography
- EndNote has a plug-in for Microsoft Word
- The university now has a site license for EndNote
- For the assignment, install EndNote and learn how to use it.

WRITING CENTER

- Your writing needs to be precise and concise. And professional sounding.
- Don't forget to take advantage of the writing center
- Especially if your writing is wanting!
- There is a link on the canvas site
- They book up at the end of the semester, so plan on meeting them early, say after the first draft of your background draft is due (mid-october)



The Writing Center

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DENVER | ANSCHUTZ MEDICAL CAMPUS