COURSE SYLLABUS
MENTORED SCHOLARY ACTIVITY (MSA) CURRICULUM
2025-2026
Part of IDPT 5031/6090/7090/8090
Electives: 5091/8091/8093

Mentored Scholarly Activity – Scholarship for Life-Long Learning & Advocacy

The CU-AMC School of Medicine's curriculum includes a four-year longitudinal course requirement for all students to pursue and complete a mentored scholarly activity (MSA). The MSA project is aimed at fostering self-directed, life-long learning and developing the key communication skills needed to foster career-long advocacy and leadership at both patient and population levels. Students will do an in-depth scholarly project in an academic area of interest related to medicine or health care with the mentorship of a CU faculty member. The MSA project culminates with a Capstone Presentation prior to graduation. MSA requirements may also be satisfied through the successful completion of the MSTP program or the School of Medicine's Research Track. For more detailed information on the MSA and resources, please refer to the MSA Website.

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For questions related to the MSA:
You are welcome to email any of the Associate Directors directly or email the MSA coordinator at SOM.MSA@cuanschutz.edu. Please also check the CANVAS calendar regularly for session updates announcements.

Also consider reaching out to your MSA Class Representatives:
- Class of 2026: Morgan Dewey and Ian Pelto
- Class of 2027: Mia Barrett and Luke Zacharias
- Class of 2028: Reid Boyce and Katherine Kesselman

MSA Course Goals
- Demonstrate progress through each year and display independence and collaboration.
- Demonstrate ability to formulate a specific problem statement, question, hypothesis or aim.
- Demonstrate ability to work effectively with a mentor and team (if applicable).
- Demonstrate ability to critically review and analyze literature on an important scholarly topic.
- Demonstrate ability to prepare a scholarly project with appropriate methods and develop a plan to complete the project.
- Demonstrate ability to synthesize and present results of a scholarly project to peers and colleagues.

Common Components of all Scholarly Projects
The following components are an important part of any scholarly project. They do not necessarily have to be followed in sequence.
- Meet with your Associate Director to explore potential projects and strategies.
- Identify your general goals, what do you want to learn, where do you want to go, with what kind of mentor would you like to work?
- Meet with one or more potential mentors to refine your ideas. Often your mentor will have a specific project that is in the area of your interests.
- Identify a question, need, or idea that you could explore and ultimately contribute.
- Define a hypothesis and/or specific aim with your mentor.
- Define objectives that are realistic and achievable.
- Demonstrate an understanding of the existing scholarship (published literature) relevant to your project.
- Develop a protocol with a clear hypothesis and/or aim and set objectives with a realistic timeline that will lead to successful completion.
- If human research participants are involved, obtain COMIRB approval (if not in place already).
- Develop the necessary skills and seek support where needed to complete the work.
- Allocate resources and prioritize tasks needed to complete the project on time.
- Apply scholarly methods effectively.
- Modify the project objectives and methods in response to changes or findings when needed.
- Write a manuscript in a style appropriate for your area of scholarship.
    - Describe what is known and unknown on your topic as background.
    - Clearly state the objective of the project.
    - Include a section on your methods or approach.
    - Describe and analyze the results or products of your project.
    - Critically evaluate your work considering relevant evidence and indicate how it contributes to relevant fields of scholarship.
    - Identify areas for improvement, further study, and exploration (limitations).
    - If uploading a submitted or published manuscript for the final paper and you are not the first author, include a statement detailing your contribution to the project and manuscript as a separate document if not already included in the submitted manuscript.

- Clearly communicate your work to others in the [Capstone presentation](#) and in other forums.
- Consult with your Associate Director regularly for support and help in reaching your goals.

Group MSA Projects

It is acceptable for groups of students to work on an MSA project. These groups may be composed of students in a single class or may be spread out over more than one class. The latter is particularly appropriate for projects that have a long lead time for administrative approval (e.g., international research for students in the Global Health Track) or that involve ongoing interventions (e.g., a curriculum change). The first class may lay all the groundwork for the project and subsequent classes may then move to data collection and expansion to other project goals.

If groups of students work on a project, a few points need to be kept in mind regarding the final paper, and Capstone:

1) Teams of students may do an MSA project together.
2) Each student must meet regularly with the faculty mentor for the project, either in a group or individually.
3) Each student must independently submit the Project Abstract and define their role in the project.
4) Each student must make his/her own scholarly contribution to the work.
5) A single paper, published or unpublished, can be submitted to describe the work on a project that involves several students. The authorship of this paper should reflect the contributions of the participants. Each student on a group project will submit an additional 1-page supplement that describes their role in more detail and describes what they have learned from participating in the project.
6) A group of students in the same class can use the same physical poster for their Capstone presentation. Each student will, however, present the findings to the reviewers separately. Since there are three poster sessions, a project that involves more than 3 students in a single year will need to prepare an additional poster so that each student will have the opportunity to present the work independently.

Global Health MSA Projects

- Global Health Track directors also serve as the MSA Associate Director for students in the Global Health Track.
- For Global Health Track students, due to the regular contact with track directors and the nature of global health MSA work, there are slight differences in the due dates for MSA assignments. Please refer to the communications you receive from the GHT regarding track specific MSA deadlines.
- If you are not a member of the Global Health Track, you cannot travel internationally to collect data for your MSA. If you have any additional questions regarding the Global Health Track, please contact the Associate Director for Global Health (listed above).

Research Track and Medical Scientist Training Program (MSTP) Students

- Research Track students must complete MSA assignments up until the time of notification of acceptance to the Research Track. If a 1:1 meeting has been set up with your Associate Director, please contact them directly to cancel the meeting as soon as you receive your Research Track acceptance notification.
- MSTP students are exempt from the MSA requirement.

MSA Due Dates AY 2025-2026

Plains (MS1): Class of 2029
- Fall 2025 Assignments
  - MSA Introduction Lecture – 10:00 AM Aug 22, 2025
  - Interest Form – due September 5, 2025
  - One-on-one with MSA Associate Director or Director – Complete by November 1, 2025
- Spring 2026 Assignments
  - January 16, 2026: MSA Associate Directors meet with their students to clarify MSA philosophy, discuss mentor and project identification, and answer student questions
  - Capstone Poster Judging (MS4 posters) – Due by April 8, 2026 Asynchronous
  - MS1 Project Outline – due May 1st, 2026
  - Online Research Module – complete by July 17, 2026
  - COMPASS guides will follow up on the MSA project during touch points by Traverse 4 week.

Summer Elective (IDPT 5091): Class of 2029 – July 26-August 28, 2026
Note: Summer electives are **optional**. If completed, this course fulfills the Fall MS2 IDPT 5091 requirements, and the Spring Annotated Bibliography requirement. The student would not be enrolled for IDPT 6090 during the MS2 Fall term.

- Summer Elective Orientation – Monday, July 27, 2026. Time and location TBD.
- Abstract and Annotated Bibliography – due August 21, 2026
- Work in Progress (WIP) Slide Upload — due August 21, 2026
- Work in Progress (WIP) in-person presentation – August 26-27, 2026

Foothills (MS2): Class of 2028
- Fall 2025 Assignments
  - MSA Reminder Lecture – September 2, 2025, Pre-LIC Basecamp, time TBD.
  - One-on-One with MSA Associate Director or Director – October through December 2025.
    - Students who completed Summer MSA Elective course are excused.
- Spring 2026 Assignments
  - Watch Video Recording: [How to Do a Literature Review](#) – due by January 30, 2026
  - Submit annotated bibliography – due March 18, 2026.
    - Students who completed Summer MSA Elective course are excused.

Alpine (MS3): Class of 2027
- Fall 2025 Assignments
  - MS3 Project Update – due August 8, 2025
  - Watch Video Recording: [How to Write an Abstract](#) – due by November 12, 2025
- Spring 2026 Assignments
  - Work In Progress (WIP) in-person presentation: Scheduled during Trails Immersion in January 2026
  - Abstract: due upon presentation of WIP during Trails Immersion, January 2026
  - MS3 Narrative Reflection: due March 13, 2026

Alpine/Summit (MS4): Class of 2026
- Fall 2025 Assignments
    o Draft Paper – due December 1, 2025
- Spring 2026 Assignments
    o Final Paper – due February 2, 2026
    o Capstone Data Entry Form – due March 2, 2026
    o Upload Capstone Abstract and Poster Files – by March 23, 2026
    o Capstone Presentation Event – April 6, 2026

Early Completion Option
The final MSA Paper may be turned in before the deadline under special circumstances and upon approval of the MSA Associate Director. However, students are still required to complete all MSA requirements as assigned.

If there are major scheduling conflicts and if approved by their MSA Associate Director, students may also present at an earlier year Capstone. Students completing this option will be required to participate in their class's Capstone as evaluators (remotely, if needed). This allows students increased flexibility to submit the final MSA Paper and complete the oral/poster presentation if special circumstances arise.

The MSA is a Pass/Fail Course
Each student will receive a grade (Pass/Fail) on their transcript at the end of each semester based on their progress through the course requirements. You must complete each component of the MSA requirements by each assignment's deadline to receive a passing grade. If extenuating circumstances make completing an assignment on time difficult, this must be discussed with the MSA team prior to the deadline. MSA Associate Directors will provide all feedback on assignments through the MSA Canvas Course. Make sure that you have the appropriate system notifications turned on, to ensure you are receiving your grade and/or feedback information. Edits may be needed on incomplete submissions, so it is important that you check your assignments in Canvas for any comments from the MSA Faculty and act on them promptly.

MSA Grade Definitions
The School of Medicine uses the following grades for the official transcript for the MSA Course: Pass (P), Pass with Remediation (PR), In Progress (IP), and Fail (F). Unless otherwise specified, "grades" once assigned become a permanent part of the student's academic record and transcript. In Progress (IP) grades are temporary, which will be permanently replaced by one of the other listed grades.

Institutional Review Board Approval (Required only if your project involves human subjects research):
- Colorado Multiple Institutional Review Board (COMIRB) – If your project involves human subjects research, you must complete COMIRB training/certification online ("CITI"), upload a CV, and declare any conflicts of interest (COI). Plan accordingly to submit your protocol as soon as possible, if IRB approval has not already been obtained by your mentor.
- If you are joining a previously COMIRB-approved project, you will need to complete CITI training and share the certificates of completion with the project's Principal Investigator.
- Not all projects with human subjects are considered research. Projects that are considered quality improvement or program evaluation do not need COMIRB approval. To determine if your project qualifies as research, you can review the COMIRB QI/PE Decision Tool and discuss the project with your mentor and/or a COMIRB representative.
- IRB applications for students completing international research projects the summer between years 1 and 2 must be submitted by March 15th.

- If you are submitting a Global Health protocol, it must be reviewed by the Global Health Director prior to submission to COMIRB.

MSA Mentor Expectations (pass these along to your mentor)

- I**nitial Engagement & Project Development**
    - Meet with students to explore scholarly interests and brainstorm feasible project ideas.
    - Outline potential projects for students who have general interests but no specific ideas.
    - Help students develop a scholarly and achievable project plan.
    - As the years progress, be open to alternative projects that may be more practical or better aligned with student goals if needed.
- **Relationship Building & Communication**
    - Establish a clear agreement with students, including:
    - Meeting and communication schedule
    - Authorship expectations
    - Professional development goals
    - Understand and negotiate timelines based on student schedules.
    - Maintain availability and provide consistent supervision throughout the 4-year project.
- **Project Support & Scholarly Development**
    - Review and give feedback on all scholarly materials:
        - Proposal
        - Abstract
        - Annotated bibliography
        - Work-in-progress presentations
        - Final paper and Capstone poster
    - Support presentation opportunities by helping students find subspecialty meetings, travel awards, and scholarships.
    - Assist with data gathering, analysis, and Capstone preparation.
    - If funding is available, mentors typically cover poster printing costs.
    - Project posters presented at national meetings may be re-used for the final Capstone.
- **Evaluation & Reporting**
    - Provide a summative evaluation at the end of MS2 and after the final Capstone presentation.
    - Complete end-of-elective evaluations for post-clerkship students (IDPT 8091 and 8093).
    - Report concerns about student progress to the MSA Associate Director or coordinator via email: SOM.MSA@cuanschutz.edu.
- **Professional Standards & Faculty Requirements**
    - Promote academic rigor and professionalism.
    - Ensure at least one CU Faculty member is involved as a mentor/co-mentor.
    - Non-faculty mentors can apply for volunteer faculty status: som.ocbme@cuanschutz.edu.
    - Associate Directors are not project mentors but can provide guidance.
- **Final Deliverables & Publication**
    - Final Capstone posters and abstracts will be posted on the MSA website.
    - Contact SOM.MSA@cuanschutz.edu to request removal of sensitive data.
    - All stone poster presentation requirements remain in the 4th year even if the project is completed and published earlier.

Associate Directors will work with mentor-student teams to provide ongoing support.

Narrative Comments and Assessment
Narrative comments from individual MSA mentors will be solicited in Year 2 and Year 4. Narrative comments from MSA Associate Directors will be submitted for each student's Work In Progress (WIP) session (if needed to expand on oral comments during sessions) and for their initial draft of the MSA paper (required in year 4). These will be used to obtain faculty level input to further develop and improve student skills. Students will complete a WIP session either during the optional summer elective, IDPT 5091, or during the spring of their MS3 year.

Library Resources
The librarians can help MSA students with the following:
- Problem identification and focus (as far as helping with preliminary searching to identify whether a topic has been covered previously in the literature)
- Question formulation (asking answerable questions)
- Understanding the process for a "scoping" literature review
- Working with teams and calculating budgets for large literature reviews
- Translating the question into a search strategy
- Identifying resources for literature review
- Organizing and managing citations and article reprints or other resources
- Accessing software for various research needs (e.g., SAS/SPSS, Endnote) and referral to training resources.
- Understanding manuscript style requirements
- Identifying opportunities for publishing or sharing research

Helpful information is available at: https://library-cuanschutz.libguides.com/som/msa
- Contact one of the MSA program librarians for an individual consultation. Consultations generally last one hour and may include discussion of your research topic, suggested resources for that topic, identification of key search terms, development of a search strategy, set up of a PubMed "My NCBI" account, and demonstration of resources such as PubMed or Google Scholar.
- Sections of immediate interest: Finding a Mentor, Online Tutorials, recommended books (reference resources on how to do research), information on software resources for the research process, statistical resources, EndNote and information on MyNCBI for organizing references, and other advice for organizing and Electronic Reprint File.
- To contact a Strauss Library librarian for research help with your MSA project, including Global Health Track projects, you can request a consultation using this form: https://library.cuanschutz.edu/contact-the-library/askus

Writing Center Resources
The campus writing center is an excellent and free resource to help you with your rough and final draft papers. To get more information or to make an appointment with the writing center:
- Services for Students, The Online Drop Box is an asynchronous service whereby students submit a document and receive feedback in about four business days.
- CU Anschutz students might be especially interested in our Principles of Scientific Writing Handout. More handouts are available at Services for Students.

Statistical Resources
The Center for Informative (Statistical) Design (CIDA) has partnered with the MSA program to provide guidance on how to design and analyze your MSA research project. Through the MSA Consulting Clinics, CIDA will help you move beyond a general research question to craft a testable hypothesis. You will develop a research plan consisting of your study design details, the specific data to be collected, and the methods you will use to analyze your data. During these clinics, you will also receive assistance with implementing your analysis and interpreting your findings. Each clinic will be a mix of small

groups (2-3 individuals) and one-on-one interactions with biostatistics graduate students dedicated to answering your specific questions.

Biostatistical support - The Research Consulting Laboratory is available for consultation on statistical approaches without charge to MSA students. Please be sure to identify yourself as an MSA student.
Registration is required and must be completed at least 48 hours in advance. To get more information or to sign up for assistance, please visit here.

For projects requiring more intense biostatistical analysis, MSA students can apply for an MSA Small Grant from the CIDA for assistance with analyses. Click here for more information.

Course Evaluations
Students will be required to complete online evaluations. Class representatives and class officers will meet with the course directors as at least quarterly to provide feedback.

How will students be graded in the Mentored Scholarly Activity Course?
For a full description of grading policy during Plains, refer to the Home page of the MSA Canvas page.

EXAMPLES of SCHOLARSHIP
To see examples of previous projects, you can visit the MSA website page dedicated to previous year's Capstone Projects.

Plains/MS1
IDPT 5091
Summer 2026

Note: This summer elective is **optional**. If completed, this course fulfills the Fall MS2 IDPT 5091 requirements, and the Spring Annotated Bibliography requirement. The student would not be enrolled for IDPT 6090 during the MS2 Fall term.

Goals:
- Demonstrate ability to formulate a specific problem statement, question, hypothesis or aim.
- Demonstrate ability to work effectively with a mentor.
- Demonstrate ability to critically review and analyze literature on an important scholarly topic.
- Demonstrate ability to prepare a scholarly project with appropriate methods and develop a plan to complete the project.
- Demonstrate ability to synthesize and present results of a scholarly project.
- Demonstrate progress and display independence and collaboration.

Learning Objectives:
- Present work in progress (WIP) to peers and faculty in an oral presentation.
- Effectively respond to comments and questions from peers and faculty about your scholarly work.
- Demonstrate effective interaction with the mentor on the scholarly project.

Benchmarks

All enrolled students <u>must</u> complete the following requirements by the end of the summer course:

Note: All submissions will be electronic.
- **July 27, 2026:** Attend IDPT 5091 Introductory Orientation Course.
- Meet/communicate with your mentor at least bi-weekly. You will be expected to work on your MSA project for 25 hours per week, for 4 weeks.
- **August 21, 2026:** Submit an Abstract and Annotated bibliography (20 references minimum), via Canvas.
- **August 21, 2026:** Upload Work in Progress materials (PowerPoint), via Canvas by 11:59 PM (MT).
- **August 26-27, 2026:** Present status of project and participate in Work in Progress sessions. A specific schedule will be communicated closer to the presentation dates.
- COMIRB certification and approval notice (if your project requires COMIRB approval).
- Students will be required to complete online evaluations and meet with the course directors as necessary to provide feedback.

Attendance and Professionalism

Attendance is required at the Orientations, WIP presentation sessions as assigned, and the Capstone event. Details for all of these sessions will be communicated via e-mail to your CU Anschutz e-mail account. Otherwise, you will be expected to organize your own schedule, with guidance from your Associate Director and mentor.
Please refer to SOM General Information for a full description of requirements. <u>Failure to attend a required session will be considered a Professionalism issue:</u>

1st unexcused absence - the MSA Associate Director will contact the student, the situation will be discussed, and the student will be warned that a second infraction will result in filing a Professionalism Feedback Form.

2nd or subsequent unexcused – the student will meet with an Assistant Dean, who will file a Professionalism Feedback Form.

At any time, if a second Professionalism Feedback Form is filed owing to a student's unexcused absence at a required session, the student's case will be referred to the Professionalism Committee.

Having a negative impact on the learning environment (including arriving late for a session) or not responding to communications from the MSA team will be treated as a separate Professionalism issue.

Post Clerkship Electives
IDPT 8091 and IDPT 8093

Post Clerkship electives are pass/fail. Students are assessed by the project mentor in Oasis. Final grade(s) will be issued once the mentor has completed an evaluation of the student based on the following:

- Demonstrate ability to work effectively with a mentor
- Demonstrate ability to critically review and analyze literature on an important scholarly topic
- Demonstrate development of a plan to complete the project
- Demonstrate ability to synthesize data and interpret results of the project
- Demonstrate significant progress on scholarly project
- Display independence, collaboration, professionalism, and effective communication

Goals of Elective

- Deepening knowledge of subject matter
- Professionalism (accountability, integrity, respect)
- Development of scholarship skills
- Communication (consistent and effective)
- Display ownership of project

Assignments

All assignment instructions and details can be found on the MSA Canvas page under each Assignment

Final Capstone
Students are responsible for printing their own poster for the final Capstone event during year 4. Students are encouraged to reach out to their mentors and/or their mentors' departments to inquire about possible contributions to printing costs (most mentors will cover the cost). If students have a poster they have presented at a conference, please keep those posters to be used again at the final Capstone event.