

## CAPSTONE COURSE SUMMARY & PROJECT ADVISOR INFORMATION SHEET | August 2019

Thank you so much for your interest in or participation as a student's Advisor in the Capstone Scholarship and Discovery course (CSD)! Your role is imperative in guiding students through this Project. Please contact us at any time via [CSD@umassmed.edu](mailto:CSD@umassmed.edu).

### WHAT IS CAPSTONE?

The Capstone Scholarly Project (CSP) is a mentored, longitudinal project based on each student's personal passion. The project must be related to medicine, and meet at least one of the six [UMMS core competencies](#). Projects may range from bench or clinical research, to advocacy, to the humanities, to medical education. Students are the primary drivers of projects, working with LC mentors (for the FOM1 year) and then **Project Advisors** (through completion) who provide knowledge, skills, and experience to support students in the design, execution, writing, and presentation of their work. Students submit reports on their projects each term to help guide and document their efforts. Credit for the CSP is granted based on the Project Final Write-up and the formal presentation with reflection in the spring of their AS year. The Capstone course is required for graduation; grading is Credit/No Credit.

### OVERVIEW

- The Capstone Scholarship and Discovery Course (CSD) **Leadership**: Rachel Gerstein PhD, Course Co-Leader; Christina Hermos MD MS, Course Co-Leader; Carolina Ionete MD PhD, Course Co-Leader; Sarah McAdoo MD, Course Co-Leader; Lawrence Rhein MD, Course Co-Leader; Joseph Sabato MD, Course Co-Leader; and Program Manager, Colleen Burnham, MBA
- The Capstone **Faculty Committee (CFC)**: professionals from various departments, and student representatives
- **Students are the primary drivers** of their project, initially working with LC Mentors and then Project Advisors for assistance in finding resources, time management, right-sizing their projects, and reviewing and providing feedback on all written materials. Capstone course leaders serve throughout the process as an additional resource for their respective houses.<sup>i</sup>
- **Timeline plan**: Students develop a timeline with the Project Advisor for the Capstone Project no later than at the time of submitting the Capstone Proposal, when the Project and design is determined.
- **Project scope**: Capstone projects should be manageable over 3 years, with the bulk of the work (literature review, data collection, project implementation) often completed by the end of second year.
- **Various steps in Project development and related reports** begin in the first year, and culminate in completion of Project Final Write-Up and presentation in March of the 4<sup>th</sup> year. The longitudinal design of the course requires some form of Capstone effort across all 4 years. That effort ranges from literature review, to discussions with experts in their topic area, to major project work, to writing about the Project.
- **Report Submission**: Students are expected to have all reports reviewed for feedback prior to submission to CSD course leadership team for formative evaluation. FOM1 reports are reviewed by LC Mentors; subsequent reports are reviewed by Project Advisors. For each report, a WORKSHEET including explanations, rubric, and resource links, is provided to use as a draft for review by LC Mentors and Advisors; the SUBMISSION version is used to "turn in" the requested information – all forms are available via the Capstone Course website.
- **Change of Topic**: Students are encouraged to carefully consider before making significant changes. If they determine to change topics altogether, or are planning to substantially **change existing project design or methodology**, changes may be made until January of the CCE year using the Change of

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Project Request form available via the course website. A Change in Advisor constitutes a significant project change and requires a conversation with the Capstone House Affiliate.

- ✓ **Group Projects:** Students may work in groups to a maximum of 3 students. Each student is responsible for a particular piece of the Project. Groups may work with one or multiple Project Advisors.
- ✓ **MD PhD and MSci Students are not required to complete Capstone years 1-3;** although must complete the 4<sup>th</sup> year Capstone Month, presentation and reflection components

### STEPS AND REPORTS

**Reports are reviewed to ensure students are successful in their work and meeting Capstone requirements**

- ✓ CSD leadership house affiliates review all reports throughout medical school years
- ✓ CFC reviews Project Proposal and Final Project Write-up

#### 1<sup>st</sup> year (FOM1) | Required Reports

- ✓ Fall Progress Report | Topic consideration | November 30
- ✓ Spring Progress Report | Potential topics, Summer research planning | April 30

#### 2<sup>nd</sup> year (FOM2) | Required Reports

- ✓ Fall Advisor Selection | December 11
- ✓ Project Proposal | November 30
- ✓ Spring Project Update | April 15

#### 3<sup>rd</sup> Year (CCE) | Required Reports

- ✓ Fall Project Update, with Draft Introduction Section | December 30
- ✓ Spring Project Update, with Draft Methods Section | April 1

#### 4<sup>th</sup> Year (AS) | Required Reports

- AS Capstone Month | May (EE1) – December (M6) | EVOS CCE Spring Term
- OPTIONAL | AS Fall Project Update, with Draft Results Section | due date determined with Affiliate
- AS Final Project Write-up | December 20
  - If enrolled in M6, Final Project Write-Up is due December 30
  - 5-10 page scholarly paper, including: Introduction, Methods, Results, Conclusions, Discussion, and References
- Deliverables – due as appendices to Final Project Write-up
  - Any work integral to the actual project, such as research protocols, surveys, educational pamphlets, or any presentation(s) done in addition to the final Capstone presentation
- AS Capstone Presentation | March 18 (Wednesday of Match Week)
- Guided Reflection paper | April 1
- Remediation must occur by April 30 of the AS year

### PROJECT WORK TIME (Examples of when project work may be done)

- ✓ **FOM1 (1<sup>st</sup> year):** unscheduled time, the summer between FOM1 and FOM2 year, interest group participation, Optional Enrichment Elective (OEE) or Learning Community activities, new or ongoing research, international experiences or volunteer time
- ✓ **FOM2 (2<sup>nd</sup> year):** Population Health Clerkship, and other opportunities as above

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- ✓ **CCE** (3<sup>rd</sup> year): self-designed Flexible Clinical Experience (FCE), existing FCE or opportunities as above
- ✓ **AS** (4<sup>th</sup> year): related electives, Capstone month (scheduled May – January) is dedicated time intended for report writing and compiling the final presentation

All reports throughout the 4 years are submitted to CSD and reviewed by CSD leadership; the Capstone Faculty Committee reviews Project Proposals and Project Reports as well as any particularly concerning reports. Reports are reviewed to ensure students are successful in their work and meeting Capstone requirements.

### CAPSTONE PROJECT ADVISORS – ROLE AND RESPONSIBILITIES

- ✓ Students engage a Capstone Project Advisor for their Project in the late fall of the FOM2 year. The Advisor provides project management, a role previously filled by LC Mentors.
- ✓ Advisors may be from any professional discipline and do not need to be faculty or located at UMMS. Residents or Fellows may serve as advisors with the consent of their supervising program director, if they are expected to remain in that residency program through the duration of the student's Capstone work.
- ✓ It is recommended that Advisors accept only one student, or one student group, from each class year cohort.
- ✓ Students are the primary drivers of their project and work, utilizing Project Advisor assistance in finding resources, time management, right-sizing their projects, and reviewing and providing feedback on all written materials.
- ✓ The Advisor may need to help the student narrow a project to the appropriate scope of work by helping them right-size expectations. For comparison, a Capstone project should be less work across four years than a Senior Scholars Project, which is allotted 2-3 months.
- ✓ Project Advisors are encouraged to schedule regular meeting or check-in times, and may be otherwise engaged by students as needed
- ✓ Capstone Projects requiring IRB approval require appropriate oversight by Advisors and may require an additional time commitment
- ✓ Students submit the **Capstone Project Proposal** in December of the FOM2 (2<sup>nd</sup>) year.
  - The Proposal is a major outline of the Project including Goals, Objectives, Methods, anticipated Results and expected Deliverables, as well as providing information regarding the need for IRB, IACUC, or SAS review<sup>iii</sup>
- ✓ Along with the CSD team, the Capstone Faculty Committee reviews all Capstone Project Proposals to determine that they meet the Capstone Course requirements
- ✓ Beginning with the Capstone Project Proposal and through to the Capstone Scholarly Project (CSP) Presentations, **all written work is sent to Project Advisors for review and feedback and designated by Project Advisors as "meets expectations" prior to submission.** If Project Advisors are not able to review before the due date, students are required to contact their Capstone House Affiliate to request an extension.
  - Recommended timelines for allowing ample time for your review will be suggested to students; however, Project Advisors should plan to discuss a timeline around this and all other reports so that there is time for review and feedback while accounting for time either you or the student will not be available (conference travel, holidays, etc)

CCE (3<sup>rd</sup>) Year Progress Reports require general information and updates on how students' Projects are progressing. In addition, students will utilize these submissions to include polished drafts of various sections of their final scholarly Project Reports. The CCE Fall Progress Report includes a draft Introduction section; the Spring Progress Report includes a draft Methods section, the AS Fall Progress Report (when

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required) includes a draft Results section.

In the AS (4<sup>th</sup>) year, students complete the AS Capstone month according to the AS Elective schedule (EE1-M6). Students are allowed to schedule interviews during the Capstone month as it is possible to work on Project write-up and submission while off-campus.

- Students submit the final Capstone Project Report and associated deliverables (products) no later than

December of the AS year

- The Capstone Project Final Write-Up is the complete and detailed description of their project, written in the format of a **scholarly paper**. Publication is not required, although students may do so.
- In March of the AS year, students present their Capstone Scholarly Projects at the Capstone Presentation Forum; the Guided Reflection is due at this time.

- ✓ Remediation (if required) must occur no later than April of the AS year.

Multiple resources are available such as the Capstone Course website, Mentors and Advisors, House Librarians and the Library website, CFC members, and CSD House Affiliates to assist students (and all associated) with information about the Capstone course and its requirements, selecting topics, finding advisors, and writing and presentation skills.

### Capstone Team

Colleen Burnham, MBA | Kelley & all group projects  
Rachel Gerstein, PhD | Blackstone & Tatnuck  
Christina Hermos, MD, MS | Burncoat  
Carolina Ionete, MD, PhD | Quinsigamond  
Sarah McAadoo, MD, MPH | Brightwood  
Lawrence Rhein, MD, MPH | Tatnuck  
Joseph Sabato, Jr, MD | Kelley

### Acronyms

CSD - Capstone Scholarship and Discovery  
course CSP – Capstone Scholarly Project  
CFC – Capstone Faculty Committee

### Student years:

FOM 1 & 2 (1<sup>st</sup> and 2<sup>nd</sup> year) – Foundations of  
Medicine CCE (3<sup>rd</sup> year) – Core Clinical  
Experiences  
AS (4<sup>th</sup> year) – Advanced Studies

If interested in advising multiple students from one class cohort, please complete the Advisor Exception Request Form

UMMS [Institutional Review Board](#) (IRB)  
UMMS [Institutional Animal Care and Use Committee](#) (IACUC)  
UMMS [Students as Study Subjects](#) (SAS)