

Distinction in Medical Research (DMR) Information Session

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What is the DMR?

The Distinction in Medical Research (DMR) program is designed to provide medical students a structured medical research experience.

Students not only plan, conduct, and present cutting-edge medical research projects, but receive instruction in research method development, research management, and other critical skills.

This structured experience will empower the students to become engaged in research during medical residency and as they continue on in their medical practice.

DMR website: <https://www.ttuhschool.edu/medicine/medical-research.aspx>

Distinction in Medical Research (DMR) at a glance

- Estimated completion time: 3-4 years
- Lectures (prerecorded, online)
- Opportunity to increase skills and knowledge in clinical research
- No thesis requirement
- Students plan their own research studies and customize them on a case-by-case basis
- Expert faculty chosen for lectures and mentoring
- Well-equipped research environment
- Interactive peer group discussions (two per semester)
- Practice preparing study protocols and grant proposals for medical research
- Apply basic, clinical, community health, and health service research concepts to improve patient outcomes
- No charge to TTUHSC SOM students

DMR Curriculum

Provides fundamental understanding of the medical research process without the time commitment of a master's degree and with the benefits of being self-paced

- **Core Curriculum:**

- PART I: self-paced online lectures (Course 1: *Research Methods*; Course 2: *Proposal Development and Research Management*): All DMR lectures are pre-recorded lectures via Zoom and available to the students via links on Brightspace.
- PART II: covers scholarly activities such as research proposals and abstract writing

- **Average completion time: 3-4 years**

DMR Timeline

Activities	MS1	MS2	MS3	MS4
DMR Application Deadline: October 1st MS2		X		
Introduction to Research (elective)	Optional			
(Req A) Medical Student Summer Research Program <u>or</u> comparable research experience	X			
Y2 Medical Student Research (Fall MS2-Spring MS2)		Optional		
(Req B) Course 1: Research Methods due Dec 31st MS3	X	X	X	
(Req C) Course 2: Proposal Development/Research Management due Dec 31st MS3		X	X	
(Req D) Student Group Discussion 7/10 sessions		X (Spring)	X	X
(Req E) Conduct research project(s)	X	X	X	X
(Req F) Submit abstract and give oral presentation/present poster as the first or co-first author at one (1) Student Research Week due Feb 28th MS4		O (Spring)	O (Spring)	O (Spring)
(Req G) Research Proposal Submission draft due by MS3 January 15th MS3		X	X	
(Req H) Submit abstract and give oral presentation/present poster as the first or co-first author at one (1) national conference due Feb 28th MS4	O	O	O	O
(Req I) Participate in one (1) manuscript submission due Feb 28th MS4	O	O	O	O

X: Mandatory completion dates

O: Flexible fulfillment throughout medical school years

Part I: Course 1

Research Methods

- DMR student uses eRaider account to log in to [Brightspace from DMR homepage](#).
- **Req B: Finish online course (30-60 min/session, 8 hours of lectures)**
 - How to conduct medical research literature
 - How to conduct retrospective chart review research using UMC EMR
 - How to formulate research questions and design a hypothesis-driven research study (basic science studies and clinical trials)
 - How to write study protocol for a basic science study and a clinical trial
 - Basic biostatistical analysis and preparation for statistical consultation
 - How to conduct a case-control study, a retrospective study, and a clinical trial
 - How to prepare an abstract for a scientific meeting
 - How to prepare and present an oral or poster presentation at a scientific meeting
- **Complete brief questions after each lecture to document participation**

Part I: Course 2

Proposal Development and Research Management:

- **Req C:** Finish online course (30-60 min/session, 8 hours of lectures)
 - How to write a research proposal for basic science study
 - How to write a research proposal for clinical trial
 - Advanced biostatistical analysis and data management
 - Research misconduct
 - How to write basic science manuscript and select a journal for publication
 - How to write case control and retrospective study manuscript and select a journal for publication
 - How to write a clinical manuscript and select a journal for publication
- **Complete brief questions after each lecture to document participation**

Part II: Scholarly activities

- **Req D:** Participate in DMR student group sessions: 2 sessions/semester via zoom. 70% attendance of sessions (7 of 10 with)
- **Req E:** Conduct research project(s)
- **Req F:** Submit at least one abstract as the first or co-first author and presenting the work for Student Research Week. [Due by MS4 \(Feb 28th\)](#)
- **Req G:** Submit a 5-page research proposal. DMR committee will review and offer comments to address before approval. [Due by MS3 \(Jan 15th\)](#)
- **Req H:** Submit at least one abstract as the first or co-first author and presenting the work at a state/national conference. [Due by MS4 \(Feb 28th\)](#)
- **Req I:** Participate in a manuscript submission: must be at least a co-author in manuscript to show the significant contribution for peer-referred journal submission/publication. [Due by MS4 \(Feb 28th\)](#)

Application to DMR

WHO?: Students who wish to acquire medical research skills as part of their education and need flexible schedules.

HOW?: Requirements for application:

- (1) Medical student transcripts from MS1 Fall and MS1 Spring,
- (2) Letter of support from faculty mentor, and
- (3) Application form approved by faculty mentor and reviewed by DMR committee for acceptance.

Application Deadlines:

October 1st MS2

DMR website: [Distinction in Medical Research Program | Texas Tech University Health Sciences Center](#)

- Questions should be directed to Jordan Beal Jordan.Beal@ttuhsc.edu or Dr. Shen Leslie.Shen@ttuhsc.edu

What are the responsibilities of a DMR mentor?

During DMR application (due October 1st, MS2):

- Guide/mentor student on his/her 1-page DMR application to include background, objective(s), hypothesis, methods, and expected outcomes.
- Write a letter of support as a DMR mentor.
- The number of accepted students depends on the number of applicants (no cap). The DMR Admissions Committee will review all applications and provide feedback and ask for clarification as needed.

During DMR program (Spring MS2-Spring MS4):

- Guide/mentor student with proposed DMR project and provide resources.
- Guide/mentor student in writing and editing his/her 5-page DMR proposal with NIH format. **First draft due January 15th, MS3**
- DMR Research Committee will review all DMR proposals and provide feedback and ask for revision(s) for mentor to assess, if applicable. **Final DMR proposal approval by Feb 28th, MS4**

Can multiple students work on the same project?

- Yes
 - Some projects are big enough that more than one student can participate
 - DMR students must all have their own research question(s)
 - Each student will have his/her own set of requirements to fulfill

Can DMR students carry over their MSSRP research projects to the DMR or should they start new projects?

- It depends
- Not all MSSRP projects will be substantial enough to continue development for the duration of the DMR
- Students will have adequate time to begin a new project that meets all program requirements, whether out of necessity or a desire to pursue new research