

Medical Student Training in Aging Research (MEDSTAR)

The MEDSTAR program is designed for medical students to immerse themselves in research and educational experiences around Geriatric topics. The 8-week program consists of didactics, guided learning and research projects. The research projects entail the “nuts and bolts” of research activities including regulatory aspects, statistical analysis, and presentation of research findings both oral and written. At the end of the program, students are expected minimally to have an abstract of their work for a future poster presentation, if not a full-fledged article for peer review.

The learning objectives for MEDSTAR participants include:

1. Report biological and physiological changes with age
2. Conduct Comprehensive Geriatric Assessment and Health Promotion
3. Identify and treat key Geriatric Syndromes
4. Utilize functional assessment and patient management around the Geriatric 4Ms
5. Understand how to design a research or quality improvement project
6. Apply evidence based medicine to older adult care
7. Critically review medical literature

While each student will have a focused research project, each student will have crossover experiences with other projects and thus serve as a team member of the overall Dakota GWEP projects.

Key resources are the Geriatrics at Your Finger Tips hand book and the Geriatrics Review Syllabus. A good on – line resource is POGOe which archives different Geriatric Education modalities (e.g., case reports, presentations, etc).

Week 1- Orientation

1. Introduction to the educational, research and clinical mission of Dakota GWEP: students will be introduced to the Dakota Geriatric Workforce Enhancement Program (GWEP) and its objectives.
2. Research Ethics- Students complete relevant on – line CITI training modules on responsible conduct in research. This training will serve to complete IRB applications.
3. Students familiarize themselves with IRB application process and initiate their respective applications.
4. Aging Research Didactics: In addition to conducting their research on various Dakota GWEP projects, the students will participate in weekly didactics that will include, journal club, faculty presentations and student presentations.

Week 2-7- Research Work + Didactics

1. Each week will be split between project work and learning activities.

2. Project Work- Students will work closely with their direct supervisors on their predefined and discussed projects in the mornings.
3. Learning Activities- Most afternoons will be spent on didactic sessions that will include:
 - a. Faculty Presentations- Students will have the opportunity to attend weekly talks presented by different faculty on topics relevant to their research work. Because of the availability of faculty, these will be scheduled on specific dates and times mentioned below.
 - b. Journal Club- Once a week, the students will meet in a faculty supervised discussion forum. First half of the meeting will be spent in updating the team with project work and second half of meeting will be a critique/discussion on a specific article. The article will be sent out to students ahead of time.
 - c. Student presentations-The students will engage in adapting and updating a GRS slide deck and present it to the faculty/team.

Week 8/Last week- Program Wrap –up

1. Students will present a summary of their projects/research work.
2. Students will also provide a program evaluation provided via qualtrics.

Elective Protocols

Prior to start of Internship

Protocol for Students

1. Complete all requirements for eligibility
2. Confirm participation in MEDSTAR/REMS II.

Protocol for providers

1. Geriatrics team will confirm faculty presentations prior to start of elective
2. Team will finalize calendar of events for the elective and provide it to the students
3. Team will provide the handbook to students prior to start of elective.

During Elective

Expectations from student

1. Students will regularly report to their immediate supervisor and present updates on their work in department meetings.
2. Each student will present in at least 1 Journal club and 1 student presentation during the elective.

3. Students will draft 2 manuscripts by the end of elective- 1 research article based on individual projects, 1 review article on a broad topic closely related to their project.
4. If applicable, students will submit IRB application related to their project within 4 weeks of start of the elective.

Expectations from GWEP group

1. Students will be provided access to GRS slides and teams site on day 1 of elective.
2. Students will be provided program orientation (Overview of GWEP) on day 1 of elective.
3. Group will assign one supervisor/contact person to each student for daily progress of project work.
4. Supervisor will provide orientation of individual projects within 1 week of start of elective.
5. Supervisor will work with students throughout the elective to produce 1st drafts of manuscripts (2).

Student Presentations:

GRS topics:

Cultural Aspects of Care

Delirium

Dementia

Depression

Demography

Gero-Psychiatry

Ethics and Law

Falls

Frailty

Hospice

Pain Management

Checklist for student presentation (GRS Slide deck adaptation)

1. Update the slides with last 2 years of data
2. Include pictorial representation of information present in provided slides
3. Survey of POGOe resources for case reports

Journal Club:

Topics TBD