Family Medicine Research Elective Syllabus

Introduction

This four-week-long elective curriculum is designed to service the developing academic interest in family medicine residents within the Northeast Georgia Medical Center graduate medical education division. **The overarching goal of this elective is to allow the resident to immerse in research and scholarly activity in their specified area of interest with protected time and access to research coordinators and ,data developers, statisticians so that they can complete several scholarly projects, advance their research skills, and prepare for a career in academic medicine.**

Family Medicine Research Elective: Generic Focus

Faculty Sponsor: Amy Bailey, MD or other

GME Director of Research: Louise Jones, PHD MED Louise.Jones@NGHS.com

NGMC GME Department of Research and Scholarly Activity

GME Research Coordinator: assigned by Dr. Jones

Objective: To provide the highly motivated resident with a focused four-week opportunity to focus on the development of robust, evidence-based knowledge in their field of interest. At the end of this intensive, the resident will have expanded academic knowledge and research skills by completing several rigorous and targeted research activities.

Rotation outcomes:
At the end of this rotation, the successful resident will:
1. Complete at least two case reports or one literature narrative ready for publication (academic writing)
2. Identify a focused area of interest (Step 1)
3. Critically appraise a focus area of academic literature using a robust appraisal system (Literature Review)
4. Design and complete one or more research projects which add to the body of knowledge in the subspecialty (Methods)
5. Work with GME Data Developer to define the dataset (Data collection) and collect appropriate data.
6. Work with GME Statistician to analyze data.
7. Work with Research Coordinator to develop a robust manuscript followingauthoror guidelines of target journal.
8. Present research findings at Residents Research Day (May) and potentially at a grand rounds event or capstone meeting (Dissemination) and have the manuscript ready for submission to a conference opeer-revieweded publication.
Evaluation Measures:
1. Evaluation of a sample of critically appraised evidence
2. Protocol rigor
3. Publication acceptance

Potential Topics for Resident:

(typically have 3 to 4 topic areas, and narrow down choice at pre-meeting (1 month before elective).

Research can be:

Research on Medical Education (ROME)

Research on Medical Processes (ROMP)

Research on Devices (ROD – FDA approved)

Research on Medical Management and Treatments (FDA approved, Guideline) (ROMMT)

Schedule

Location: Resident is allocated a study area in Suite 710 with immediate access to GME Coordinator. Accountability will be through the timely completion of tasks and deliverables and a weekly progress meeting with Dr. Jones.

Schedule: Due to the customized nature of this elective, the resident is responsible for completing a weekly schedule and posting this in their Teams Channel.

The following model is based on a quantitative retrospective study; however, it can be adapted for a mixed or qual study, grant proposal, etc. these may take longer than 1 month.

Pre-requisite work:
1. Meet with Dr. Jones and the team 4 weeks prior to the start date to go through the schedule, narrow focus and set expectations.
2. Current CITI certification
3. Orientate to GME Scholarly Resources (Digital Tools, Teams Channel)
4. Install Endnote 20 and citewhileyouwrite, and complete 30 mins onboarding module (async)
5. Complete step 1 async module
6. Complete step 1 draft

Week 1:
This week, the focus will be on completing an academic orientation, step 1 and 2 of a capstone study and meeting with GME Research Director to customize the elective goals, evaluation methods, and task timeline.
1. Finalize Step 1 and get approvals by Day 1
2. Complete async module step 2 by day 1
3. Develop a **Step Two Protocol, submit to IRB by Day 3**
4. Discuss a potential **FM case report** with FM and research faculty
5. Obtain ethical consent from the identified patient (for Case Report)
6. Identify 3-5 target journals for case reports and capstone projects, develop a publication plan and timeline by day 5
7. Schedule a population discovery session with GME Data Developer and Statistician for week 2 by Day 4
8. Meet with Dr. Jones for debrief meeting on Day 5.

A possible schedule for week one could look like this:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8							
9	Step One review session with GME Director coordinator	Step Two Data Management Plan	Complete Research Summary Excel, review with coordinator	Case report Literature review synthesis	Clinic	Case Report: Clinical context	
10		Step Two Operalization and Variables	Step Two Approval Review with Dr. Jones	Set up a data developer and statistician meeting for next week (Tuesday or Thursday); attach data summary and data plan			
11		Step 2: Data excel sheet	Step 2: IRB application and submission	Case Report 1: template. Complete academic context section			
12	Lunch	Lunch	Lunch	Lunch		Lunch	
1	Step 2 async module	Step Two Ethics (upload your CITI)	FM Didactics	Academic review session with GME Director coordinator			
2	Begin Step 2	Step Two: Limitations		Case Report: Clinical context			
3					Clinic day		
4	Meeting with RC: Step Two Review and edit based on meeting notes. Refine research questions. Develop hypothesis	Submit Step 2 for approval from Faculty Sponsor					
5		Review rotation plan. Develop topic step 1 for case report 1 Complete case report module (async) 60 mins					Submit first draft to RC & Dr. Jones for review by 8p
evening	Work on Step 2 methodology	Case report Literature review plan and requests	Case report Literature review synthesis				

Week 2:
1. While waiting for IRB approval:
1. Using the NGMC GME Case Report process: Complete one or more case report manuscript drafts and poster drafts
2. Use CARES checklist to review case report
3. Meet with facilitator for feedback on manuscript
4. Refine drafts and submit to identified journals and conferences
2. Complete a data collection template
3. Attend data meeting for retrospective study
4. Draft a personal research biography / career resume (and a personal statement for fellowship app – optional)
5. Debrief meeting at end of week with Dr. Jones
6. Draft Intro, Lit Review, and Methods section of capstone report
7. Identify target journal author guidelines for CR and Research project

A possible schedule for week 2 could look like this:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8	Case Report 1: Discussion section	Write CR abstract, Begin poster and presentation deck.	Work on poster 1 and presentation deck.	Case Report Outline: Academic Context section	Clinic Day		
9	Case Report 1: Discussion section	Submit CR 1 as soon as approvals given. Complete reimbursement claim.					
10		Clinic Obtain consent for 2nd case report	Circulate for approvals prior to submission			Case Report 2 Draft 1	
11	Case Report: Introduction and conclusion	Personal Statement for fellowship / career– outline and draft 1	Submit poster 1 to conference				
12	Case Report 1: Manuscript draft 1	Lunch	Lunch	Lunch	Lunch		
1		Complete statistics module 1	Family Medicine Didactics	Academic review session with GME Director coordinator			
2	Review manuscript with CARES checklist			Case Report 2: Clinical context			Plan and schedule next week research meetings
3	Review author guidelines for target journal and modify			Data meeting and data collection validation steps			

	manuscript appropriately (we can help)						
4	Send final manuscript to faculty sponsor, and Dr. Jones for pre submission approvals			Complete Case report 2 discussion and conclusions			
5	Begin poster and presentation deck.						
evening		Review literature for case report 2			**Case Report 2:** Manuscript draft 1		Submit first draft of CR 2 to Dr. Jones for review by 8pm

Week 3:
1. IRB approval: Meet with Data Developer to validate dataset
2. Schedule and attend meeting with statistician – share dataset with them
3. Schedule a findings discussion meeting with statistician.
4. Draft data findings section – tests, methods, rationale and characteristics tables are probably doable at this stage.
5. Plan out how you will visualize findings and AMA approach to data reporting.
6. Identify significant ranges and values that you will be looking for in your data.
7. Draft out a poster for your research project.
8. Develop a powerpoint presentation for your project.
9. Schedule capstone presentation for end of week 4.

A possible schedule for week 3 could look like this:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8							
9	Meet with PR to build fellowship social media plan (follow, & posts)			Schedule meeting with statistician to discuss preliminary findings.	Clinic day		
10	Academic review session with GME Director coordinator	**Submit CR 2** as soon as approval given. Complete reimbursement claim.	Draft Intro, lit review and methods section of research report	Academic review session with GME Director coordinator			Lunch
11	**Case Report 2:** Manuscript draft 2						
12	Lunch	Lunch	Lunch	Lunch	Lunch		

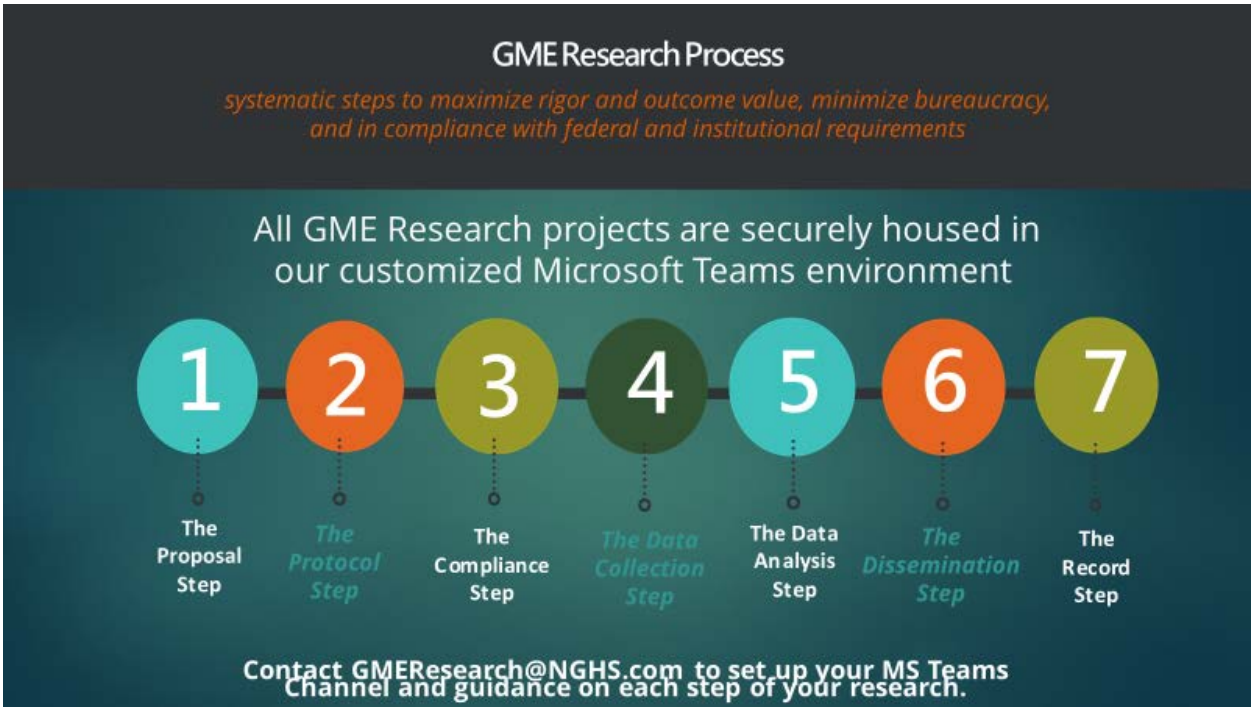
1	Review manuscript w/ CARES checklist	Dataset meeting w/ Data developer & statistician.		Work on draft manuscript			
2	Review author guidelines for target journal a& modify manuscript appropriately (we can help)	Data timeline agreed and meetings set for next week.		Outline findings section and send draft to statistician to comuunicate what you are looking for,			
3	Send final manuscript to faculty sponsor, and Dr. Jones for pre submission approvals	Complete statistics module		Plan visualization and communicate these with statistician.			
4	Begin poster and presentation deck.			Review author guidelines for target journal and modify manuscript appropriately (we can help)			
5			Identify journal for research project	Work on career/ fellowship packet	Begin draft poster & ppt presentation, abstract.Draft visualizations, tables, figures etc.		
evening							

Week 4
1. Prepare for and attend progress meeting on your projects
2. Complete data findings meeting with your statistician.
3. Complete final draft of your research manuscript, submit to co-authors for approval
4. Complete final draft of your research poster
5. Develop capstone presentation
6. Capstone presentation – complete practice presentation prior to your formal presentation
7. Complete exit interview with GME research director

A possible schedule for week 4 could look like this:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8	Academic work	Academic work	Academic work	Academic work	Academic work		
9			Final day for writing up research	Edits & then submit to your co-authors for final approval	Clinic Day		
10				Submit draft 1 to GME research team			
11				Academic review session with GME Director coordinator			
12	Lunch	Lunch	Lunch	Lunch	Lunch		
1	Continue w/ manuscript preparation			Prepare capstone presentation			
2		Meet w/ statistician as they prepare findings for you to use in response to your questions. Note interesting findings, note limitations.		Prepare capstone presentation Complete exit survey and debrief with Dr. Jones			
3		Academic review session with GME Director coordinator		Record capstone presentation	Wrap up day: Write abstract Submit for publication as soon as approval arrive.		
4		Write up findings section		Submit narrated capstone presentation to faculty mentors, PD, and GME Research			
5							
evening		Complete your draft #1 research manuscript. Use checklist to review.	Edits draft 2				

GME Research Process will be used for the capstone project:



Resources and Support:

Digital research tools (Endnote, Nvivo, SPSS, MPlus, Qualtrics)

Project management

Coaching

Editing

Expertise

Data Platform

Visualization tool (Lucidcharts)

Graphics tool (venngage)

Conferences and journals will be added to the rotation channel.