

2023 Grantee Annual Meeting



Hyatt Regency Crystal City At Reagan National Airport
Arlington, VA

A partnership between



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Scholarship in Residency Programs: Options and Opportunities

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Disclosures

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Objectives

- Transform thinking about scholarship from “one more we have to do” to “creating a learning community that we can all be proud of.”
- Provide some concrete strategies to convert core interests and activities into “scholarly activity.”



Why is scholarship core to GME?

“Medicine is both an art and a science. The physician is a humanistic scientist who cares for patients. This requires the ability to think critically, evaluate the literature, appropriately assimilate new knowledge, and practice lifelong learning. The program and faculty must create an environment that fosters the acquisition of such skills through resident participation in scholarly activities. Scholarly activities may include discovery, integration, application, and teaching.”

(Common Program Requirements 7/1/23 version, Part IV.D. Scholarship)



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(Common Program Requirements 7/1/23 version, Part IV.D. Scholarship)



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Scholarly Activity

Program Responsibilities

- IV.D.1.a) The program must demonstrate evidence of scholarly activities consistent with its mission(s) and aims. (Core)
- IV.D.1.b) The program, in partnership with its Sponsoring Institution, must allocate adequate resources to facilitate resident and faculty involvement in scholarly activities. (Core)
 - [The Review Committee may further specify]
- IV.D.1.c) The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care. (Core)



Scholarly Activity Program Responsibilities

- IV.D.1.a) The program must demonstrate evidence of scholarly activities consistent with its mission(s) and aims. (Core)
- IV.D.1.b) The program, in partnership with its Sponsoring Institution, must allocate adequate resources to facilitate resident and faculty involvement in scholarly activities. (Core)
 - [The Review Committee may further specify]
- IV.D.1.c) The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care. (Core)





Faculty Scholarly Activity

- IV.D.2.a) Among their scholarly activity, programs must demonstrate accomplishments in at least three of the following domains: (Core)
 - Research in basic science, education, translational science, patient care, or population health
 - Peer-reviewed grants
 - Quality improvement and/or patient safety initiatives
 - Systematic reviews, meta-analyses, review articles, chapters in medical textbooks, or case reports
 - Creation of curricula, evaluation tools, didactic educational activities, or electronic educational materials
 - Contribution to professional committees, educational organizations, or editorial boards
 - Innovations in education



Faculty Scholarly Activity

- IV.D.2.b) The program must demonstrate dissemination of scholarly activity within and external to the program by the following methods:
 - IV.D.2.b).(1) faculty participation in grand rounds, posters, workshops, quality improvement presentations, podium presentations, grant leadership, non-peer reviewed print/electronic resources, articles or publications, book chapters, textbooks, webinars, service on professional committees, or serving as a journal reviewer, journal editorial board member, or editor; (Outcome)
 - IV.D.2.b).(2) peer-reviewed publication. (Outcome)

Scholarly Activity Requirements for Residents



- IV.D.1.b) The program, in partnership with its Sponsoring Institution must allocate adequate educational resources to facilitate resident and faculty involvement in scholarly activities. (core)
- IV.D.1.c) The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care. (Core)
- IV.D.3.a) Residents must participate in scholarship. (Core) [Review Committee may further specify]

Scholarly Activity Requirements for Residents



- IV.D.1.b) The program, in partnership with its Sponsoring Institution must allocate adequate educational resources to facilitate resident and faculty involvement in scholarly activities. (core)
- IV.D.1.c) The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care. (Core)
- IV.D.3.a) Residents must participate in scholarship. (Core) [Review Committee may further specify]





Audience prompt:

**What barriers do you anticipate?
What resources do you think you might need?**



Barriers to research/scholarly activity: What rural residency program directors say

Meeting scholarly activity requirements is the #1 accreditation challenge, cited by more than 50%

Challenges

1. Lack of faculty with experience (78%)
2. Faculty not interested (72%)
3. Lack of support infrastructure and personnel (59%)
4. Publishing original scholarly work (55.2%)
5. Obtaining funding (35.2%)
6. Lack of flexibility in meeting scholarly activity requirements (33.6%)

Patterson et al. *How can we support rural-centric residency programs as unified ACGME accreditation approaches in 2020?* Policy brief. 2018. Seattle, WA: Collaborative for Rural Primary care Research, Education, and Practice.



Possible solutions from the literature: Keys to successful research in residency education

1. Program director support
2. Time – for faculty and residents
3. Faculty involvement in research
4. A research curriculum/journal club
5. An easily accessible research professional
6. Opportunities for residents to present their research
7. A research/scholarly activity committee
8. Affiliation with university programs

DeHaven M, Wilson G, O' Connor-Kettlestrings P. *Creating a research culture: what we can learn from residencies that are successful in research*. Fam Med 1998;30:501-507.

Winter R. *Leading Successful Residency Research*. Ann Fam Med 2003; 1: 183.

Patterson et al. *How can we support rural-centric residency programs as unified ACGME accreditation approaches in 2020?* Policy brief. 2018. Seattle, WA: Collaborative for Rural Primary care Research, Education, and Practice.

A word about budget

- Remember to include scholarship needs in your budget
- FPIN, Scholarship Fair, Microresearch funds, etc.





Types of Scholarly Activity

- Discovery
 - Build new knowledge through hypothesis driven original basic, clinical, epidemiological, public/population health, health services research, educational research, or other research on health, health systems/services, or disease:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3546601/>
- Integration
 - Synthesize current knowledge so as to make it useful to other researchers, clinicians, patients, policymakers, and/or educators
- Application
 - Use knowledge to improve health care, medical practice, health systems operation, public health, or policy (QI)
- Teaching
 - Develop, implement, and evaluate educational programs, rotations, courses, materials, or other resources to educate students, healthcare professionals, patients, or the public

Discovery

Build new knowledge through hypothesis-driven original basic, clinical, epidemiological, or other research on health or disease

Faculty:

- Present a poster at a refereed statewide research fair
- Publish an original research paper in a peer-reviewed state or national medical journal
- Present original research in grand rounds at another institution, or in a refereed regional or national professional conference

Featured ideas:

- Practice-based research networks
- CERA
- RTT Collaborative Scholarly Intensive
- Microresearch

Residents:

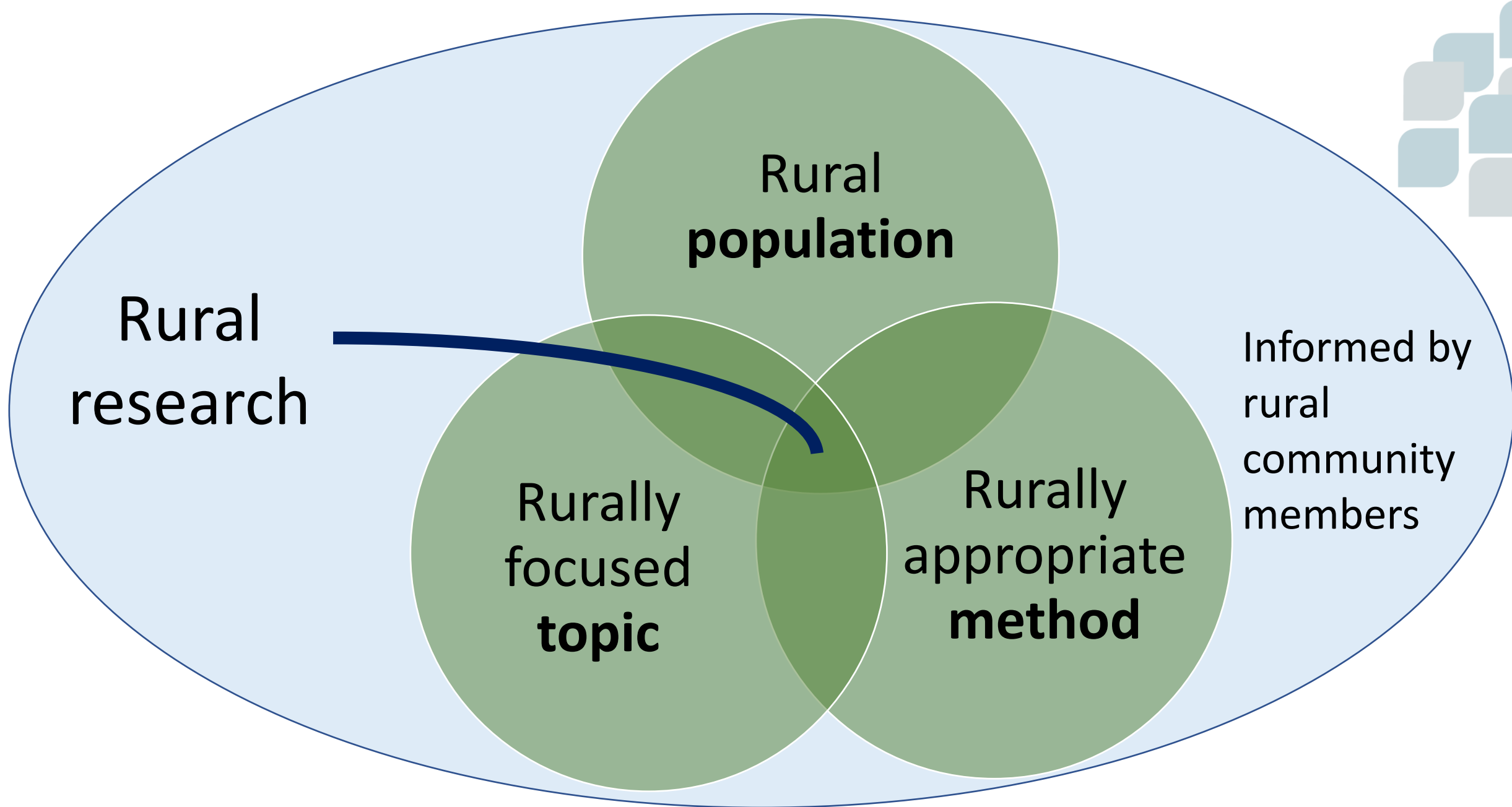
- Present a poster at a residency research fair
- Publish an original research paper or abstract in a residency newsletter
- Present original research in local or state grand rounds or in a residency conference



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Integration

Synthesize current knowledge so as to make it useful to other researchers, clinicians, patients, policymakers, and/or educators

Featured ideas:

- FPIN
- Wiki Journal Club

Faculty:

- Publish a focused review regarding a clinical question in a peer-reviewed journal
- Testify in the state legislature regarding strategy to manage a public health problem
- Publish a review of evidence-based guidelines for management of a clinical problem in a statewide or national CME meeting
- Serve as Associate Editor or Editor of a state or national medical journal

Residents:

- Present a case study and literature review of a clinical problem in local/state grand rounds
- Lead a local or state patient education conference series on care for a chronic condition
- Publish an op-ed in a local or state newspaper explaining the meaning and significance of a current public health concern
- Publish a letter to the editor of a medical journal analyzing results of a paper published by others



Application

Use knowledge to improve health care, medical practice, health systems operation, public health, or policy

Faculty:

- Present the results of a clinical quality improvement program implemented in a group of practices professional meeting
- Present the results of participation in a practice-based research network at a professional meeting
- Present on the process and results of seeking recognition as a PCMH
- Serve on a state or national professional committee developing/implementing medical practice/ education
- Obtain foundation, state/federal funding for a grant to implement practice improvement

Featured ideas:

- Integrated QI curriculum
- PBRN
- Scholarly driven advocacy work

Residents:

- Present the design and results of a clinical QI project conducted in the residency practice at a residency conference
- Write letter to the editor, op-eds, or resolutions
- Describe the design, implementation, and effects of a patient education program on risk behavior or chronic disease management in a residency newsletter
- Serve as chair of a local or state medical society committee; publish a report of committee accomplishments in a medical society newsletter

Teaching

Develop, implement, and evaluate educational programs, rotations, courses, materials, or other resources to educate students, healthcare professionals, patients, or the public

Faculty:

- Evaluate a new skill-building workshop for students, residents, faculty and present results
- Develop, implement, and report a new curriculum for a national professional educational course or module in an existing program to a sponsoring professional organization
- Obtain a Title VII grant to implement a new medical education curriculum
- Publish an evaluation of a new curriculum in a state or national medical journal

Featured ideas:

- Presentation at a regional or national conference
- Publish/share curricula (MedEd Portal, etc.)

Residents:

- Prepare an enduring curriculum for use in a residency program
- Develop and implement a program for patient self-care for chronic disease; present the outcomes in a residency conference and publish a summary report for a residency newsletter



Other ideas

- Community projects (and disseminating)
- Commentaries/editorials/personal stories
- Radio talk shows
- State academy publications
- Local clinic/system newsletters
- Newspaper articles

April 18, 2023 at 2:23 pm

ACA court ruling upends progress in preventive health care | Op-Ed

A U.S. District Court ruling overturned a key Affordable Care Act rule requiring health insurers to cover preventive health screenings and services at no cost.

October 17, 2022 at 3:22 pm

Where an 1864 law denies my patients reproductive health care | Op-Ed

By becoming an abortion provider, I am providing safe, evidence-based care that saves lives, respects bodily autonomy and prevents forced parenthood.

June 11, 2023 at 12:01 pm

Train more providers in abortion care to fill reproductive-health gaps | Op-Ed

As abortion restrictions increase and the number of practitioners drops, it's vital for providers in other fields, like emergency medicine, to fill the gap.

Winter 2022 WAFP Magazine

When the Vibes are Off: Adolescent Mental Health During COVID-19



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What do you have to report?



Template for **Faculty Scholarly Activity** that occurred during the **previous academic year, between July 1st and June 30th**

Faculty Scholarly Activity	PMID				Non-PMID Peer Review Publications	Other Publications	Conference Presentations	Other Presentations	Chapters / Textbooks	Grant Leadership	Leadership or Peer-Review Role	Formal Courses	Domains							
	<p>Pub Med Ids (assigned by PubMed) for articles published during the previous academic year.</p> <p>Pub Med ID (PMID) is a unique number assigned to each PubMed record. The PubMed Central reference number (PMCID) is different from the PubMed reference number (PMID). PubMed Central is an index of full-text papers, while PubMed is an index of abstracts.</p>				<p>Number of peer-reviewed publications without a PMID, which are not recognized by the National Library of Medicine.</p>	<p>Number of other articles/publications without PMIDs and are not peer-reviewed. Examples include editorials, online magazines, or activities related to item-writing (eg. board examination questions) .</p>	<p>Abstracts, posters, and presentations at international, national, state, or regional meetings during the previous academic year.</p>	<p>Other presentations (grand rounds, invited professorships), materials developed (such as computer-based modules), or work presented in non-peer review publications during the previous academic year.</p>	<p>Chapters or textbooks published during the previous academic year.</p>	<p>Grants for which faculty member had a leadership role (PI, Co-PI, or site director) during the previous academic year.</p>	<p>Active leadership role (such as serving on committees or governing boards) in international, national, state, or regional medical organizations or served as reviewer or editorial board member for a peer-reviewed journal during the previous academic year.</p>	<p>Responsible for seminars, conference series, or course coordination (such as arrangement of presentations and speakers, organization of materials) during the previous academic year. This includes developing training modules for medical students, residents, fellows and other health professionals (eg. simulation). Program didactics and/or conferences are not considered formal courses.</p>	<p>Which of the following domains has this faculty member demonstrated accomplishments in the previous academic year?</p> <p>Research = Research in basic science, translational science, patient care, or population health</p> <p>Grants = Peer-reviewed Grants</p> <p>Quality = Quality Improvement and/or patient safety initiatives</p> <p>Reviews = Systematic reviews, meta-analysis, review articles, chapters in medical textbooks, or case reports</p> <p>Curricula = Creation of curricula, evaluation tools, didactic educational activities, or electronic educational materials</p> <p>Committees = Contribution to professional committees, educational organizations, or editorial boards</p> <p>Innovations = Innovations in education</p> <p>None = None of the above</p>							
	Enter up to four PMIDs				Respond with total number	Respond with total number				Respond with Yes/No			Mark all that apply							
Faculty Name	PMID 1	PMID 2	PMID 3	PMID 4	Non-PMID Peer Review Publications	Other Publications	Conference Presentations	Other Presentations	Chapters / Textbooks	Grant Leadership	Leadership or Peer-Review Role	Formal Courses	Research	Grants	Quality	Reviews	Curricula	Committees	Innovations	None



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What do you have to report?

Template for Faculty Scholarly Activity that occurred during the previous academic year, between July 1st and June 30th

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Faculty Name	PMID 1	PMID 2	PMID 3	PMID 4	Non-PMID Peer Review Publications	Other Publications	Conference Presentations	Other Presentations

What do you have to report?



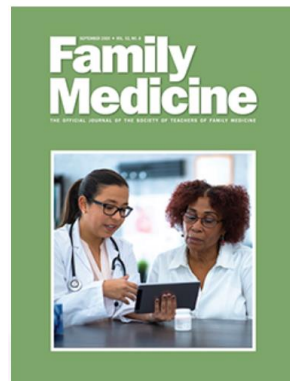
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		<i>Respond with Yes/No</i>		<i>Mark all that apply</i>							
Chapters / Textbooks	Grant Leadership	Leadership or Peer-Review Role	Formal Courses	Research	Grants	Quality	Reviews	Curricula	Committees	Innovations	None



Places to share research findings



Accreditation Council for
Graduate Medical Education



ACP Internal Medicine
Meeting





Audience prompt:

**How are you planning to/how could you plan to
meet your scholarly activity requirements?**



Remember the “Why”

- Curiosity, skepticism, and the scientific method are habits of mind; they are at the core of what we hope to produce in our graduates
- These habits of mind are the basis of scholarship; scholarly activity is the manifestation of this as a community of physician scholars



Take home points

- Establish “scholarship” habits of mind to the core culture of your program. Use it to generate enthusiasm and pride in your accomplishments
- Take advantage of every “opportunity for improvement” (i.e., “failure”) to apply the scholarly approach to solving the problem(s). USE THE TEAM APPROACH!
- Tell others about your success and failures (it isn’t just about publishing)
- Keep score




Discussion:

Based on what you heard today, any new ideas?

Thank You!



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Davis Patterson	davisp@uw.edu
Amanda Weidner	aweidner@uw.edu



Ideas for each type of scholarship

(additional resources)





Ideas for each type of scholarship

- Discovery
 - Practice-based research networks
 - CERA
 - Rural PREP microresearch
- Integration
 - FPIN
- Application
 - QI curriculum with dissemination
- Teaching
 - Presentation at a regional or national conference
 - Publish/share curricula

Keep in mind:

- *Creative thinking about interdisciplinary scholarship!*
- *What your community needs*
- *Tackling more than one “requirement” with a single project*



Other resources and suggestions from previous grantees

- IHI Open School for QI modules
- <https://www.evidencealerts.com>
- Paper from University of Wisconsin re: QI for psych (and can download QI PPT slides) - <https://pubmed.ncbi.nlm.nih.gov/32051851/>
- link to a zip file of QI lectures for psych residency <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7012317/bin/mep-16-10870-s001.zip>
- RHlhub for librarian service - <https://www.ruralhealthinfo.org/>
- Ideas for scholarly activity list-serve that we can join to discuss/float research ideas, join other institutional studies or have others join ours for a multi-institutional study?
 - The RTT Collaborative Google list
 - the AFMRD member listserv
 - STFM Connect
 - Our grantee listserv!

Discovery

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Practice-based Research Networks

- Many PBRNs have residencies involved and most that don't are interested in involving them¹
- Reach out to your local PBRN if there is one near you!

<https://pbrn.ahrq.gov/pbrn-registry/pbrn-registry-map>

¹Weidner A, Gilles R, Seehusen DA. Residency Scholarship Within Practice-based Research Networks. Fam Med. 2020;52(2):91-96.
<https://doi.org/10.22454/FamMed.2020.303653>



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CERA



CERA, the CAFM Educational Research Alliance, is a framework to focus and support medical education research. CERA conducts approximately five surveys per year of:

- Family medicine residency directors (surveyed twice per year)
- Clerkship directors
- Department chairs
- General membership, including subsets of members as selected by applicants
- Family medicine residents
- Medical students
- Investigators submit questions
- Once proposals have been approved, experienced researchers/mentors join each project team to help refine questions, facilitate analysis, and prepare and submit manuscripts.
- Researchers receive their individual survey results, plus the recurring question responses.
- Researchers are given 3 months to analyze the data from the survey prior to release of data to the general membership. The expectation is that investigators will write and submit a paper within those 3 months.
- **Members of STFM, NAPCRG, AFMRD, and ADFM can use CERA data for secondary analysis.**

<https://stfm.org/publicationsresearch/cera/cera/>



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RTT Collaborative Annual Scholarly Intensive: Resources available online

Goals:

1. Increase the number and variety of scholarly publications, presentations and posters from programs, faculty and students in rural health professions education and training.
2. Provide a forum for dissemination, faculty and student professional development and training, and mutual encouragement
3. Sustain and grow a community of practice in rural program scholarship among individuals and organizations engaged in the education and training of health professionals, both undergraduate and graduate programs, around our nation

<https://rttcollaborative.net/meetings/annual-scholarly-intensive-2/>

Rural PREP Microresearch



Microresearch creates interest in rural practice by encouraging learners to conduct research about:

- rural primary care
- rural population health
- rural health workforce education and training

Provides a small “seed grant” of up to \$4000 to student or resident researchers and assign or approve a faculty mentor. Preference is given to research that is:

- Community-engaged, including a commitment of in-kind community contributions
- Collaborative across health professions or institutions
- Based in the rural United States.



<https://ruralprep.org/research-scholarship/microresearch/>



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Integration

Synthesize current knowledge so as to make it useful to other researchers, clinicians, patients, policymakers, and/or educators

Featured ideas:

- FPIN
- Wiki Journal Club

Faculty:

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What is FPIN?



Family Physicians Inquiries Network

FPIN is a 501(c)(3) nonprofit, **membership organization** offering medical scholarship education to students, residents, faculty, and fellows in family medicine.

Mission: “FPIN provides quality education and professional development for primary care clinicians to practice evidence-based medicine and produce scholarship.”

Visit FPIN at www.fpin.org

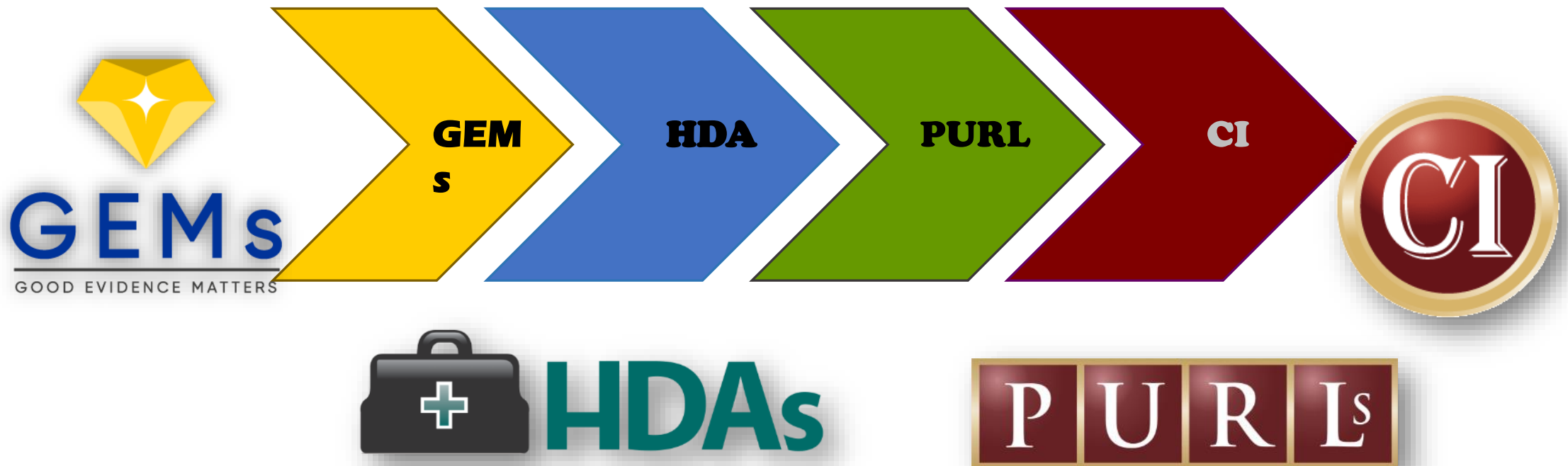


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FPIN Publication Formats





FPIN PURLs Journal Clubs are...

- “Plug and play” comprehensive monthly toolkit available through FPIN Institute that include:
 1. Journal Club Instructions
 2. Speaker Notes including teaching points
 3. Journal Club participant worksheet
 4. Completed review form for reference
 5. Published PURL (in The Journal of Family Practice)
- Ideal for programs looking for a structured approach to journal clubs with little faculty skill or time.
- Web site also has a list of all JC topics with associated teaching points (Excel file)

FPIN GEMs: summary of a single study

- FPIN's newest product
- Concise summary of a single, recent study
- Residents or faculty can be solo authors who are new to writing for publication and looking to bolster critical appraisal skills, working with local editor
- Local Editor reviews all manuscripts before submission
- Peer reviewed and disseminated nationally (to meet ACGME requirements for scholarly activity)
- Published in *Evidence-Based Practice*
- Can be finalized within an academic year (ideally ~ 5 months)

Effects of aspirin for primary prevention in persons with diabetes mellitus

Bowman L, Mafham M, Wallendszus K, et al. Effects of aspirin for primary prevention in persons with diabetes mellitus. *N Engl J Med*. 2018; 379(16): 1529–1539. doi: 10.1056/NEJMoa1804988.

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DOI 10.1097/EBP.0000000000000716

KEY TAKEAWAY: Although aspirin prevents serious vascular events in persons with diabetes and no evidence of cardiovascular disease exists, its benefits are outweighed by the risk of major bleeding events.

LEVEL OF EVIDENCE: STEP 2

BRIEF BACKGROUND INFO: It has been established that aspirin is beneficial for patients with cardiovascular disease, and patients with diabetes are at a significantly higher risk of experiencing a cardiovascular event. Previous studies on the use of aspirin for primary prevention have been uncertain because none have shown clear benefits or reported detailed information regarding bleeding events, and the balance of benefits and risks of aspirin use remains uncertain. It is estimated that 400 million persons with diabetes do not have manifest vascular disease, which begs the question whether aspirin should be used in primary prevention of cardiovascular events in diabetic persons who do not have evidence of cardiovascular disease.

PATIENTS: Men and women at least 40 years of age with a diagnosis of diabetes mellitus (any type) with no known cardiovascular disease from the United

OUTCOME: Primary outcomes: first serious vascular event (reduction in nonfatal myocardial infarction, non-fatal presumed ischemic stroke, and vascular death excluding intracranial hemorrhage and transient ischemic attack). Secondary outcomes: gastrointestinal cancer and the composite of any serious vascular event or any arterial revascularization procedure. Primary safety outcome was the first occurrence of any major bleeding event (intracranial hemorrhage, sight-threatening bleeding event in the eye, and gastrointestinal bleeding)

STUDY DESIGN: Multisite, double-blinded, randomized controlled trial

METHODS BRIEF DESCRIPTION: Potential participants were identified from regional diabetes registers or from general practices around the United Kingdom and were sent a screening questionnaire which also assessed the willingness to participate. Most (94.1%) had type II diabetes. Those who were willing to participate were sent supplies (including a kit to obtain blood and urine samples, record blood pressure, height, and weight). After this run-in period of 8 to 10 weeks, participants remained eligible if they again returned the questionnaire, indicating the willingness to continue. From there, participants were randomized and assigned to receive 100 mg aspirin or matching. Follow-up questionnaires and appropriate tablets were sent to participants every 6 months until the end of the trial. In total, 15,480 participants underwent randomization into the aspirin or placebo group. Outcomes (vascular events and gastrointestinal cancer) were collected using questionnaires.

INTERVENTION (# IN THE GROUP): 7,740

COMPARISON (# IN THE GROUP): 7,740

FOLLOW-UP PERIOD: After initial randomization, follow-up questionnaires and appropriate tablets and capsules

FPIN Help Desk Answer (HDA): a brief format for scholarly writing

- 450-900 word manuscript
- Brief, structured evidence-based answers to clinical questions
- Residents can be co-authors (with faculty members)
- Work with Local (deputy) Editor and Editor-in-Chief
- Peer reviewed at another FPIN program
- Published in *Evidence-Based Practice, JFP* and *AFP* (selected HDAs are in *JFP* and *AFP*)
- Can be finalized within an academic year

References

1. Lilly M, Godwin M. Treating prediabetes with metformin. *Can Fam Physician*. 2009; 55:363–369. [STEP 1]
2. Knowler W, Fowler S, Hamman R, et al. 10-Year follow-up of diabetes incidence and weight loss in the diabetes prevention program outcomes study. *Lancet*. 2009; 374(9702): 1677–1686. [STEP 2]

Is acetaminophen effective for pain relief in acute musculoskeletal injury?

EVIDENCE-BASED ANSWER

Acetaminophen is as effective as NSAIDs for acute soft-tissue injury pain (SOR: **B**, meta-analysis of low-quality randomized controlled trials [RCTs]). Acetaminophen is no more effective than placebo for acute low back pain if patients with and without sciatica are included (SOR: **B**, single, large RCT).

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A 2015 systematic review and meta-analysis of 16 randomized controlled trials (RCTs) (N=2,144) compared oral NSAIDs, acetaminophen, opioids, and acetaminophen/opioid combinations in patients with acute soft tissue injury (sprain, strain or contusion of a joint, ligament, tendon or muscle occurring up to 48 hours before enrollment in the study).¹ Patients were men (59%) and white (80%). Dosing varied across studies: diclofenac 25 to 75 mg, ibuprofen 400 to 800 mg, and acetaminophen 500 to 1,300 mg. Patients reported pain levels using a visual analog scale (0 to 100 mm, no pain to worst pain; a difference of 15 mm was considered clinically meaningful). Pain levels were reported at 24 hours, one to three days, or seven or more days after starting the treatment. No clinically meaningful differences were observed in pain relief between acetaminophen and NSAIDs at any time (TABLE). Generalizability of the study's findings was limited by a narrow patient population and the low quality of included studies (inconsistent randomization techniques and inconsistent blinding).

A 2014 prospective, double-blind RCT (N=1,652) evaluated the efficacy of acetaminophen versus placebo in patients with nonspecific acute lower back pain.² The

TABLE. Acetaminophen versus NSAIDs for acute musculoskeletal pain

Time after treatment initiation	Trials	N	MD in pain (mm) ^a	95% CI for MD
24 h	4	377	1.5	−3.7 to 6.7
One to three days	4	431	4.3	0.69 to 7.8
Seven or more days	4	467	1.6	−0.33 to 3.4

^a Visual analog scale of 100 mm, with a clinically meaningful difference defined as 15 mm. MD=mean difference.

study enrolled individuals from Australia (53% men; average age 44 years) who sought care for moderate or severe intensity lower back pain with or without leg pain and lasting fewer than six weeks at initial presentation. Patients with serious spinal pathology such as cancer, fractures, or cauda equina syndrome were excluded. The trial assessed pain using a patient-reported scale from 0 to 10. Patients were treated with acetaminophen using scheduled (a total of 3,990 mg of acetaminophen equivalent a day), as needed (maximum dose of 4,000 mg a day), or placebo therapy. Acetaminophen did not decrease pain versus placebo at one week (mean difference [MD] 1.5; 95% CI, −1.3 to 4.3), two weeks (MD 1.0; 95% CI, −1.7 to 3.7), four weeks (MD 0.49; 95% CI, −2.0 to 3.0), or 12 weeks (MD −0.5; 95% CI, −2.9 to 1.9). Most patients did not take the full recommended dose of 4,000 mg/d of acetaminophen (median dose 2,660 mg/d). **EBP**

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2. Williams CM, Maher CG, Latimer J, et al. Efficacy of paracetamol for acute low-back pain: a double-blind, randomized controlled trial. *Lancet*. 2014; 384(9954):1586–1596. [STEP 2]

Application

Use knowledge to improve health care, medical practice, health systems operation, public health, or policy

Faculty:

- Present the results of a clinical quality improvement program implemented in a group of practices professional meeting
- Present the results of participation in a practice-based research network at a professional meeting
- Present on the process and results of seeking recognition as a PCMH
- Serve on a state or national professional committee developing/implementing medical practice/ education
- Obtain foundation, state/federal funding for a grant to implement practice improvement

Featured ideas:

- Integrated QI curriculum
- PBRN
- Scholarly driven advocacy work

Residents:

- Present the design and results of a clinical QI project conducted in the residency practice at a residency conference
- Write letter to the editor, op-eds, or resolutions
- Describe the design, implementation, and effects of a patient education program on risk behavior or chronic disease management in a residency newsletter
- Serve as chair of a local or state medical society committee; publish a report of committee accomplishments in a medical society newsletter

Integrated QI curriculum

Example from Family Medicine Residency of Western Montana



- Overview of QI at the FMRWM
 - 6 didactic sessions spread out over the academic year. 3 faculty involved in oversight.
 - At each session we briefly cover a QI topic/skill, then allow time for residents to work on QI projects.
 - R1: Individual behavior/workflow/wellness theme. May join up with an R2/R3 group if strong interest in a particular project.
 - R2: A clinical project that ideally will meet the ABFM Performance Improvement requirement
 - R3: A QI project of their choosing
 - R2/R3s may work in groups of 2 or 3.
- Spring Scholarly Activity Showcase
 - R3s take ~7-10 minutes to present on their QI and SA work and answer questions. All residents, core faculty, providers, leadership and QI team, and community preceptors are invited to attend.
- “Scholarly Activity and QI Work” annual publication
 - Final product: For R1/R2/R3 → QI Write up using QI abstract template
 - In addition R3s also provide a write up of scholarly activity work completed over the past 3 years.

Teaching

Develop, implement, and evaluate educational programs, rotations, courses, materials, or other resources to educate students, healthcare professionals, patients, or the public

Faculty:

- Evaluate a new skill-building workshop for students, residents, faculty and present results
- Develop, implement, and report a new curriculum for a national professional educational course or module in an existing program to a sponsoring professional organization
- Obtain a Title VII grant to implement a new medical education curriculum
- Publish an evaluation of a new curriculum in a state or national medical journal

Featured ideas:

- Presentation at a regional or national conference
- Publish/share curricula (MedEd Portal, etc.)

Residents:

- Prepare an enduring curriculum for use in a residency program
- Develop and implement a program for patient self-care for chronic disease; present the outcomes in a residency conference and publish a summary report for a residency newsletter



Tips for writing conference proposals from seasoned faculty

- Get someone else (not on submission, ideally not familiar with topic) to read. Focus their feedback on clarity of proposal
- Don't get stuck on "originality" – not a lot of weight on this! Your "boring" ideas have value too
- Data (resulted or planned) is important. It doesn't have to be a lot – a few comments or surveys is viewed positively
- Include a learner – it is always fun to work together, model scholarship and meet resident requirements as well
- Always ask for feedback on rejected proposals
- Ask for more time, they're downgrade you if needed
- Having access to the actual score sheet is helpful!



Rural Residency Planning and Development and Teaching Health Center Planning and Development Technical Assistance Centers

A partnership between

