To: All School of Medicine Faculty

From: Gary A. Smith, PhD, Associate Dean of Continuous Professional Learning

Re: Announcing a Funding Opportunity for Scholarship and Research in Medical Education through the Scholarship in Education Allocations Committee (SEAC)

- **Deadline for submission:** Monday, April 15, 2024
- **Submit to:** Office for Continuous Professional Learning, via Smartsheet application. No physical or emailed applications, or supporting materials, will be accepted.
  - Submit Research and Scholarship proposals via this form:
    https://bit.ly/2024SEAC-SRForm
  - Submit Quality Improvement/Patient Safety proposals via this form:
    https://bit.ly/2024SEAC-QIPS
  - All proposals must submit a budget via this form:
    https://bit.ly/2024SEACBudget
- **Announcement of Awards:** August 2024

The Office of Education and the Office for Continuous Professional Learning (CPL), with the support of the Dean of the School of Medicine, announce the availability of funding for faculty at the School of Medicine (SOM) in support of scholarship and research focused on the educational mission of the School of Medicine. Scholarship is taken to mean work that builds upon the work of others, entails a public accountability, is open to peer review, and is subsequently utilized by others in their own educational work. Scholarship in teaching and education requires faculty to frame and systematically investigate questions related to student learning-the conditions under which it occurs, what it looks like, and how to deepen it "...with an eye not only to improving their own classroom but to advancing practice beyond." [1] This is consistent with the UNM Faculty Handbook and the literature on scholarship[2-6].

Description of Available Funding

- **Scholarship and Research Initiatives**

Funds for individual projects during this cycle is available for up to 24 months during the 2024-2025 and 2025-2026 academic years in support of School of Medicine faculty time and effort devoted to scholarship and research in medical education. All funds must be used and projects completed and submitted for presentation/publication by June 30, 2026. Faculty time approved for funding will be in the form of salary support for partial FTE (salary *plus fringe,* paid to faculty person's department).

Funding is available up to a maximum of $10,000 per project.

- **Quality Improvement/Patient Safety Initiatives**

Funds are available for up to 24 months during the 2024-2025 and 2026-2027 academic years in support of scholarly patient safety /quality improvement initiatives. Development and implementation of each funded initiative must include one or more SOM medical students or residents/fellows along with at least one SOM faculty member. Funding can be used in support of project materials, books, journals, technology support, web-based development, data entry and analysis or travel, and poster development. All funds must be used and the projects completed and submitted for presentation or publication by June 30, 2026.

Funding is available up to a maximum of $2,500 per project.

Below is summary of two funding initiatives and components:

Scholarship and Research Initiatives	Patient Safety and Quality Improvement Initiatives
• Up to $10,000	• Up to $2,500
• Submission deadline April 15, 2024	• Submission deadline April 15, 2024

• Proposal from SOM faculty PI (see guidelines) includes:
  o General topic, research question, relevant literature, conceptual framework, research plan with subjects, methods/ intervention, data collection, analysis, outcome measures
	• Proposal from SOM faculty PI plus named SOM learner(s) (student(s) resident(s) and/or fellow(s) includes:
	  o General topic, question/problem statement, relevant literature, intervention, outcomes and dissemination plan

• In progress deliverables: Annual progress report submitted near the end of each funded fiscal year, in addition to presentation or poster at EDUCATION DAY during each year of award	• In progress deliverables: Annual progress report submitted near the end of each funded fiscal year, in addition to presentation or poster at EDUCATION DAY during each year of award
• Expected outcomes: Dissemination of work through presentation at local or national meeting, and submission of draft manuscript for publication within the 24 months	• Examples of expected outcomes:
• Preference will be given to submissions that include (a) investigation of a scholarly question other than only development/evaluation of curriculum, and (b) plans to report demonstrated outcomes	• Educational materials for faculty, staff, residents, students, or patients
	• Implementation of a new process
• Budget required (see Sample Budgets)	• Creation and implementation of a checklist for process improvement
• Timeline required (see additional information below)	• Poster or oral presentation given at locally sponsored or national event in 24-month timeframe
• *Letters of support encouraged and required from chair/chief if salary support is requested*	• Preference will be given to submissions that include plans to report outcomes
	• Expense explanation: Please describe how you plan to use the funds and the general costs associated with each planned expenditure, itemizing the expenditures for each fiscal year you are requesting project funding.
	• *Letters of support are not required.*

Scholarship and Research Initiative applications are encouraged in all areas of medical education. Scholarly projects using either qualitative, quantitative, or mixed methods are welcome and encouraged. A critical aspect of scholarship is that it be driven by a research question and include a review of the literature and an evaluation plan. What is already being done related to this project? How will you build on it? How will it be evaluated?

Proposal Guidelines for Scholarship/Research Initiatives

Proposals must include, as appropriate and relevant, each of the following elements, submitted using this form. https://bit.ly/2024SEAC-SRForm

Proposal Heading
- Title of Proposal
- Name of SOM Principal Investigator
- Names of any Co-Investigators

- **Stage 1 - Develop a Research Question/Hypothesis:** A critical aspect of scholarship is that it be driven <u>by a research question and include a review of the literature and an evaluation</u> What is already being done related to this project? How will you build on it?
  - o The General Topic: What is the general topic of interest
  - o Significance of Need: Why is this project important? Will the research outcomes be generalizable beyond your study setting?
  - o Literature Search: What is already known about this topic? What measurement/ data gathering tools have been used? What is the gap in knowledge that highlights the value for your project
  - o Conceptual Framework: What educational theory[7] and/or conceptual frameworks[8,9] underlie your question and your methodology?
  - o The Research Question/Hypothesis: What is your specific research question and/or testable hypothesis?
    - *Objectives:* List specific objectives of the project (see Reference Guide)
    - *Outcomes/Impact of Project on UNM SOM and medical education in general.* · Include a statement of how UNM and medical education, generally, will benefit from the proposed work.

    Note: Strongest consideration will be given to proposals that address fundamental questions in medical education rather than the development and/or evaluation of a curriculum.

- **Stage 2 - Develop a Research Plan:**
  - o Subjects: Who will you measure/gather data about, how many, and for what period of time? Do you have access to these people? Do you need a power analysis in order to determine if you will have enough subjects to answer your question with confidence?
  - o Data Collection/Methodology: What are your measurement/data gathering tools? Do you have permission to use these tools? Will you have a comparison group? Is a pilot study of your tool necessary? When will you collect your data?
  - o Data Processing: If applicable who will enter your data into a computer file? How will you assure the accuracy of this data entry?
  - o Analysis: How do you plan to analyze the data? Will you be doing any statistical tests?

- **Stage 3 - Develop an Outcomes and Dissemination Plan for Your Project:**
  - o Identify measures of success and provide a description of how desired outcomes will be evaluated/measured. Indicate which group(s) of learners will be affected by this research project.
  - o Provide your plan for presentation and publication submission of your work within the 24-month timeline.

- **Stage 4 - Develop Timeline and Budget for Your Scholarship and Research:**
  - Detailed Timeline: What is your step-by-step plan for conducting your research or your
  - patient safety initiative? How long do you imagine each step will take? Include specific dates for key steps; e.g. completion of a survey, identification of study group participants, etc.
  - Personnel: Who will be involved in the study? What is each person's responsibility?
  - Consultation (Scholarship and Research Project Only): In what areas will you need outside help consulting?
  - Budget (Scholarship and Research Project Only): Provide percentage **FTE** and dollar equivalent for salary release time (salary release inclusive of fringe). Include a short (1- 2
  - paragraphs) justification of the budget request.

Information and Guidelines for SEAC Budgets

- The budget should present specific line itemization for each year of funding that is requested. Please show the budget request as three columns per line item: Year 1, Year 2, Total
- Funds must be spent by June of the grant year in which they are budgeted, if at all possible. (For example, expenses budgeted for the first fiscal year of the grant should be spent by June 30, 2025) Funds awarded but not spent in year one might be available in year two but *do not automatically roll into the year two budget.* Requests to carry funds forward with a revised budget, must be submitted for approval.
- Faculty, salary awarded will include fringe benefits. Include the fringe benefit calculation in your budget request for faculty compensation. If you do not provide that calculation, your request will be recalculated to include it. For example, if your proposal shows $2000 salary release without designating the amount of fringe, the award total will be recalculated as% salary+ fringe= $2000. Each faculty member for whom salary is requested should appear as a separate budget line itemization.
- A Memorandum of Understanding (MOU) for salary release will be provided to be signed by faculty and department chair after the confirmation of SEAC award.
- Faculty may hire staff from UNM Temp services or student employees if they work solely on the SEAC activities. Temporary or student employee wage requests should also include fringe, if applicable. *SEAC funds may not be used to cover a portion of a regular staff position salary.*
- If proposals contain requests for work such as data collection, analysis, research assistance, videographer, etc., investigators must indicate who will be doing this work (temps, students, UNM personnel, etc.).
- Research related supplies, books, and software may be purchased using SEAC funds.
- SEAC funds may be used for research travel to collect data or present SEAC data. Travel funds are limited to up to $1000 for one faculty member, with matching funds, and/or up to $2000 for one learner.
- Gift certificates or gift cards are allowed, e.g. for incentives for completion of surveys.
- Extra compensation from SEAC Fund for faculty and staff is not allowed.
- Purchase of iPad (or similar) may be allowed if required to complete the project.
- Maximum allowable budget is $10,000. However, you do NOT have to budget that full amount. Many successful SEAC grants have been awarded with requests for smaller amounts. Funding is expected to be allocated across both funding years and budgets that propose expending more than $6000 in one year *may* require revision.

[Click here to see Sample Budgets](.).

In addition, the proposal must include:

- Letter of support from the Chairperson and/or Division Chief, as appropriate, of each person for whom salary funding is requested, indicating support and approval of requested release time.
- If your project will involve an addition or change to existing curriculum (e.g., a Phase I block, Phase II or Ill clerkship, Residency curriculum), include a letter of support from the course director.
- If services are required of a SOM office, include a letter from the office(s) director acknowledging their role and support of the project (in addition to a line item in the budget to fund their assistance).

Samples of a [research] proposal from previous years are provided as resources available through links on the **website (goto.unm.edu/cpl-seac)**. Please ensure, however, that the format of your proposal conforms to this year's request for proposals.
Summaries of recently funded proposals are available on the [website].

Proposal Guidelines for Quality Improvement/Patient Safety Initiatives

For patient safety or quality improvement proposals, please use this [form](https://bit.ly/2024SEAC-QIPS)(https://bit.ly/2024SEAC-QIPS) and follow these guidelines.

Proposal Heading

- o Title of Proposal
- o Name of SOM Principal Investigator
- o Names of any Co-Investigators, which *must* include a UNM student, resident and/or fellow

- **Stage 1 - Develop a Question:**
A critical aspect of scholarship is that it driven by an answerable question and include a review of the literature and an evaluation plan. What is already being done related to this project? How will you build on it?
    - o General Topic: What is the general topic of interest?
    - o Literature Search: What is already known about this topic? What measurement/data gathering tools have been used?
    - o The Question: What is your specific question? Can it be written in the form of a hypothesis? Is there a specific intervention that you hypothesize will lead to enhancement of patient safety or quality improvement[10-12]?
        - *Objectives:* List specific objectives of the project (see [Reference Guide])
        - *Outcomes/Impact of Project on UNM SOM and medical education in general:* Include a statement of how a defined target population will benefit from the proposed work.

- **Stage 2 - Develop a Plan for the Project:**
    - o Consider the potential relevance of the SQUIRE[13] guidelines to the creation of your project for potential publication
    - o Subjects: Who will you measure/gather data about, how many, and for what period of time? Do you have access to these people? Do you need a power analysis in order to determine if you will have enough subjects to answer your question with confidence?
    - o Data Collection/Methodology: What are your measurement/data gathering tools? Do you have permission to use these tools? Will you have a comparison group? Is a pilot study of your tool necessary? When will you collect your data?
    - o Data Processing: Who will enter your data into a computer file? How will you assure the accuracy of this data entry?

- o Analysis: How do you plan to analyze the data? Will you be doing any statistical tests?
- o Evaluation/Measures of Success: Identify measures of success and provide a description of how desired outcomes will be evaluated/measured. Include a two - column table that lists desired outcomes on the left and how they will be measured on the right.

- **Stage 3 - Develop an Outcomes and Dissemination Plan for Your Project[13]:**
  - o Include your outcome measures and plan (methods, measures, comparisons).
  - o Provide your plan for presentation.

- **Stage 4 - Develop a Timeline:**
  - o Detailed Timeline: What is your step-by-step plan for conducting your patient safety initiative? How long do you imagine each step will take? Include specific dates for key steps e.g. completion of a survey, identification of study group participants, etc.
  - o Personnel: Who will be involved in the study? What is each person's responsibility?

Proposal Submission for Scholarship/Research or Quality Improvement/Patient Safety Initiatives

- **Submit proposals** via Smartsheet application. No physical or emailed applications, or supporting materials, will be accepted.
  - o Submit Research and Scholarship proposals via this form: https://bit.ly/2024SEAC-SRForm
  - o Submit Quality Improvement/Patient Safety proposals via this form: https://bit.ly/2024SEAC-QIPS
  - o All proposals must submit a budget via this form: https://bit.ly/2024SEACBudget
- **Complete** proposal applications, **including** budgets, must be **received by Monday, April 15, 2024.**

Have Questions? Need Help?

Guidance in the conceptualization, design and preparation of projects and proposals is available; please contact Gary Smith (gsmith@salud.unm.edu).

Review of Proposals

Proposals will be reviewed by a SEAC Faculty Committee, composed of experienced individuals from various UNM SOM offices and departments, who will make recommendations for funding. Only complete proposals will be considered. Each complete proposal will be rated on the following criteria:

- **Scholarship and Research**
  - o Research question (clearly stated, supported by review of literature; strong conceptual framework) - 30%
  - o Research plan (clear time-frame, feasibility, ability to answer question) - 30%
  - o Research timeline and budget (clear timeline with dates for specific activities; budget defensible and aligned with research plan) - 10%
  - o Outcome and Dissemination Plan and Benefits - 15%
  - o Impact of Project on UNM SOM (how many and which learners will be impacted; will benefits be sustainable?) - 15%

- **Quality Improvement/Patient Safety Initiatives**
  - Required participation of a faculty member plus resident and/or student
  - Patient Safety question (clearly stated, supported by review of literature) -1/3
  - Scholarly plan (clear time-frame, feasibility, ability to answer question) -1/3
  - Outcome and Dissemination Plan and Benefits/Impact of Project on UNM SOM or HSC (patient and systems impact; will benefits be sustainable?) -1/3

References

1. Hutchings P and Shulman LS. The scholarship of teaching: new elaborations and developments. *Change:* 1999;31(5):11-15

2. Boyer EL Scholarship Reconsidered: Priorities of the Professoriate. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching 1990.

3. Glassick CE, Huber MR, Maeroff GI Scholarship Assessed-Evaluation of the Professoriate. San Francisco. CA: Jossey-Bass 1997.

4. 4, Fincher, R-M, Simpson DE, Mennin, SP, Rosenfeld GC, Rothman A, Cole McGrew M, Hansen PA, Mazmanian PE, Turnbull JM (2000). Scholarship in Teaching: An Imperative for the 2ist Century. Academic Medicine 2000;7(5):887-894.

5. Beckman, TJ and Cook, DA (2007). Developing scholarly projects in education: A primer for medical teachers. Medical Teacher 29:2: 210-218.

6. Cleland JA, Jamieson S, Kusurkar RA, Ramani S, Wilkinson TJ, van Schalkwyk S. Redefining scholarship for health professions education: AMEE Guide No. 142. Medical Teacher 2021;43(7):824-838.

7. Mann K V. Theoretical perspectives in medical education: past experience and future possibilities. Medical Education. 2011;45(1):60-68.

8. Bordage G. Conceptual frameworks to illuminate and magnify. Medical Education. 2009;43(4):312-319.

9. Bordage G, Lineberry M, Yudkowsky R. Conceptual frameworks to guide research and development (R&D) in health professions education. Academic Medicine. 2016;91(12):e2.

10. Wong BM, Levinson W, and Shojania KG. Quality improvement in medical education; current state and future directions. Medical Education 2013;46:107-119.

11. Wong BM, Edward EE, Kuper A, Levinson W, and Shojania K. Teaching quality improvement and patient safety to trainees; a systematic review. Academic Medicine. 2010;85:1425-1439.

12. Nie Y, Li L, Yurong D, Chen P, Baraclough BH, Zhang M, and Li J. Patient safety education for undergraduate medical students: a systematic review. BMC Medical Education 2011, 11:33.

13. Ogrinc G, Davies L, Goodman D, Batalden P, Davidoff F, Stevens D. SQUIRE 2.0 (Standards for QUality Improvement Reporting Excellence): revised publication guidelines from a detailed consensus process. BMJ Quality and Safety. 2016;25(12):986-992