



American Board of Medical Specialties Research Education Foundation Grant — Request for Proposals Additional Support provided by the Gordon and Betty Moore Foundation

OBJECTIVES OF GRANT PROGRAM

The American Board of Medical Specialties (ABMS) Research and Education Foundation (REF) seeks to develop a research program that will support the ABMS core mission of serving the public and the medical profession by improving the quality of health care through setting professional standards for lifelong certification in partnership with Member Boards. The fundamental actions of applied research are to collect relevant data in sufficient measure to generate meaningful insights that can result in mission-relevant action.

We seek original research that provides insight into the process of achieving and maintaining the competency standards for certification by any or all of the 24 <u>ABMS Member Boards</u> and eventually informs improvements in the structures, processes, and outcomes of certification.

In addition to the research insights achieved by the individual grantees, a key objective of the grant program is to facilitate a community of research practice around the mechanism of certification. This will be achieved through a judicious number of grantee interactions with each other, Member Boards, and the successful ABMS Visiting Scholars Program™.

IMPORTANT DATES

•	ABMS REF Grant Webinar ¹	November 30, 2023
•	Letter of Intent Submission Deadline	January 30, 2024
•	Letter of Intent Notifications	March 1
•	Full Submission Deadline	May 1
•	Full Submission Notification	June 15
•	Start of Grant Project	September 1
•	End of Grant Period	June 30, 2026
•	Dissemination of Study Results	Fall 2026

abms.org/research-and-education-foundation

Questions: REF-Grants@abms.org

¹ A recording of the webinar will be available on the REF website.

DESCRIPTION OF RESEARCH THEME OPTIONS

In this Request for Proposals, ABMS, in partnership with the Gordon and Betty Moore Foundation, seeks innovative research proposals related to two different themes:

- *General Certification:* Funded by ABMS, this supports investigator-driven proposals that come under the broad umbrella of the full ABMS mission described above.
- Diagnostic Excellence Through Certification: Funded principally by the Gordon and Betty
 Moore Foundation, this supports proposals from Member Boards and collaborating
 independent investigators in the more specific area of improving the core medical activity of
 diagnosis.

Research topics may cover:

- Personal attributes (e.g., of certification candidates or diplomates)
- Features of programs/organizations (e.g., a member board, a residency program)
- Broader ideas (*e.g.*, professionalism, competence, diagnostic excellence, or linking to outcomes)

The two themes (General and Diagnostic Excellence) and their differing mechanisms are described in greater detail below (See Figure 1). For both themes, consultation with ABMS Member Boards is required. The Diagnostic Excellence Through Certification theme will additionally require collaboration with and support of a Member Board.

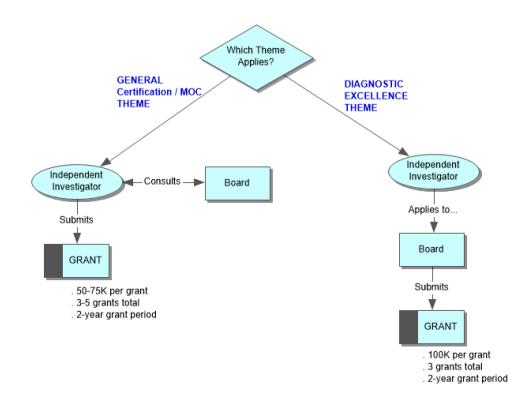


Figure 1: Member Board consultation/collaboration requirements and availability of funding by theme

ELIGIBILITY

We anticipate that the majority of applicants will be scholars from health systems or universities but welcome applications from other organizations whose mission intersects in some way with that of the ABMS. For the General theme, ABMS Member Boards may apply for funding but only in collaboration with a principal investigator from outside the ABMS community (e.g., not a paid or volunteer agent of ABMS, ABMS Member Boards, or ABMS Associate Members). For the Diagnostic Excellence theme, both external and ABMS Member Board investigators are invited to apply. Current and alumni ABMS Visiting Scholars are also encouraged to apply. Applicants' primary appointment must be at a U.S. institution.

If you have any questions about eligibility, please contact Rachel Knapp.

GENERAL CERTIFICATION THEME

Overview

The *General Certification* theme seeks to fund original research projects submitted directly by independent investigators. These projects could span the full range of the <u>ABMS mission</u>. Refer to the recent JAMA Perspective written by *Hawkins et al.* which describes the evolution of <u>ABMS Standards for Continuing Certification</u> for key researchable issues.²

Additional research priorities include but are not limited to:

- Certification's impact on public health, health care disparities
- Alignment of certification with the emerging health care delivery environment
- Assessing and improving equity in assessment
- Integrating competency-based education into initial and continuing certification programs, especially for professionalism, communication, systems-based practice, and practice-based learning and improvement
- Fine-grained assessment of competence using digital data and/or artificial intelligence

Consultation with an ABMS Member Board

At the LOI stage, the investigators must discuss their proposal with a representative from the most relevant ABMS Member Board(s). If the investigator does not have their own board contact, please see the list below for the contact information for Member Board representatives (see Appendix A). Projects that work with more than one Member Board are encouraged. Feedback from this conversation can be incorporated into the LOI at the discretion of the investigators; it is not required. The optimal timing for the Member Board consultation would be after the research team is assembled and draft research objectives are developed but before the full LOI is written, allowing the Member Board representative to provide input. In the references section of the LOI you will be asked to document the date of consultation and which ABMS Member Board representative you spoke with.

² Hawkins RE, Ogrinc G, Ramin SM. American Board of Medical Specialties and new standards for continuing certification. JAMA. 2022 May 3;327(17):1645-6. doi:10.1001/jama.2022.6053

Funding Mechanism

The ABMS Board of Directors has allocated \$250,000 for this theme which will be disbursed for grants of \$50 to \$75K. The funds will be disbursed in two installments: 75% at the beginning of the project; 25% at project completion and receipt of a final report by ABMS. The term of the funding period is up to two years.

DIAGNOSTIC EXCELLENCE THROUGH CERTIFICATION THEME

Overview

In partnership with the Gordon and Betty Moore Foundation, we also invite submissions that focus on diagnostic excellence as it touches on <u>initial and maintenance of certification</u>. Grant applications to this theme must aligned with the Gordon and Betty Moore Foundation <u>Diagnostic Excellence Initiative</u>. Fineberg et al. provides an excellent description of the future of diagnostic excellence and is highly recommended reading³.

Proposals that develop innovative systems of assessment or new measures and systems of measurement for diagnostic performance will be prioritized. Examples of potential interventions (across or within Member Boards) include certification methods, innovative continuing certification assessments, and ABMS data/registries/portfolio. Also consider the big three diagnosis areas: sepsis, cancer, and acute cardiovascular events.

Research priorities include but are not limited to:

- New Assessment Development
- Interaction of AI and the Diagnostician
- Delineating and Addressing Diagnostic Uncertainty
- Communication of Diagnosis
- Overdiagnosis and Physician Assessment
- Patient Centeredness of Diagnosis

Consultation with an ABMS Member Board

For this theme, the investigator will designate a "most relevant member board" to which the submitted LOI(s) will be sent for pre-screening and comment by the Member Board. Independent investigators are encouraged to contact the member board ahead of submitting their proposal as direct collaboration with Member Board researchers is required. Contact information for Member Board representatives can be found in Appendix A. Member Board Investigators are also encouraged to apply to this theme. The proposals will be judged on scientific merit without preference for type of originating institution or investigator. The 24 Member Boards will have a mechanism for vetting all potential grant LOIs and will

³ Fineberg HV, Song S, Wang T. The Future of Diagnostic Excellence. JAMA. 2022;328(11):1039–1040. doi:10.1001/jama.2022.12205

each be able to put forth two of the LOI's they receive. In the references section of the LOI you will be asked to document the date of consultation and with which ABMS Member Board representative.

Funding Mechanism

In this theme, the Gordon and Betty Moore Foundation and ABMS have allocated \$300,000 which will be disbursed in three grants of \$100k each.

The funds will be disbursed in two installments: 75% at the beginning of the project; 25% at project completion and receipt of a final report by ABMS. The term of the funding period is up to two years.

APPLICATION FORMATS

The application consists of two phases: (1) Letter of Intent (LOI) phase and (2) those approved at the LOI stage will be invited to submit a Full Proposal.

Phase 1: Letter of Intent

Steps in the LOI Grant Cycle

- Assemble Investigator Team
- Draft Specific Aims Page
- Consult with relevant ABMS Member Board
- Finish and submit letter of intent

Format Details

The LOI should be no more than 3 pages with additional single pages for references and graphics, all using 11-point font, 1-inch margins, single spaced, with the following headings:

- Background and Conceptual Framing On which literature are you building?
- Research Question and Specific Aims
- Methods. We encourage the use of the appropriate methods to answer the research question (e.g., observational and experimental designs, implementation science, qualitative research, quality improvement methodology).
- Anticipated outcomes
- Alignment and relevance to the ABMS mission and to one or more of the ABMS Member Boards
 - Remember to document the date of consultation and with which ABMS Member Board representative.
- Tables (optional) to be included in the 3-page limit
- Additional Pages
 - References one additional page
 - o Graphics (optional) one additional page
 - o Biosketches (3-5 page) for each co-investigator

Phase 2: Full Proposal

Steps of the Full Proposal Grant Cycle

- Convert LOI to full proposal including additional components
- Engage in deeper consultation/collaboration with relevant Member Boards
- Submit full proposal

Format

The Full Proposal should be 10 pages with additional pages (up to 5) for timeline, references, and graphics, all using 11-point font, 1-inch margins, single spaced with the following headings:

Repeated headings from LOI (included in the 10 pages) with expanded content:

- Background and Conceptual Framing which literature are you building on?
- Research Question and Specific Aims
- Methods
- Anticipated outcomes
- Significance in light of the ABMS mission; Relevance to which ABMS Boards
- Tables (optional)

Plus, additional in Full Proposal (included in the 10 pages):

- Team work plan How will the team function? Who will do what? Describe any prior work.
- Risk mitigation plan what risks and difficulties do you anticipate? How will you address them?

Additional Pages (beyond the 10-page limit)

- Timeline (one-page) including how and when ethical review will be accomplished
- Budget How will funds be allocated and used to propel the research? What will you spend the funds on? Include budget justification not counted in page limits
- References not included in the 10-page limit
- Graphics (optional) 1-2 additional pages
- Biosketches (3-5 page NIH Format) for each co-investigator (not counted in page limits)
- Copy of research instruments if any (e.g., Interview guide) not counted in page limits
- Letters of Support describing in-kind institutional contributions; and to document access to research participants/data.

Adjudication of Full Proposals

All full proposals will be adjudicated by an advisory group of Senior Researchers largely from outside the Member Board community. Conflict of interest will be managed to ensure unbiased adjudication.

The grants will be peer reviewed by experts drawn from the broader health professions education research community and will have patient representation. Applications will be reviewed and assessed according to the following areas:

- Relevance to ABMS Mission (listed above)
- Novelty and importance of the research conceptualization and question
- Research methods
- Research Team
- Potential significance

EXPECTATIONS OF GRANT RECIPIENTS

- Submit completed IRB to ABMS within 3 months after initial fund distribution
- Responsible stewardship of ABMS funding
- Full compliance with institutional ethics and conflict of interest procedures
- Attendance at a virtual meeting of grantees held annually
- Final report submitted to ABMS
- Presentation of study findings to the ABMS Annual meeting held in September each year
- Submission of findings for peer-reviewed publication

Appendix A: Member Board Representatives

NOTE: If you correspond with a different Member Board staff/researcher than is on this list OR you are contacting a board with multiple representatives, please also CC all listed representatives to keep them updated. If you have any questions, contact Rachel Knapp.

Member Board	Representative	
Allergy and Immunology	Michael Nelson, MD	
Anesthesiology	Huaping Sun, PhD	
Colon and Rectal Surgery	Thomas Read, MD	
Dermatology	Erik Stratman, MD	
Emergency Medicine	Chadd Kraus, DO, MPH, Dr.PH	
Family Medicine	Andrew Bazemore, MD, PhD OR	
	Robert Phillips, MD, MPH	
Internal Medicine	Rebecca Lipner, PhD	
Medical Genetics and Genomics	Miriam Blitzer, PhD	
Neurological Surgery	Betsy Koehnen	
Nuclear Medicine	Maria Watts	
Obstetrics and Gynecology	Anthony Sparks, PhD	
Ophthalmology	Sarah Schnabel, PhD	
Orthopaedic Surgery	Mona Saniei AND	
	<u>David Elstein</u>	
Otolaryngology Head and Neck Surgery	Brian Nussenbaum, MD	
Pathology	Ty McCarthy	
Pediatrics	Laurel Leslie, MD, MPH OR	
	Andy Dwyer, PhD OR	
	Dave Turner, MD	
Physical Medicine and Rehabilitation	Mikaela Raddatz, PhD	
Plastic Surgery	Keith Brandt, MD	
Preventive Medicine	<u>Clare Foreman</u>	
Psychiatry and Neurology	<u>David Shin, PhD</u>	
Radiology	Brooke Houck, PhD	
Surgery	Andrew Jones, PhD	
Thoracic Surgery	Patricia Watson	
Urology	<u>Lindsay Franklin</u> OR	
	Brant Thrasher, MD	

Appendix B: Frequently Asked Questions

Does the Grant Program distinguish between "Program Evaluation" and "Research" in prioritizing applications?

Program evaluation and research, although similar in many aspects, serve different purposes and follow different guidelines.

Research, in the context of social sciences, is a systematic investigation designed to develop or contribute to generalizable knowledge. It aims to establish facts, reach new conclusions, or discover and develop theories by analyzing patterns within a population or phenomenon. The main objective is to create new, generalizable knowledge that contributes to a broader understanding of some phenomenon or structure.

On the other hand, program evaluation is a systematic method for collecting, analyzing, and using information to answer questions about specific projects, policies, and programs, particularly about their effectiveness and efficiency. In contrast to research, its primary goal is not to generalize findings to other populations or settings, but to improve the specific program under scrutiny. Evaluations are often used to guide local decision-making, policy formation, and program improvement.

From the point of view of the Grant Program, we will evaluate the degree to which a program evaluation is limited by its context-specificity in informing broader conclusions. A well-done program evaluation that convinces the reviewer that it can rise above the local context to make a significant contribution to existing scholarship will be well received.

Are particular research methods preferred?

No. The emphasis is on the research question and how the methods allow the investigators to answer the question. We anticipate a broad range of research methods in the grant portfolio and will have assembled the adjudication committee in consequence.

Will investigators have access to ABMS and ABMS Member Board Data?

Access to ABMS data will be determined on a case-by-case basis. Diplomate data is held by each of the individual boards. Part of the idea behind having the investigator teams consult with individual boards is to see whether there is a collaborative opportunity for using existing data for research collaboration.

This will be governed by Data Use Agreements. ABMS Member Boards may have their own internal policies and processes regarding research using their data that require a separate approval process. If conducting the research is dependent on access to Member Board data, approvals from the boards should be obtained before submission of the grant application to ABMS. If not obtained before submission, approval from the Member Board to have access to their data will be required before distribution of funds, if the grant is approved.

Can the research funds be used for the development of commercial products or services?

No. This program is intended to further research in support of the ABMS mission, and not product development. A successful grant project outcome would support a research program which might eventually lead to successful educational applications.