AAPM Early Investigator Research Grant Overview

The American Academy of Pain Medicine entertains grant proposals of high quality following the release of the Request for Applications (RFA); there are specific deadlines for application (see RFA). Proposals should concern either basic or clinical science relevant to the understanding and/or treatment of acute, sub-acute or chronic pain aligned with the priorities of the Federal Pain Research Strategy. There is an emphasis on funding clinical research. Proposals should be complete and concise. If a section below is not applicable, a statement must be made in place as to why.

Key Dates and Deadlines

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<tr>
<th>Date</th>
<th>Event</th>
<th>Contact</th>
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<tr>
<td>November 1, 2019</td>
<td>Request for Applications (RFA) Release Date</td>
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<tr>
<td>January 20, 2020</td>
<td>Letter of Intent (non-binding) due to <a href="mailto:jwestlund@painmed.org">jwestlund@painmed.org</a></td>
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<tr>
<td>February 17, 2020</td>
<td>Proposal Application due to <a href="mailto:jwestlund@painmed.org">jwestlund@painmed.org</a></td>
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<tr>
<td>April 1, 2020</td>
<td>Notification of Award</td>
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<tr>
<td>July 1, 2020</td>
<td>Anticipated start date of funding</td>
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Criteria for Early/New Investigator Applications

**Early Investigator**: An Early Stage Investigator is an Investigator who has completed his or her terminal research degree or medical residency (including clinical/research fellowship)—whichever date is later—within the past 5 years and has not yet been awarded a substantial competing NIH or federal (AHRQ or PCORI) research grant.

One grant of $15,000 for one year will be awarded with a start date of (July 1st, 2020). The Principal Investigator must be a member of AAPM (or become a member of AAPM upon application submission) and must identify a research mentor who will allow the PI to successfully operationalize and complete the proposed work. Examples of disqualifying “substantial” grants include:

- Pathway to Independence Award-Research Phase (R00)
- Small Grant (R03)
- Academic Research Enhancement Award (R15)
- Research Education Grants (R25, R90, RL9, RL5)
- Clinical Trial Planning Grant (R34)
- Dissertation Award (R36)
- Small Business Technology Transfer Grant-Phase I (R41, UT1)
- Small Business Innovation Research Grant-Phase I (R43, U43)
- Shannon Award (R55)
- NIH High Priority, Short-Term Project Award (R56)
- Competitive Research Pilot Projects (SC2, SC3)
• Resource Access Award (X01)

On the other hand, the PD/PI is not excluded from consideration as an “Early Stage Investigator” if he/she has been the PD/PI of received an award from any of the following classes of awards:

- Training-Related and Mentored Career Awards
- All Fellowships (F awards)
- All individual and institutional career awards (K awards)
- Loan repayment contracts (L30, L32, L40, L50, L60)
- All training grants (T32, T34, T35, T90, D43)
- Instrumentation, Construction, Education, Health Disparity Endowment Grants, or Meeting Awards
  - G07, G08, G11, G13, G20
  - R13
  - S10, S15, S21, S22

**Grant Requirements**

- The budget should extend no further than 12 months from grant disbursement. (No-cost extensions are not allowed)
- Funds cannot be used for indirect costs. A letter must be obtained from the PI’s institution demonstrating agreement to waive indirect costs (if relevant).
- All AAPM/AAPMF policies and guidelines must be strictly followed by investigators receiving awards.

**Review Process**

- Administrative staff will review Letters of Intent (LOI) in order to determine the number of reviewers needing to be assigned to the review committee.
- Final applications are reviewed by the Research Committee of the American Academy of Pain Medicine at the annual meeting held approximately 2 weeks after the application deadlines.
- Following a report by at least two principal reviewers and committee discussion, the Research Committee will score proposals based on potential for future extramural funding, scientific merit and feasibility.
- Scoring is similar to the rating scale used by the NIH (priority scores 1.0-9.0 [1.0=outstanding, 9.0=poor]).
AAPM Early Investigator Research Grant Application

Application Instructions and Contents

- Letter of intent (LOI) needs to be submitted to jwestlund@painmed.org by January 20, 2020.
  - LOI should include:
    - the name and institutional affiliation of the PI, mentor and CO-I(s) – Key personnel
    - a 250 word summary of the intended research project
- Completed applications must be submitted no later than February 17, 2020. A completed application should be electronically sent as one or more .pdf file(s) to jwestlund@painmed.org. (See Checklist on page 7.)
- NOTE: Font size (either Arial or Helvetica) should be no smaller than 11 point with a margin width of at least 0.50” on all sides.
- Text for the research proposal should not exceed 2 pages (see Research Proposal below).

Abstract of the proposed research project (not to exceed 30 lines)
Abstract should be a self-contained description of the project and should include a statement of objectives and methods to be employed.

Budget Justification
Use this section to list the name, title and associated months for each person in the Budget Section. Include a brief description of their expertise and role in the project.

- Include copy of Specific Aims for currently funded projects (should have no overlap funding) and pending proposals.
- Salary support for the PI or Co-investigator is not allowed. Immigration costs are not allowed.
- Include a justification for any equipment (over $3,000), consumable supplies, travel (limited to $1,000) and other expenses (user fees, animals, per diem, etc.).
- Include justification for salary support for students/postdocs/techs.
- Letter for research office (G&O) stating that no indirects will be taken.

Mentor/Consultant or Co-Investigators
State the role of a mentor and other participants, consultant or co-investigators working on the project. Letters of support are encouraged. All mentors, PIs and Co-PIs (no salary support) need at least 1% effort on all projects they are named.

Biographical Sketches
Include biographical sketches in NIH format (not to exceed 4 pages per investigator) for the Principal Investigator and all key personnel (i.e. faculty co-investigators). The biography lists the degree(s); awarding institution(s); professional positions held; professional experiences; relevant honors; publications and funding history (title of project, specific aims, page, PI’s role, awarding entity, and dates of award).
Facilities, Equipment & Other Resources
This information is used to assess the capability of the department/center resources available to perform the effort proposed. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical and Other).

Research Proposal:
Do not exceed 2 pages for Specific Aim (0.5 page) and Research Strategy (1.5 pages.)

Specific Aims
State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.

List succinctly the specific objectives of the research proposed, e.g.:
- to test a stated hypothesis,
- create a novel design,
- solve a specific problem,
- challenge an existing paradigm or clinical practice,
- address a critical barrier to progress in the field or develop new technology.

Research Strategy
Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading – Significance, Innovation, Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography and References Cited section.

a. Significance (Page length: .25)
- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
- Application should contain a clear description of the applicant’s broad research goals and explanation of how the pilot project relates to plans for future research and procurement of extramural funding.

b. Innovation (Page length: .25)
- Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
- Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

c. Approach (Page length: 1.0)
- Preliminary data is not necessary but can be an essential part of a research grant application and help to establish the likelihood of success of the proposed project. If you have data, include only the most
feasible/relevant preliminary data to illustrate/demonstrate the compelling points of the research initiative. Remember that the reviewers are not always experts in the same area as you, although they are accomplished scientists. If there is no preliminary data, describe why you are qualified to do the proposed research. If a substantial amount of the budget is for equipment, discuss the closest source of suitable equipment; whether a plan exists for shared purchase and other pertinent considerations.

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- Describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
- Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised.

**Sections below are not included in the 2-page count of the research proposal:**

**Vertebrate Animal** – If using animals (1) indicate IACUC approval number or if approval is pending (2) address the five points below:

1. Provide a detailed description of the proposed use of the animals in the work outlined in the Research Strategy section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.
2. Justify the use of animals, the choice of species, and the numbers to be used.
3. Provide information on the veterinary care of the animals involved.
4. Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury.
5. Describe any method of euthanasia to be used and the reasons for its selection. State whether this method is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines on Euthanasia. If not, include a scientific justification for not following the recommendations.

**Human Subjects**

Provide a brief description of the proposed use of human subjects and if IRB approval has been received or is pending.

**Bibliography and References Cited**

Provide a bibliography of any references cited in the Project Narrative. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Please use bibliography format of the journal *Pain Medicine*.

**Letters of Support**

Attach all appropriate letters of support, including any letters necessary to demonstrate the support of collaborators such as Senior/Key Personnel, mentors and other significant contributors included in the grant application. Letters are not required for personnel (such as research assistants) not contributing in a substantive way to the scientific development of the project.
Review Process
At least two reviewers will be assigned to each application. They will give separate scores for each of the five core review criteria and a preliminary impact score for that application (see below). The top half of the most meritorious applications will be discussed at the Committee meeting and assigned a new impact score, based on the discussion and score of each member on the Committee. The final impact score for each discussed application will be determined by calculating the arithmetic average of all the eligible members’ impact scores.

All applicants will receive a written critique representing a combination of the reviewers' written comments and scores for individual criteria.

Research Project Evaluation Criteria

**Overall Impact.** Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to gain extramural funding if completed, and to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following five core review criteria.

**Core Review Criteria**

- **Significance:** Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?
- **Investigator(s):** Are the PIs, collaborators, and other researchers well-suited to the project? Are the candidate's prior training and research experience appropriate for this award? Is the candidate's academic, clinical (if relevant), and research record of high quality?
- **Innovation:** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?
- **Approach:** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? Will the strategy establish feasibility and will particularly risky aspects be managed? Do the project goals align with those of AAPM? What is the likeliness that the data will lead to improved care or future extramural funding?
  
  If the project involves clinical research, are the plans for:
  1) protection of human subjects from research risks, and
  2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?
- **Environment:** Will the scientific environment in which the work will be done contribute to the probability of success? Are the support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?
Checklist – (Grant page order when sending electronically to jwestlund@painmed.org)

- Abstract (not to exceed 30 lines)
- Budget Justification (not to exceed 1 page)
- Biographical Sketches (not to exceed 4 pages per investigator)
- Facilities Resources (not to exceed 1 page)
- Research Proposal (not to exceed 2 pages)
- Vertebrate Animals
- Human Subjects
- Bibliography and References Cited
- Letters of Support