

Indiana Academy of Science
SENIOR RESEARCH GRANTS PROGRAM

I. SUMMARY

The Indiana Academy of Science Senior Research Grants Program makes awards of up to \$3000 to Academy members or students they sponsor to purchase supplies, support travel and field expenses, pay research assistants, and provide other items required to conduct novel scientific research. The deadlines for the submission of proposals to the chair of the Research Grants Committee are 15 September and 1 March of each year (see below for deadline details).

If you have questions e-mail grants@indianaacademyofscience.org.

II. PROGRAM BACKGROUND

In 1964, income from bequests made by Mr. and Mrs. John S. Wright to the Indiana Academy of Science Foundation became available for the support of scientific research. Since that time, the Academy's Research Grants Committee has been responsible for developing guidelines, reviewing proposals, and determining awards made possible by the Wright funds. The resulting Indiana Academy of Science Senior Research Grants Program has provided support to approximately 40 scientists each year for the past decade.

The Committee considers proposals from Academy members representative of all scientific disciplines. Past grants have reflected the full spectrum of research activities by Academy members. At the same time, they have also reflected the mission of the Academy and awards have favored supporting scientists with limited access to major national funding for whom modest sums available may permit the initiation or continuation of investigations of potential value. Projects of potential special value for the State of Indiana are also given strong priority.

III. ELIGIBILITY

Applicants must be formally affiliated with not-for-profit organizations, usually as employees or faculty-sponsored students. Individuals meeting any one of the following criteria are eligible to apply for research grants:

- Members of the Academy in good standing during the preceding year and at the time of the application.
- Recently joined members who have never previously applied for a research grant from the Academy.
- Students, postdoctoral associates, non-permanent faculty members or other applicants not otherwise chiefly responsible to the institution for the research program must have a sponsor who is responsible to the institution for the research program and has been an IAS member for at least one year or is a new member who has not previously applied for an IAS grant. Grants to students are made to the

applicant organization for use by the student on the condition of faculty sponsorship. For this reason, the award will be made in the faculty member's name and that sponsor will be responsible for meeting all conditions of the grant award. Consequently, it is essential that the faculty sponsor review the proposal carefully prior to its submission.

Awards will be made to the parent organization, not to an individual. Therefore, each application must be signed by the organization's official with the authority to approve the request (e.g., President, Chief Academic Officer, College or University Research Officer, etc.) and commit the institution to the conditions of the award.

IV. APPLICATION PROCEDURE

Submit your grant application online. Login to the Indiana Academy of Science website (<http://www.indianaacademyofscience.org>) and go to Member Center. From the Member Center pull down menu select Document Sharing. Click on Document Sharing and select Deposit Box. Select Senior Grants from the Select Folder line. Use the Browse button to find your grant on your hard drive. Enter the title and appropriate notes. Click on the Upload File button. A message will appear on your screen telling you that your application has been received.

Proposals and all supporting information (including the cover page) should be submitted as a single document saved as a pdf file in the format of: LastnamePI_FirstInitial.pdf. Please be sure that all necessary information is included with the application as incomplete files are unlikely to be funded.

Questions about the online application should be directed to the committee chair (grants@indianaacademyofscience.org). Each research proposal should be brief but complete and must include the following information arranged in the following order, with each section starting on a new page:

1. The completed *Senior Research Grant Application Information Form*. This page may be accessed from the web site and the resulting file may be used as a template and filled in. Signatures are required for a complete application, so be sure these are included in the final pdf.
2. A COVER PAGE giving the name, mailing and e-mail addresses, and affiliation of the investigator and of the faculty sponsor where appropriate, together with a descriptive title for the proposed project. The cover page should also include the date of submission; the level of funding requested; the name of the person authorized to make grant-related commitments on behalf of the applicant organization; and, the name and address of the institutional official to whom the check should be sent (again, note that award checks are made out to the institution, not to any individual).
3. An ABSTRACT of no more than 300 words.
4. A NARRATIVE of *no more than five pages* (single or double space with double

space between paragraphs, 10-12 point font, 1" margins). This section must

- describe the problem to be investigated and justify the proposed study,
- provide a review of the published relevant literature,
- state the research objectives, scope of the problem, and methodology to be followed,
- describe efforts made to obtain research support from other sources,
- list the investigator's qualifications, and
- estimate when the results will be submitted for publication.

This is an important part of the proposal and will be scrutinized by the reviewers. Applications with a narrative exceeding five pages may be returned without review.

5. A REFERENCES CITED page listing all literature cited in the application.

6. A *detailed* BUDGET. The budget may include

- supplies (defined as items that by their nature will certainly be consumed during the course of the research),
- vehicular travel (limited to predicted fuel costs for personal vehicles and justifying the need for and detailing the costs of rental vehicles; travel outside of Indiana is not normally supported and if so only after convincing and detailed explanation),
- room and board at study sites (road-side housing and food for transitional travel are not eligible),
- wages and salaries for students or technicians (applicants and sponsors are not eligible for salary support, and requests by graduate students to pay assistants receive low priority and will be approved only with strong justification), and
- durable equipment. Please note that requests that focus on equipment are discouraged in general and those proposing to spend over half the request on equipment will receive low priority. Only equipment required specifically for the proposed project will be considered, requests for consumer electronics commonly available from other sources (e.g., video recorders) will receive lower priority, and requests for computers will not be considered.

The budget *may not* include funds to

- attend meetings,
- pay publication costs,
- support institutional administrative or overhead/indirect costs,
- pay salaries to applicants or sponsors,
- sponsor pedagogical research, or
- purchase computers or computer time.

The budget must also describe the expected or actual source of funding for resources essential for the project not included in the request to the Academy.

It is essential to understand that enough detail must be provided to allow members

of the Research Grants Committee to evaluate the appropriateness of each element of the budget. The Committee may delete items from the request that it feels are not justified as long as it believes the project would not be unduly impaired; such a conclusion usually results in the application's rejection. Consequently, it is essential that each item be explained and justified for the request to receive full funding.

7. Copies of APPROVED AND SIGNED INSTITUTIONAL REVIEW FORMS if the proposed research would involve humans, animals, or recombinant DNA; a statement of institutional exemption from such a review signed by the appropriate official is required in those cases. *Applications without written verification of this approval or exemption will not be reviewed.* In situations where a review board does not exist within the applicant organization, consult the chair of the Research Grants Committee for directions. It is the responsibility of the applicant to at all times follow the appropriate ethical, legal, and procedural guidelines mandated by the institution, government, and professional societies.
8. If appropriate, a brief PROGRESS REPORT for requests for additional funds to continue a project completed under a previous award. Such reports may refer to the original application and may summarize the final project report submitted to close a previous grant, but they must stand on their own as the rotating membership of the Committee ensures that not every reviewer will be familiar with the earlier work. This report should specifically justify the request as well as provide evidence of efforts to find other sources of support. Given the Committee's preference for start-up projects, renewal requests often receive a lower priority.

V. REVIEW PROCESS

Every application is reviewed by multiple members of the five member Senior Research Grants Committee. The Committee members represent a wide range of scientific disciplines, and the results of their discussions determine which requests will be awarded and for what elements of the request. The Committee chair will inform applicants by mail of the Committee's final decision and will contact the Academy Treasurer who will then mail award checks to the official identified in the application. The review process is normally completed within six weeks of the application deadline. The decision of the Committee is final and all questions concerning awards and the decision process should be directed to the Committee chair.

In reviewing proposals for possible support, the Research Grants Committee will consider the following criteria:

- Attention to the information requested in these guidelines.
- The scientific merit of the research proposal. The applicant must explain the significance of the study and its relationship to other research in the subject area must be made clear or the absence of such relationships must be explained.
- The research methodology to be used must be clearly explained and appropriate to the problem. The proposal should include assurances that essential apparatus not requested is available.

- The basis for the proposed investigator's stated qualifications must be described clearly and convincingly.
- The budget should be commensurate with the level and scope of the proposed activity and adhere to the limitations and preferences listed in the Budget section of these guidelines (above).

It is an objective of the Senior Research Grants Program to support as many meritorious projects as the limited funds available permit. The Committee will search for economies in grants, especially those requesting awards near the grant limit, and it favors funding multiple smaller requests over a single larger amount. *No grant, however worthy, may request more than \$3,000; proposals requesting more than this amount will not be reviewed.*

Preferences in awarding grants will be given to

- projects that promise to contribute specifically to the State of Indiana. Research to be conducted outside of Indiana will be considered, but proposals for work outside of the state should explain the necessity for leaving Indiana.
- applications from Academy members who have limited access to other research funds and that describe attempts to gain other or additional sources of funding..
- start-up requests that demonstrate potential for future funding from other sources given the development of necessary preliminary data.
- projects that contribute directly to the education of Indiana student scientists, especially those that involve undergraduate and graduate students directly in scientific investigation. Note that pedagogical research is not supported by this program.
- modest requests, owing to the limited funds available and desire to help as many scientists as possible.
- proposals written to be understood (or at least appreciated...) by scientists representing a wide range of disciplines. While the diversity of representation on the Committee ensures that each proposal will receive expert review, applications that provide clear and compelling detail and descriptions at a level understood by the widest range of scientists will naturally receive the most favorable reviews.
- proposals in which the applicant demonstrates a record of presenting project reports at the annual meeting of the Indiana Academy of Science and/or publishing articles in the *Proceedings of the Indiana Academy of Science*, or states an intent to do so.

It is the intent of the Committee to fund as many projects as possible. In the event that several applications come from a single research group (for example, several graduate students from the same research group), the Committee may choose to fund the highest ranking proposal only. In addition, if a graduate student in a faculty member's research group already has received funding, further funding may not be awarded to this group until the final report and research report have been submitted.

VI. GENERAL POLICIES

Grants will normally be made for investigative periods of one year beginning on the date of the award letter unless otherwise requested in the grant application, approved by the Committee, and specifically mentioned in the award letter.

A final budgetary accounting of grant funds by the applicant organization is expected within six weeks after the project closing date. This should be sent to the IAS Office. Unexpended funds are to be returned to the Academy Treasurer.

A final report covering the scientific accomplishments is due within six months after the project closing date; the report should be sent to the IAS office. A cover page for this report can be downloaded from this website. Research grant recipients will be ineligible for further funding if a satisfactory report describing previously funded research is not on file with the chair of the Research Grants Committee.

Oral presentation of research results at annual meetings of the Academy is expected. Publications resulting from projects supported by Indiana Academy of Science funds must acknowledge the Academy's support.

VII. REQUESTS FOR CHANGES IN FUNDED REQUESTS

Extensions. Requests for extensions, without additional funds, of the period of investigation for active projects supported by current grants may be considered by the Research Grants Committee. All such requests must be sent to the chair of the Research Grants Committee. Any such request should have the signature of the applicant organization's authorized approved official or some other tangible indication that the appropriate office has been alerted to the request. Requests for extension of time should be limited to six months or less, although requests for longer extensions may be considered in exceptional circumstances.

Redirection of Funds. Requests to redirect funds within the approved budget must be directed to the chair of the Research Grants Committee. They must be accompanied by a statement that explains the circumstances leading to the request. Normally, only requests confined to the scope of the original request will be approved.

Additional Funds. Requests for additional funds to complete work proposed in a previously funded grant are discouraged unless the need for the funds was prompted by circumstances beyond the investigator's control. Any such request must follow the guidelines for a new grant (including deadlines) and clearly explain the circumstances surrounding the request and must convince the Committee of the value of funding a project that, under the terms of the original grant, should already be completed.

VIII. APPLICATION DEADLINES AND SUBMISSION DETAILS

Applications for Senior Research Grants **must be submitted online by September 15 or March 1 of each year** and will normally be acknowledged by electronic mail within a week of the final deadline date. Grant announcements will normally be made by the committee chair within six weeks of the deadline date. Applicants whose requests are denied will be notified on or soon after the corresponding award announcement dates.