

# M. J. MURDOCK CHARITABLE TRUST

## General Scientific Research Grant

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### HOW TO APPLY

#### PLEASE NOTE THE FOLLOWING:

1. Applications from individuals will not be considered.
2. If your institution has not submitted a proposal for support of research to the Trust in the last five years, please call Dr. John Van Zytveld, Senior Program Director at the Trust (360-694-8415), before completing the Research Application Form.

The material that follows pertains only to requests for the support of scientific research.

The Trust has an understanding with all research institutions in our funding region that only requests that are considered to be institutional priorities are to be submitted, that no more than two proposals should be under consideration by the Trust from any institution at any given time, one of these in support of science research and the other in support of research in engineering, and that requests in each of these areas should be submitted no more frequently than about once per year. Therefore, the Trust does not accept grant requests from individual researchers unless the institution endorses that request as its priority to the Trust. The authority to provide this endorsement lies with the chief executive officer of the institution or may be delegated to a chief academic or research officer.

Study the following materials carefully for instructions on how to proceed.

1. Should there be any question of institutional or project eligibility for application for support, contact Dr. John Van Zytveld for advice. He may be reached at 360-694-8415.
2. Complete pages 1 and 2 of the Research Application Form. All information should be completed as requested in the space provided. Sections labeled A-C should be completed on these two pages.
3. Continue the research proposal by adding pages behind these first two Form pages. Up to 18 pages may be added, numbering them starting with page 3 and continuing to a maximum of page 20. Sections D-J should be completed on these added pages. Information to guide you in addressing these sections is found in the document Instructions for Completing Research Application Form in the Section entitled Continuing Format for Completing Research Application Form.
4. Prepare nine copies of the completed Research Application Form (2 and 3 above).



5. Include one copy of all pertinent materials listed on the document entitled Required Attachments for All Research Applications.

Mail all materials to: John Van Zytveld, Ph.D  
Senior Program Director  
M. J. Murdock Charitable Trust  
P. O. Box 1618  
Vancouver, WA 98668

The review process may take six months or more from date of Trust acknowledgment before action on the proposal is complete.

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## INSTRUCTIONS FOR COMPLETING RESEARCH APPLICATION FORM

All information must be filled out on pages 1 and 2 of the Research Application Form **within the spaces provided**. Up to 18 additional pages may be added using the format specified below (Sections D-J). Use a font no smaller than 10 pt. in filling out the Form.

The Sections A-C that follow correspond to those on the first two pages of the Research Application Form. Sections D-J should be developed by adding pages that follow the first two pages of the Form.

- A. Project Title:** Provide a concise, one-phrase title that encapsulates the central theme of the project for which the requested funds will be used (such as Research Laboratory Equipment for Structural and Functional Analyses of Complex Biological Systems).

**Brief Description of Project:** Distill the essentials from the "Full Description of Project," Section G, so that the reader can get an overview of the project. The summary in the upper block should be able to stand on its own as the official description of your proposed project. You may expand on this statement in the lower block, as you think necessary. Be sure to state clearly the central theme and objectives of the project, the plan you are proposing to address them, and the scientific significance of the project. Use language comprehensible to the intelligent non-scientist.

- B. "Total Project Cost"** means the cost of the overall project (example: a new scanning electron microscope with energy dispersive x-ray spectrometer), not just that portion of the project for which support from the Trust is being requested (example: the energy dispersive x-ray spectrometer). The "*Outside Funding in Hand*" is the amount already received or awarded from outside agencies for this project. The "*Funding Committed from Institution*" is the actual firm commitment of the institution to the direct costs of this project. The "*Balance From Other Sources*" should be listed here and detailed in *Section E*. (**Note: Do not include indirect costs either in the "Request from Murdock Trust" or in the "Total Project Cost."**)



The amounts you put in these spaces should add up to the total project cost. If the overall project is part of a larger program (example: a central instrument laboratory), describe the larger effort separately on an attachment to this Research Application Form.

- C. The information requested here is for your Department. If more than one department is involved with this project, reproduce this page and fill it in for each department separately. If there is not a departmental structure at your institution, state the appropriate organizational designation for which you are reporting the data. The following instructions will use the term “department.”

**Personnel:** List both the FTE faculty as well as the total number. If you have senior researchers who are not formally faculty, list them under “Other” and specify their titles. List the number of research assistants and under “Other” the number (in parentheses) of other support staff, such as secretarial or technical repair people. List the number of postdoctoral fellows in your department and the total number of graduate students majoring in your department. Indicate the average number graduated from your department during the past five years with Masters and Doctors degrees. List or estimate the total number of undergraduate students who are pursuing a major in your department and the average number who received baccalaureate degrees during the past five years.

**Financial Support:** List your annual departmental budget for instruction, not including salaries for those who teach. If your department has a budget for graduate students who are teaching assistants, list this and so specify under “Other.” Fill in the information showing the external support awarded during the past five years. If several grants were received in a given year, give the combined amount awarded and in the same box the number of grants (in parentheses). Use appropriate abbreviations for sources, such as NSF, NIH, etc. Also, list the institutional support to your department for direct costs for research during the past five years.

If your institution allocates a percentage of indirect costs for research in your department, list this and explain in “source” box.

**Publications:** Fill in the information requested for the past three years. Articles should only be counted if they were published on research in reviewed professional journals. Do not include abstracts, talks at meetings, chapters of or whole monographs or editing responsibilities.

**Comments:** If the above requested information does not fit your situation, please clarify and describe in this section.

#### CONTINUING FORMAT FOR COMPLETING RESEARCH APPLICATION FORM

The remainder of your research proposal is to be completed following the format specified below. Please address each Section in the order given. You may use up to 18 pages for this, numbering them 3, 4, etc. up to a maximum of page 20 (pages 1 and 2 are the completed form). Additional information deemed critical for an understanding of the project should be provided separately as attachments.

It is recognized that you may be requesting support for something other than a specific research project, such as for a central instrumentation lab that will service a variety of researchers in conducting a wide



range of projects. If this is the case, the “project” should be viewed as the central instrumentation lab rather than the specific research projects that it may service. Develop the proposal in this light and attach representative specific research projects written up in the format of Section G below. The following will use the term “project,” whether it applies to a specific research endeavor or to an effort that will facilitate work on several research projects.

- D. Itemized Project Budget:** List the costs for the total project by category. If applicable, asterisk (\*) those items for which funds are already in hand and mark (x) those items for which Murdock support is requested. If undesignated Murdock support is being requested, provide a rationale for the level of support requested on page 1. Note that Murdock support will not be provided toward indirect project costs. Also, at public universities, Murdock monies may not be requested for construction renovation costs.

Provide the budget in column form, one column for each year of support requested. Break the budget down by category, such as personnel (specify positions and titles), equipment (list major items), supplies, travel, other, or whatever categories apply best to your project.

If support for major equipment (items costing over \$50,000) is being requested, provide a model and description of each item and a reason why that particular brand has been chosen. Justify the need for major equipment if the same or similar equipment is available on campus or on a nearby campus. Indicate how many similar units are present on campus or on a nearby campus, and in which departments. How many researchers and students will be using the equipment?

- E. Project Funding Strategy and Goals:** List support for this project, both requested and received, along with sources and amounts, including the Murdock Trust. If the plan is for multiple year support, provide the information in column form as for Section D.
- F. Institutional and Departmental Priorities in Research:** Describe the appropriate research priorities of your institution and participant departments for the next decade and how the proposed research project relates to these. Compare this project with any others that are related or similar at institutions in the Pacific Northwest.
- G. Full Project Description:** Describe your project in detail, using language of sufficient precision so that it can be evaluated by individuals with expertise in this field. If more than one research avenue will be pursued with this support, each should be described in sufficient detail for evaluation. Develop this section as follows:
- 1. Background:** Provide both an institutional and a research context out of which this project arises. What events, circumstances, conditions, etc. have served as the springboard for this project? What are the present strengths of your department that make it suitable to carry out this project? What areas need improvement or strengthening to better equip it for the task? How does this project build on your experience, strengths, and priorities? If pertinent preliminary results have been obtained, describe them here.
  - 2. Procedure:** Outline the experimental approach that will be employed. Depending upon the nature of your project, this may be the heart of your proposal. Be sure to develop this with



- sufficient detail and precision so that it can be evaluated by experts in the field. Be clear about the objectives and the expected measurable outcomes.
- 3. Scientific Significance:** Discuss the scientific significance of your proposed line(s) of research. By significance, we mean the importance of this research for the scientific world, for researchers beyond the confines of your institution as well as for your own research group.
- H. Project Staff:** Identify key researchers who are available and qualified or will be recruited to conduct this research. If researchers are to be recruited, describe how they will be recruited, what qualifications they must have, and give a timetable for their recruitment and appointment. Separately attach a CV for each available researcher to be involved in the project that contains a list of published research papers for the past three years only. For each investigator, list all current research grants by title, dollar amount, funding agency, and dates.
  - I. Future of the Project:** Describe how you anticipate this research area will develop in the future and how this project and future projects will participate in that development. How will this project be financially sustained beyond the period of Trust support?
  - J. Relevant Research Papers:** List titles and authors of no more than three published research papers authored by the principal investigators that are relevant to this proposal and attach six copies of each.

