2023 Guide to Writing an Environmental Venture Projects Proposal

PROPOSALS ARE DUE WEDNESDAY, JANUARY 25th @ 5PM PST
Complete and submit your application here:
https://web.stanford.edu/dept/woods/cgi-bin/seed/app/evp-application.php

The Stanford Woods Institute for the Environment EVP program provides seed grants from $5,000 up to $250,000 over two years, to Stanford faculty members with Academic Council or Medical Center Line standing, for interdisciplinary research projects that seek to identify solutions to pressing problems of the environment and sustainability. Projects are evaluated for their intellectual merit, potential to solve environmental problems, the interdisciplinary strength of the team and the project's potential to secure additional funding in the future.

The EVP Program considers applications in two categories, EVP Small Grants, for requests of $60,000 and less, and EVP Grants, for requests up to $250,000.

> **EVP Small Grants** –support from $5,000 up to $60,000 for discrete research needs and efforts, including to define and scope full research projects that may be at preliminary stages of development, in line with the EVP program priorities and guidelines below
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> **Requests may be for less than $60,000, and PIs are encouraged to be judicious in their requests for EVP Small Grant funds. PIs who receive an EVP Small Grant remain eligible to apply in a future round for an EVP Grant or REIP Grant for that project.*
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> **EVP Grants** – support from $60,000 up to $250,000 for up to two years for research projects per the EVP priorities and guidelines below
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> **EVP Grants are set up as sponsored research awards rather than departmental grants and must comply accordingly. Likewise, PIs are encouraged to be judicious in their requests.*

PROGRAM PRIORITIES

The Environmental Venture Projects program seeks:

- *High-risk, potentially transformative research projects* that have the potential to produce solutions to our critical global environmental challenges;
- Projects that address cross-cutting issues that are relevant to the environment <u>and/or</u> address challenges within one or more of the Woods Institute's focal areas.
    - Cross-cutting topics might include: environmental ethics, cultural and humanistic influences, decision science, effective economic and incentive systems, environmental justice, political ecology, stewardship, risk perception and analysis, communication, mitigation and adaptation, valuation, and interdisciplinary modeling.
    - Issues to be addressed may include: climate mitigation, oceans, ecosystem services and conservation, environmental justice and equity, environmental health, freshwater, food security, climate adaptation and sustainable development.

- Projects that Involve interdisciplinary collaborations, especially among Stanford faculty who have not worked together. Including scholarly communities that have not been active in the Woods Institute and School of Sustainability to date, will be given additional consideration.

PROGRAM GUIDELINES
Proposed projects should:
- Represent the above program priorities;
- Involve PIs at Stanford from separate disciplines;
- PIs must have Academic Council or Medical Center Line standing;
- *Contribute towards a solution* to a major global environmental challenge;
- Demonstrate a clear pathway for connecting the proposed research to an actual solution to be implemented by identified, non-academic stakeholders;
- Explain how the collaborative effort will be stronger than the sum of disciplinary parts; and
- Have the potential for obtaining additional support.
  - Faculty members may only be Lead PI on one EVP application at a time, either for one EVP Small Grant or one EVP Grant, not both.
  - Likewise, a faculty member may not apply to Lead a Woods Institute EVP grant and an REIP grant in the same application cycle.
  - Faculty members are also restricted from being the Lead PI on more than one active grant from the EVP Program or REIP Program.
  - However, faculty may be the Lead PI on consecutive grants from the EVP program and/or REIP program. A Lead PI applying for a new award in 2023 will need to have any active grant award from either EVP or REIP set to close in 2023 and must submit the required financial and narrative reports of the active award before spending under the new award will allowed.
  - *EVP grants must otherwise comply with the requirements and restrictions for awards of the Office of Sponsored Research.*

If you have any questions about your project or research idea, or would like additional information, please contact Chris Field, Stanford Woods Institute Director at cfield@stanford.edu or Brian Sharbono, Director, Programs at sharbono@stanford.edu.

If you and your Research Administrator have questions about the budget and budget justification requirements, including subawards, please contact Paula Wetzel, Assistant Director of Research Administration at pwetzel@stanford.edu and Brian Sharbono, Associate Director, Programs at sharbono@stanford.edu.

If you have technical questions or issues in submitting your LOI through the online application system, please contact Keith Iverson, IT Manager at kailou@stanford.edu for assistance.

REVIEW PROCESS
Proposals are due Wednesday, January 25, 2023, 5:00 pm PST. For the 2023 cycle there is no Letter of Intent phase, rather only this call for proposals. Proposals for awards over $60,000 will be reviewed and discussed by the EVP selection committee. The Woods Institute may invite review from experts not on the committee. Project teams may be asked to respond to questions raised in their proposals.

Finalists for awards will be asked to complete an Ethics and Society Review Statement and respond to any feedback and questions raised regarding mitigating societal risks by the Stanford Ethics and Society Review panel. This is a distinct process from that of the IRB, and more information may be found here: https://docs.google.com/document/d/1Z3ZKvfcpn_BcE7S_AmcnJ8YmIoJrPC299UTbbdipcTQ/edit?usp=sharing

Upon satisfactory completion of the ESR process (~3 weeks from notification as finalist), we will issue formal notices of award and move to award setup, with start date July 1.

PROPOSAL APPLICATION INSTRUCTIONS

NOTE: THE LEAD PRINCIPAL INVESTIGATOR MUST INVOLVE THEIR QUALIFIED RESEARCH ADMINISTRATOR IN THE DEVELOPMENT OF THE BUDGET AND BUDGET JUSTIFICATION CORRESPONDING TO THE PROPOSAL AND IS ADVISED TO DO SO EARLY ON.
A Research Administrator is a person who normally handles budget information.
The Research Administrator is not considered a member of the research team.

Steps to anticipate for completing and submitting the application:

1.) **The Lead Principal Investigator** may begin an application for an EVP grant here:
https://web.stanford.edu/dept/woods/cgi-bin/seed/app/evp-application.php

The Lead Principal Investigator (Lead PI) must enter the Sunet IDs of the Lead PI and all Co-Principal Investigators (Co-PIs) in the fields provided. At least one Lead PI and one Co-PI is required. All PIs entered will be validated for Academic Council or Medical Center Line status against the faculty list provided by the Office of Faculty Affairs.

2.) **The Lead Principal Investigator** must also enter the SunetID of the Research Administrator for the proposal in the field provided for the application.

3.) **The Lead Principal Investigator** must upload the proposal narrative, or problem statement, as separate pdf where provided for in the application system.

The proposal narrative is to be completed per the instructions below.

4.) **The Research Administrator** for the project must upload the budget for the proposal as separate pdf within the application.

The budget is to be completed per the instructions below.

5.) **The Research Administrato**r for the project must upload the budget justification, with complete explanations for each line item, as separate pdf within the application.

The budget justification is to be completed per the instructions below.

6.) After the Research Administrator has uploaded the budget and budget justification pdfs, the Lead PI will be able to view all pdf documents, and only the Lead PI may proceed to submit the proposal.

7.) The Lead PI may resubmit the application as many times as desired until the deadline. The system only saves the most recent submission.

1. **Proposal Narrative**   Lead PI uploads as separate pdf within the application system.

Rules to write by:

- The EVP proposal narrative of Parts I – IV must not exceed 6 pages in length.
- This 6-page limit excludes the title and summary page and the addendum of biosketches, current and pending support for each PI and listing of scholarly references cited that support the proposal. Please keep Biosketches to one page per person.
- Be concise and compelling. Excessively long proposals do not generally score extra points with the reviewers.
- Reviewers represent the social science, physical science, engineering, medicine, humanities, law and business communities. Assume that reviewers have limited familiarity with your topic. Avoid jargon and explain your ideas in language accessible to a diverse audience.

Please include the following as the narrative problem statement pdf that you upload:

Title and Summary Page   (not counted as part of the 6-page limit)
List project project title, team members and project period (generally, July 1, 2023 – June 30, 2025).

Include one brief paragraph in ***layperson's language*** describing the key objectives of the research proposal. If your proposal is funded, this paragraph will be used in marketing materials and published on the Woods website.

Part I - Problem Statement   (Parts I – IV are limited to 6 pages, including use of figures)
Please articulate your research in the larger framework of a major environmental challenge that your research will help to solve. Recognizing that major solutions are not often solved by one research team over the span of only two years, please explain how this short-term project will contribute to a solution to a major environmental challenge in the longer term.

    a. Include relevant background information.

    b. Describe any previous work done on the problem.

    c. Define project objectives, goals and desired outcomes.

    d. Explain proposed research and methods for design, evaluation and solution.

Part II - Translating Knowledge into Action
The Stanford Woods Institute is looking for projects that hold real promise for solving important environmental challenges. The following questions ask you to explain how the results of your EVP project will help to solve the environmental problem that motivates your research. Who must be engaged and what must be done to ensure that your research results in actual change?

    a. Through which pathway(s) will your findings/innovation solve the environmental problem that motivates your research? Please explain. For example:
- Adoption or use by governmental policy makers or agencies
- Development of new commercial products or processes

- Changes to industrial or business practices
- Use to change individual or societal behavior

b. Please describe any anticipated engagement of external stakeholders and partners before and during your project that may inform the research and thereby facilitate the transmission of your research discoveries into action to solve the motivating environmental challenge.

External stakeholders and partners may be decision makers in government charged with public policymaking and public management related to the motivating environmental issue and/or your approach. They may be existing companies, a new start up and venture capital interests, or even Stanford's Office of Technology and Licensing that you engage to explore potential IP and commercialization possibilities. They may be relevant NGOs, community groups or other organizations with capacity to adopt or implement your findings at some scale.

c. Who will employ the findings/innovation from your EVP to advance a solution? How will they learn about it from you and be interested?

d. What additional steps will need to be taken to translate your findings/approach/innovation into a deployed solution? Who will you need to engage to do this (e.g., businesses, governmental agencies, nonprofits)? How do you plan to engage them and at what stage?

e. If your research is successful, what obstacles may prevent the results of your research from translating into an actual solution? What steps and what partners are needed to overcome these obstacles to deployment?

f. Please share any additional thoughts regarding translating your research into adopted solutions, including resources you believe will be required and assistance you are interested in.

Part III – Interdisciplinary Team:
Describe the composition of your team, explaining to what extent the PIs bring different disciplines and diverse strengths, and how the team will work as an integrated unit. Please consider how you might have undergraduate and graduate students become involved in the research effort.

a. Faculty Lead Principal Investigator and Co-Principal Investigator(s).

b. Other Individuals involved and contribution to the project

c. External collaborators

d. Indicate if team members have worked together before.

e. Define research roles and responsibilities. Be sure to articulate how the team will work together and how the collaborative effort will be stronger than the sum of disciplinary parts.

Part IV – Feasibility and Anticipated Sources of Outside Funding

a. Explain the feasibility (e.g., can this project be done within the proposed budget?).
b. Why is EVP funding needed?

Recognizing that research does not always lead to a solution over the span of a single grant, briefly articulate a vision for how you believe this project will attract outside funding and how your research agenda may evolve with outside funding to further contribute to the environmental solution.

c. Articulate subsequent investment needs (e.g., what are the expected long-term investment needs beyond the grant period?).
d. Who you expect will be interested in providing follow-on funding? List specific sources of funding for which you believe progress under this grant will enable you to be competitive.

Please fully address all Parts I – IV above. Only proposals that include all four parts will be considered for review.

Addendum (not counted as part of the 6-page limit)

a. Current and pending support information for each investigator, including other sources to which you have or will be submitting this project for consideration.
b. Biosketch for each investigator (maximum 1 page for each)
c. List of scholarly references cited to support your proposal

2. Budget   Research Administrator uploads as separate pdf to application system

Note: The project's Research Administrator must be involved in the development of the proposal budget and justification to ensure compliance, including with Stanford budget rates, rules on use, etc. A Research Administrator is a person who normally handles sponsored project budget information. The Research Administrator is not considered a member of the research team. Only the Research Administrator indicated in the application is able to upload the Budget and Budget Justification pdfs and must do so before the PI will be able to submit the proposal. Please use the budget and justification templates available at DoResearch: https://doresearch.stanford.edu/tool/budget-basics-tools-resources.

Important Instructions and Limitations

- The research committee will consider EVP Grant projects with budgets up to $250,000 over two years (approximately $125,000 per year). Project period: July 1, 2023 – June 30, 2025.

- **Faculty salary is <u>not</u> required. Faculty salary may not be more than 20% of the total budget. Requests will be closely scrutinized The justification should state and well explain if it is for summer supplement salary.**

- **Salary support is not permitted for outside collaborators.**

- Support may be requested for personnel (undergraduate, graduate, or postdoctoral scholars, research assistants or associates), supplies, equipment and travel. (Equipment is considered as such if it has a useful life of more than one year and is over $5000 in expenditure.)

- Roles are required to be clearly and substantively defined and the expenditure intended for each to be made explicit in the budget justification sections.

- There may be occasions when be deployed through Stanford resources, including facilities and personnel (translation, sample collection, laboratory analysis, for example). Such professional services may be funded if there is a strong case for their involvement. **Consultant/Professional Services expenses may not exceed 10% of the total budget.**

- A request for funds to support outside research collaboration (**this is not** hiring consultant/professional services may be necessary to support the grant when these services cannot **consultant services**) requires a subaward and needs to be very well justified, including why the support is essential for the collaboration and how the expertise is not available at Stanford. Any subaward request will be closely scrutinized and may or may not be approved by the Director of the Woods Institute and the University.

- **For any proposed subawards identified by name, a complete scope of work must be included in the proposal, as well as a Form 33, a budget, and a strong justification. This should be done in advance and uploaded separately from the budget.   If these documents are not available at time of submission, do not identify the subawardee by name; instead just use "subaward".**

- Please refer to the web page below for more information to discern between a subaward and consultant/professional services: *https://doresearch.stanford.edu/policies/research-policy-handbook/subawards/definitions-and-classifications*

- Please consider how you might have undergraduate and graduate students become involved in the research effort. They are an invaluable resource in the university's education and research mission.

- Conferences or workshops will not be funded.

- Enter all budget numbers in US dollars rounding up to the nearest whole dollar values.

- Inflation factor: 3% per year for salary, 4% for tuition.

- Effective dates for salary increase: 10/1 for faculty, 9/1 for staff

- ***Do not include ISC in your budget****. EVP research grant applicants do not need to account for indirect charges (IDC) or infrastructure charges (ISC) in their project budgets. ISC is charged to and paid by the Stanford Woods Institute on behalf of each awarded project at the time of funding.*

- **Provide a clear and complete justification *for each budget line*, in the pdf below.**   Justification should not include narrative related to calculations, but rather the benefit to the project.

3. **Budget Justification**   Research Administrator uploads as separate pdf to application system.

Note: The project's Research Administrator must be involved in the development of the proposal budget and justification to ensure compliance, including with Stanford budget rates, rules on use, etc. A Research Administrator is a person who normally handles budget information. The Research Administrator is not considered a member of the research team. Only the Research Administrator indicated in the application is able to upload the Budget, Budget Justification and subaward pdfs and must do so before the PI will be able to submit the proposal.

Please provide a clear, detailed, narrative budget justification for each budget line item in the proposal and describe (with specifics) how the budget line supports the scope of work. Include a clear and substantive definition of team roles, where not included in the project description. Please use the budget and justification templates available at DoResearch: https://doresearch.stanford.edu/tool/budget-basics-tools-resources.

Budgets will be scrutinized in this final step of the EVP process, so please make sure that your budget is accurate and reflects realistic needs.