2019 Stanford Woods Institute Realizing Environmental Innovation Program (REIP)
Priorities, Guidelines, LOI Instructions and Budget Guide

The Stanford Woods Institute for the Environment (Stanford Woods) is committed to supporting interdisciplinary research that addresses important environmental problems and leads to implemented solutions. Specifically, the Stanford Woods Institute seeks to advance innovative solutions that private market, public policy and individual stakeholders can adopt and are of significant consequence in solving pressing environmental challenges facing people and the planet. These innovative solutions can include, but are not limited to, novel technologies, practices, approaches to behavior change, public policies or some combination.

The Realizing Environmental Innovation Program (REIP) is intended to provide next stage funding to PIs to move existing interdisciplinary environmental research projects toward adoptable solutions and implementation by external stakeholders and partners. To be considered, projects should demonstrate both significant progress in identifying solutions and strong potential for viability among important solution stakeholders.

PIs with the most competitive LOIs that strongly fit the priorities and guidelines of the program will be invited for an interview. The purpose of the interview is to answer questions about the LOI and to explore establishing an advising team and external partnerships. The research projects deemed most promising in terms of achieving environmental solutions that are also most relevant to Woods focal areas will be invited to submit a full proposal.

*Note: The Stanford Woods Institute partners with the Stanford Graduate School of Business and others outside of Stanford, where relevant, to help faculty identify advising resources for their REIP projects. Project teams taking advantage of this offer have gained assistance in thinking through potential organizational models for disseminating their discoveries and innovations and have developed strategies for overcoming barriers to reaching end users. **Please contact Brian Sharbono, Associate Director, Programs, Stanford Woods Institute, at sharbono@stanford.edu, if you are interested in opportunities to gain advising for your project as you develop your Letter of Intent.***

PROGRAM PRIORITIES
The REI Program seeks later stage projects that, similar to the Woods Institute's long-standing Environmental Venture Projects (EVP) program:
- Are high-risk, transformative and have the potential to produce solutions to major global environmental challenges;
- Build on and extend interdisciplinary collaborations among Stanford faculty; and
- Address challenges within one or more of the Woods' seven focal areas, which include: oceans, ecosystem services and conservation, public health, freshwater, climate, food security, and sustainable development.

PROGRAM GUIDELINES

Proposed projects should:

- Represent one or more of the above program priorities;
- Contribute towards a solution to a major global environmental challenge;
- Incorporate a clear strategy and pathway for moving existing research toward an implementable solution and demonstrate how additional funding will help move the project along that pathway;
- Involve PIs at Stanford from two separate disciplines (For assistance identifying possible co-investigators, please visit the Stanford Woods Institute's faculty and researchers directory);
- Document how the collaborative effort will be stronger than the sum of disciplinary parts;
- Demonstrate that significant research progress has already been accomplished and results are promising;
- Demonstrate interest on the part of external stakeholders in the solution concepts of the project;
- Explain why the project is at a stage where outside funding is not yet available, yet make a strong case that continued advancement holds real promise for outside financial support;
- The research committee will consider projects with budgets up $200,000 maximum over two years (approximately $100,000 per year).
- While former Stanford Woods EVP grant winners are eligible, faculty teams need not have received an EVP grant to be eligible.

- Faculty members may only be Lead PI on one REIP application at a time.
- Likewise a faculty member may not apply for 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 <u>active</u> 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. In the case of a consecutive award, a Lead PI applying for a new award in 2019 will need to have any existing, open grant award from either EVP or REIP set to close in 2019 <u>and have the required financial and narrative reports of the current award submitted before the new award can begin</u>.

LOI SUBMISSION INSTRUCTIONS

Review Process

Letters of Intent (LOI) are due Monday, January 14, 2019, 5:00 pm PST. Letters will be reviewed and those teams whose LOIs are most competitive will be invited to interview with the REIP Advisors on a single day likely in March. The research projects deemed most promising in terms of achieving environmental solutions that are also most relevant to Woods focal areas may be asked to submit more information, including a more complete proposal, which would be due in April. Awards will be announced by the end of June.

If you have any questions about your project or research idea, or would like additional information, please contact Chris Field, Stanford Woods Director at cfield@stanford.edu or Brian Sharbono, Stanford Woods 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 Woods IT Manager Keith Iverson at kailou@stanford.edu for assistance.

ON-LINE APPLICATION INSTRUCTIONS

Overview:

- If you are using Internet Explorer as your web browser, make sure compatibility mode is turned off. To do this, open your browser, click 'Tools' and unclick 'Compatibility View'.

- Only Lead and Co-PIs will be able to access the on-line application, along with the Research Finance Administrator to assist in handling the budget information.

- Only the Lead PI can submit the application. Please ensure that the Lead PI's email address is entered correctly on the Team Members page of the application. All submission confirmations and REIP correspondence will be sent to this address. A confirmation will also be sent to the Research Finance Administrator.

- Use the menu links (Project Description, Team Members, Finance Administrator, Budget, Validate Application and Submit Application) to navigate from page to page without committing any changes.

- **To save and update pages you must click on the 'Save Page' button at the bottom of each page of the on-line form.**

- The application will not be considered complete or considered for review until all required fields have been completed and the 'Submit Application' button on the Submit Application page has been clicked.

- Once the application has been submitted, the Lead PI will receive a confirmation e-mail.

- **The application can be resubmitted as many times as necessary until the deadline. The system only saves the most recent submission.**

Section I: Project Description

Step 1: Enter the project title in the box provided.

Step 2: Use the on-line application system to upload a PDF. A pop-up message will indicate if your upload was successful or unsuccessful.

Rules to write by:

- Be concise and compelling. The REIP letter of intent PDF, Part 1-4, as outlined below, should not exceed 1400 words. Assume that reviewers have little or no familiarity with your topic. Avoid jargon and explain your ideas in language accessible to a diverse audience.

- **Please be sure to address all four parts fully. Only proposals that include all four parts will be considered for review.**

- The application and budget should be a collaborative effort among the PIs and research team and should not be completely delegated to graduate students or postdoctoral scholars. It is expected that the budget will be finalized by the Research Finance Administrator.

Part 1 - Project Description: The proposal should describe in clear terms (minimal use of jargon) the problem to be addressed and its importance, your research progress to date and how this informs the project objectives of this proposal, desired results, research methods and a clear and compelling statement of how team members will operate as an integrated unit. Please describe your research in the larger framework of a major environmental challenge.

Part 2 – Interdisciplinary Team: Describe the composition of your team, explaining how the PIs are from different disciplines, if not different departments; the contributions of each; 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, i.e. data collection, analysis. They are an invaluable resource in supporting our education and research mission.

Part 3 – Knowledge to Action Plan: Please describe the pathway(s) through which your research findings are likely to lead to solutions, e.g., through private markets (products and innovations), government policies (rules, regulations, laws and management practices) or individual behavior changes.

Which external stakeholders and partners have expressed interest in your research and which, if any, have incorporated your early findings into their actions? Please describe any continued or anticipated engagement of external stakeholders and partners during or after your project that may facilitate the transmission of your research discoveries into action to solve the major environmental challenge motivating this project.

External stakeholders and partners may be decision makers in executive and legislative capacities in government charged with public policy and public management related to the motivating environmental issue and/or your approach. They may be existing companies, venture capital interests, or even the Office of Technology and Licensing that you engage to explore potential IP and commercial possibilities. They may be relevant NGO, community groups or other organizations with capacity to adopt or implement your findings at some scale.

Part 4 –Funding: First, please list the sources of support and amounts for your research in this area to date. Explain why additional support is needed. Next, 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. List specific sources of funding which you believe progress under this grant will enable you to be competitive in pursuing. Finally, explain how the additional funding will help move the project along the pathway to an implemented solution.

Section II: Team Members

- **Each PI (Lead and Co-) must be a member of the Academic Council or Medical Center Line. Please verify that both PI and co-PI are PI eligible**.

- In this section, please list all team members involved in the project (e.g. faculty, postdoctoral scholars, graduate students, undergraduate students, academic staff, outside collaborators and other). All team members are expected to actively participate in the project.

- Lead PIs will serve as the primary contact for all LOI and proposal submissions and financial matters. Please ensure that the Lead PI email address is entered correctly in this section. Submission confirmation and other REIP correspondence will be sent to that address.

- A researcher who is the Lead PI for a currently funded Woods EVP grant is eligible to participate in new REIP grants as a Co-PI but not as the Lead PI. Also, Faculty cannot be designated as Lead PI on more than one submitted project for Woods EVP or REIP funding.

- Postdoctoral scholars and senior academic staff may be associate investigators, but not PIs.

- Outside collaborators such as non-Stanford faculty, graduate students or undergraduate students may participate on a project team but will not be considered formal investigators. For these individuals please leave the 'Designation and Role of this Team Member' drop down menu blank.

- Reports for active projects funded by Stanford Woods Institute grants (EVP, REIP, e.g.) must be current. A new LOI will not be eligible if it includes a Lead PI or co-PI from a current Woods funded project team with an outstanding report.

Step 1: Provide the following information for each team member using the on-line application system.
- SUnetID
- First Name
- Last Name
- Designation and Role (two drop down menus provided)
- AC or MCL
- Title
- School
- Department
- E-mail
- Statement of individual involvement/contribution to project

Saving Your Application
1. Any changes to the team members are not saved until you click the 'Save Page' button below.
2. We recommend clicking the 'Save Page' button after each team member addition or modification.
3. To add additional team members, click the 'Add Another Member' button.
4. To remove a team member, check the 'Remove Member' checkbox for that team member. Only the Lead and CO-PIs can remove a team member.

Section III: Research Finance Administrator

The Lead PI must designate a qualified Research Finance Administrator (RFA) from her/his department. The Lead PI should consult the RFA to complete the budget. The designated RFA will have complete access to the application for completing the budget section, but will not be able to submit the application. Again, the RFA will receive a confirmation once the application is submitted by the Lead PI.

Step 1: Provide the following information for the Lead PI's department RFA using the on-line application system.

- SUnetID
- Does this individual ordinarily handle budget and reporting information? (Check box)
- First Name
- Last Name
- School
- Department
- Title
- E-mail
- Task org to use, if awarded

Section IV: Budget

Project Start Date: 10/01/2019

Project End Date*:   10/01/2021
*Please change the end date default if you wish to have a shorter period of performance.
Note: A financial and narrative report is due at the conclusion of the project and after the first 12 month period, if the period of performance is longer than one year.

Funding guidelines and instructions: Important points to keep in mind

- The research committee will consider projects with budgets up to $200,000 maximum over two years (approximately $100,000 per year).

- **Faculty salary may not be more than 20% of the total budget; Faculty salary is <u>not</u> required. The justification should state when 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. (Please consider equipment under $5000 as expenditures for supplies.)

- Roles are required to be clearly and substantively defined in the budget justification section.

- Conferences or workshops will not be funded, although we do encourage proposals for EVP Small Grants to support scoping meetings to explore new research project possibilities.

- There may be occasions when hiring consultant services may be necessary to support the grant when these services cannot 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.

- 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*

- For any proposed subawards, a complete scope of work must be included in the proposal, as well as an A-133 form, a budget and a strong justification. Any project subawards must be pre-approved by the Director of the Stanford Woods Institute.

- Enter all budget numbers in US dollars rounding up to the nearest whole dollar values. Please do not use the '$' symbol or commas in your entries; number values only.

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

- Enter budget numbers in the appropriate fields on the application form then use the budget justification narrative field at the bottom of the form to provide further detail and explanation for how each line item benefits the project. Justification should not include calculation narrative, but rather the benefit to the project. **Please use the appropriate fields on the form and do not enter your budget in the bottom budget justification narrative field.**

- *REIP 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.*

Step 1: Provide the following information using the on-line application tool: Rough estimates are acceptable at the LOI stage.

- Salary (51100)
- Benefits (51700)
- Tuition (51970)
- Travel Domestic (52410)
- Travel International (52420)
- Travel destination
- Participant Support (52435)
- Participant Travel (52436)
- Equipment Lease (52901)
- Equipment Non-Fab (53101/55001)
- Equipment Fab (53101)
- Consultant Fees (54201)
- Materials and supplies (55201)
- SLAC Charges (56801)
- Student Stipend (57000)

- Interdepartment Costs Other (58501)
- Animal Care (58701)
- Other Inclusions (50001)

Please include a clear, narrative budget justification of the benefit to the project for each line item, within the categories below. Include a clear and substantive definition of team roles, where not included in the project description.

1. **<u>Key personnel</u>**: include % effort by appointment type i.e. Academic Year (AY/SMR) and Calendar Year and $xxx for each salary and tuition
2. **Benefits**: $xxx
3. **<u>Trave</u>l**: $xxx provide breakdown by domestic, international, and participant travel and an explanation of each.
4. **<u>Equipment</u>**: $xxx with description of equipment and disposition of asset i.e. is the expense shared? Is it fabricated at Stanford? Is it leased?
5. **<u>Materials and Supplies</u>**: $xxx provide explanation of materials budgeted for, use, and allocation if applicable.
6. **<u>Consultant/Professional Services</u>**: $xxx provide explanation of services and how it benefits the project.
7. **<u>Other Direct Costs</u>**: $xxx *describe other line item costs not explained in the categories above and provide explanation of how it benefits the project*.

Section V: Validate Application
Step 1: Use the on-line application system to verify that all required fields have been completed. Complete any items noted as incomplete in the validation in order to complete submission successfully.

Section VI: Submit Application
Step 1: Once the letter of intent has been submitted through the on-line application system, the Lead-PI will receive a confirmation e-mail, as will the designated Research Finance Administrator.