**C-DEBI Graduate Student and Postdoctoral Fellowship Program**

**Objective:** C-DEBI provides support for graduate student and postdoctoral fellowships awarded on the basis of scientific excellence and the appropriateness of the subject matter to Center objectives. The goal of the fellowship program is to stimulate the advancement of deep biosphere research through the training of a new generation of innovative scientists. Potential fellows should contact and discuss research topics for fellowships with potential advisors, as successful candidates will be expected to have well-conceived research plans as well as willing advisors. **C-DEBI values a diverse research environment and encourages proposals from applicants who would help to improve diversity in C-DEBI and STEM fields.**

**Proposal Parameters:** Fellowship proponents are invited to respond to the [annual research call](http://www.darkenergybiosphere.org/research/proposals.html) with proposals that will significantly advance C-DEBI's central research agenda: to investigate the subseafloor biosphere deep in sediments and the volcanic crust, and to conduct multi-disciplinary studies to develop an integrated understanding of subseafloor microbial life at the molecular, cellular, and ecosystem scales. Phase 2 of C-DEBI comprises a transition from dominantly exploration-based investigations to projects that balance discovery with hypothesis testing, data integration and synthesis, and ecosystem modeling.

**Requirements:** Each fellowship applicant will identify a primary advisor, who agrees to sponsor them and manage logistical aspects of their support (office and lab space, materials and supplies for conducting research). The graduate fellowship applicant must be a student in good standing who has been accepted into a graduate program. The primary advisor of all graduate student and postdoctoral fellows will be required to commit to meeting with the fellow to discuss research progress at least twice monthly and to provide means of allowing broader discussion about her or his research – this can be in the form of departmental seminars, group meetings, etc. The primary advisor is also required to provide support for the fellow to attend an appropriate national meeting (e.g., AGU, ASM, ISME, ASLO, ISSM). Fellows are encouraged to go to the [Fall American Geophysical Union (AGU) Meeting](http://www.agu.org/meetings/) in San Francisco as this is the major meeting that many C-DEBI participants attend. Fellows are expected to attend [annual C-DEBI meetings](http://www.darkenergybiosphere.org/internal/annualmeetings.html) supported directly by C-DEBI. *The advisor should include a statement agreeing to these points in their recommendation letter.*

> See our [graduate student and postdoctoral mentoring plan](http://www.darkenergybiosphere.org/internal/docs/C-DEBIMentoringPlan_2015.pdf).

**Duration and Renewal:** We anticipate successful proposals to start 4/1/16 in alignment with our funding periodicity, however a delayed start date for graduate and postdoctoral fellowships is possible and will be a consideration in the review process.Graduate student and postdoctoral fellowships are available for a maximum of 2 years, depending on a successful evaluation near the end of year 1 of the fellowship. Fellows will submit a progress report on their achievements (2 pages maximum including any presentations given or papers published that can be listed separately), a one page summary of the proposed work for the second year and a letter of progress from the advisor to an ad-hoc oversight committee whose approval will be required for the release of the second year of fellowship funding.

**Fellowship Application:**

*Graduate Student Fellowship proposals* should include an institutional letter of intent, a title, a short project summary of 100 words maximum written for a broad audience, a project description of not more than 3 pages (font size not smaller than 11 points) including a broader impacts statement anda data management plan, a separate bibliographic reference section, a proposal implementation statement, a detailed budget and budget justification including institutional overhead, a NSF-style 2-page CV, a recommendation with statement of commitment from the anticipated fellowship advisor, a second faculty recommendation, and (if applicable) the [C-DEBI IODP Sample and Data Access Form](http://www.darkenergybiosphere.org/research/docs/C-DEBI_IODP%20Sample%20and%20Data%20Access%20Form.docx).

*Postdoctoral Fellowship proposals* should include an institutional letter of intent, a title, a short project summary of 200 words maximum written for a broad audience, a project description of not more than 5 pages (font size not smaller than 11 points) including a broader impacts statement and a data management plan, a separate bibliographic reference section, a detailed budget and budget justification including institutional overhead, a NSF‐style 2‐page CV, a recommendation with statement of commitment from the anticipated fellowship advisor, the names of 3 references, and (if applicable) the [C-DEBI IODP Sample and Data Access Form](http://www.darkenergybiosphere.org/research/docs/C-DEBI_IODP%20Sample%20and%20Data%20Access%20Form.docx).

Details on submission components:

1. **Institutional Letter of Intent** - The home institution's Sponsored Research Office must submit an institutional letter of intent indicating the official submission of the proposal and the contact at the institution who will be receiving the award on behalf of the institution. [[Details on the NSF award](http://www.darkenergybiosphere.org/research/grantFAQs.html#source)]
2. **Project Description** - Include a description of the proposed research (statement of the problem, background and relevance to previous work, discussion of methodology and procedure to be followed, explanation of new or unusual techniques, and discussion of expected results, significance, and application) as well as a broader impacts statement (see below), and a brief plan for making data public and accessible in accordance with the [C-DEBI Data Management Plan](http://www.darkenergybiosphere.org/internal/docs/C-DEBIDataManagementPlan_2015.pdf). The research project should clearly be the applicant's own endeavor and should demonstrate the applicant’s capability or potential for carrying out the project. Research goals should be realistic and attainable within the expected period of the fellowship. As necessary, the methodology section should also discuss any relevant pilot studies, projected numbers of samples, sampling strategies, and both limitations and strengths of the proposed techniques. Literature citations should be included throughout the proposal wherever appropriate.
3. **Broader Impacts Statement -** The Broader Impacts statement serves two purposes in our commitment to [NSF’s Broader Impacts Criterion](http://www.nsf.gov/pubs/2007/nsf07046/nsf07046.jsp): to further integrate research and education with a focus on early career professional development and to provide training to early career scientists in developing a Broader Impacts statement. Proposals must include a Broader Impacts statement (<200 words under a “Broader Impacts” heading), detailing how the fellow will participate in an Education, Outreach, and Diversity activity each year they are funded. Fellows will coordinate with the [C-DEBI Education Director, Stephanie Schroeder](mailto:slschroe@usc.edu), to ensure the activity is purposeful and relevant to C-DEBI outreach. Resulting products will be made available on the C-DEBI webpage. Example activities include:

* Present 2 research talks at a community college(s)
* Volunteer at an Informal Science Education institute (e.g., aquarium, science museum, etc.) and develop an activity for the public with an educator
* Develop a lesson plan with a K-12 teacher
* Plan 2 professional development webinars
* Mentor a young researcher (e.g., high school, community college, undergraduate student) in the lab
* Participate in professional development sessions at the fellow’s home institution (2, less depending on time commitment)

1. **Proposal Implementation Statement** (graduate fellowships only) - Include a 1 page statement briefly describing the research facilities where you plan to carry out laboratory testing, if applicable, and a timeline and schedule of your proposed research and broader impacts activities.
2. **Budget and Budget Justification –** Funding for a fellowship can include stipend/benefits (typical salaries not including benefits on the order of $32K for graduates and $50K for postdoctorals), a research and/or travel budget of $1000 for graduate students and $2500 for postdoctorals, and institutional overhead. Funds will be distributed directly to the advisor’s home institution. The home institution must be a US institution able to receive NSF funding as a subaward.
3. **Curriculum Vitae** - Include relevant educational history (degrees and dates awarded); fellowships, scholarships, and awards received; academic honors received; society membership(s); employment experience (including any internships); and any authored or co-authored journal articles, abstracts, or other publications related to your proposed research.
4. **Faculty Advisor Material** - Include a copy of the faculty advisor's two page curriculum vitae and a letter of recommendation addressing 1) the degree of originality and independence the applicant has shown in developing the proposed fellowship research and 2) how the research is intellectually and fiscally linked to the advisor's research (funded or pending). The advisor should also include a statement of commitment to mentoring the advisee as described in the requirements section above. This can be submitted directly to [C-DEBI Managing Director, Rosalynn Sylvan](mailto:rosalyyl@usc.edu?subject=Fellowship%20Recommendation).

Please submit your proposal as a single PDF in response to the [annual research call](http://www.darkenergybiosphere.org/research/proposals.html) via our [online submission form](http://www.darkenergybiosphere.org/forms/2016rfp-research/).