C-DEBI GRADUATE STUDENT AND POSTDOCTORAL MENTORING PLAN

C-DEBI seeks to train the next generation of subseafloor biosphere researchers in the United States. To do so, it provides two years of financial support for graduate student and postdoctoral fellows across the country, accompanied by this detailed mentoring plan. The success of these efforts will be monitored and adjusted as needed by C-DEBI leadership; feedback from the fellows will be regularly sought. Explicit program checks and balances to ensure balanced and equitable mentoring among all C-DEBI fellows include:

**Primary advisor and oversight committee: roles and responsibilities.**

Each 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 primary advisor will be required to meet at least twice monthly with the graduate student or postdoctoral fellow to discuss research progress 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 will be encouraged to go to AGU as this is the major meeting that many C-DEBI participants attend.

Additionally, fellows will submit a report on their yearly achievements to the Education Director, Schroeder. In consultation with the Executive Committee, she will provide feedback to the fellows. This is a required step prior to the release of the second year of fellowship funding. This provides a checkpoint to ensure that the fellows are making credible progress and that their primary advisors are assisting to their best ability. It also exposes the fellow to established researchers in the field and will likely create opportunities for ship-going experiences and broadening of research horizons. C-DEBI fellows will also be required to complete an online ethics training course. The modules were developed by former STC-CMDITR (http://www.darkenergybiosphere.org/about-our-center/ethics-policy/).

**C-DEBI graduate student and postdoctoral networking opportunities and professional development.**

C-DEBI coordination requires significant emphasis on directed networking—our annual meetings, web and cyber infrastructure, workshops, interdisciplinary expeditions; these components are critical for the broader success of C-DEBI, but also intrinsically provide opportunities for our graduate student and postdoctoral fellows. Coupled to each C-DEBI annual meeting, there will be a one-day meeting exclusive to graduate student and postdoctoral fellows to foster both academic and social networking. This meeting will include a professional development workshop organized by Education Director Schroeder. For example, for the 2015 Annual Meeting held in Marina, CA, we collaborated with the Monterey Area Research Institutions’ Network for Education (MARINE) to hold a joint workshop for both organizations’ graduate students and postdoctoral fellows before our Annual Meeting. Future workshops will be developed and local partners included whenever possible, and workshops will range from effective science communication to how to interview for jobs both in and out of academia. Furthermore, we will involve fellows directly in the planning and development of these meetings.

In addition to this formal meeting, we will also encourage and support an informal, grass-roots level of support through social-networking sites such as Facebook, Twitter, and a mailing list strictly for graduate students and postdoctoral fellows, a strategy already proven for other scientific communities and groups. Finally, all fellows will be required to participate in a professional development program with modules on research ethics, diversity, and outreach, and electives ranging from leadership and mentoring, to curriculum design and teaching/presenting class materials to grant writing, career-life balance, and more (as described in Section III d).

The advising plan and involvement of activities outlined herein exposes young scientists to leaders in their field, which is critical for successful career development, and also serves as a major confidence-building experience at a career stage when lack of confidence can be a significant obstacle.