



## **Subseafloor Biosphere – Astrobiology Postdoctoral Fellow – Institute for Astronomy, University of Hawai'i Manoa**

The Institute for Astronomy (IfA) invites applications for a postdoctoral fellowship with interests in the Biosphere of Subseafloor Basaltic Crusts to work with the University of Hawai'i's NASA Astrobiology Institute lead team (<http://www.ifa.hawaii.edu/UHNAI/>). The Fellowship will be available in early 2009 upon availability of funds. The Fellowship is for three years assuming satisfactory progress and continued availability of funds. Fellows will receive a stipend of approximately \$4,800 per month, a small relocation allowance and basic research costs.

The UH lead team maintains an innovative and multi-disciplinary research environment linking astronomical, biological, microbiological, chemical, and geological sciences to investigate the origin, history, distribution and role of water as it relates to life in the universe. The program centers around interactions with an interdisciplinary group of postdoctoral fellows. We have a particular need for an individual interested in the study of microbial geochemistry and ecology of subseafloor basaltic crust environments, as part of a deep subseafloor microbial observatory. This interdisciplinary project exploits direct access to deep basement fluids available via IODP borehole CORK observatories installed at Cascadia Basin on the flanks of the Juan de Fuca Ridge.

The Fellow will participate in the design of instrumentation and performance of experiments to investigate the nature and rate of metabolic pathways in this dynamic low energy environment. The Fellow will join the deep subseafloor biosphere team and participate in funded submersible cruises with HOV (Alvin) or ROV (Jason). The Fellow is expected to collaborate with other fellows and co-investigators in an interdisciplinary environment and to participate in group activities (*e.g.* seminars, meetings, discussion groups etc). For example, team co-investigators also have active research programs related to hot springs along the mid-ocean ridge axis and ultramafic-hosted springs in subduction zones.

Minimum qualifications include a Ph.D. in Oceanography, Microbial Geochemistry / Ecology, or a related field, a record of research in microbial geochemistry in low energy environments as demonstrated by publications, good computer and software skills, and expertise in sensitive tracer techniques. Desirable qualifications include experience with functional genomics and/or field experimentation and instrument development. Education and public outreach is an integral part of the Astrobiology program and experience with or interest in E/PO will be considered positively in an application.

Questions about the Deep Seafloor Biosphere project may be directed to: Dr. James Cowen by email ([jcowen@soest.hawaii.edu](mailto:jcowen@soest.hawaii.edu)).

Questions about the UH Astrobiology lead team's program may be directed to Dr. K. J. Meech ([meech@ifa.hawaii.edu](mailto:meech@ifa.hawaii.edu)).

To Apply, please submit the following:

- Contact information - name, email, phone(s), fax, address.
- Current position and location
- Date of Ph.D and where and what field
- Date available if selected for Fellowship.
- If non-US citizen, visa status (note: funding only allows support for fellows entering on a J1-visa)
- Current CV and Bibliography
- Letters of recommendation – Please arrange to have 3 letters of recommendation sent separately.

Application materials can be sent (preferably via email) to:

Via snail mail to: Karen Ehrhorn, Institute for Astronomy, 2680 Woodlawn Drive, Honolulu, HI 96822.

Via email to: [ehrhorn@ifa.hawaii.edu](mailto:ehrhorn@ifa.hawaii.edu)

Via fax to: NAI Postdoc application, Fax no. (808) 956-4644

Applications will be reviewed beginning February 1, 2009 and will remain open until the Fellowship is filled.