

Trans-Amazon Drilling Project
ICDP workshop
Manaus, Brazil, 18-20 March 2015

We invite applications for participation in a workshop, sponsored by the International Continental Scientific Drilling Program, to develop a full proposal for drilling and recovering complete Cenozoic sedimentary sequences at four sites across the Brazilian Amazon. The major goals of the proposed drilling are to: (1) determine the Cenozoic history of biodiversity of the Amazon/Andean Neotropical rain forest (using palynomorphs and phytoliths), a forest that is essentially Cenozoic in age; (2) determine the Cenozoic paleoclimate history of tropical South America (using organic and inorganic geochemical markers), a region that has remained at nearly the same latitude during this time period; (3) determine the Cenozoic history of Andean uplift (from the age, provenance, and volume of erosional products shed into its foreland basins); and (4) determine the Cenozoic history of Amazon drainage (from studies of provenance to decipher basin-basin connectivity and facies/paleoenvironmental analysis). Achieving these individual goals will help to address the larger question of how mountains, climate, and biota are coupled on evolutionary timescales.

Additional significant goals to be addressed by drilling are to: (1) determine the history of Cenozoic basin development, (2) characterize the quality and quantity of groundwater available in aquifers in each basin, (3) constrain the geodynamic and neotectonic history of the basin, and (4) recover a continuous sequence of the basic igneous rocks, related to the Central Atlantic Magmatic Province and the opening of the Atlantic, that unconformably underlie Cenozoic sediments throughout much of the Solimões and Amazonas Basins.

Members of the international scientific community interested in contributing to the workshop and the project are invited to submit an application to pbaker@duke.edu before January 22, 2015 with contact details, a short CV, a brief summary of their relevant expertise, and their intended contribution to this project. Scientists will be invited on the basis of their relevance to the aims of the project and the need for balanced representation of disciplines. Full or partial travel support will be available. Preference will be given to scientists from ICDP member nations.

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