



**The South Atlantic Climate Change (SACC)**  
*A Cooperative Research Network sponsored by the  
Inter-American Institute for Global Change Research (IAI)*



## **ANNOUNCEMENT**

### **Undergraduate - Graduate Student/Young Scientist Fellowships 2007**

The South American Climate Change (SACC) Consortium is accepting applications for one-year fellowships for South-American graduate students or young scientists carrying out research work related to their dissertation/thesis work. In this opportunity we will sponsor or co-sponsor work on the following Research Subjects:

- Studies of the ocean circulation at regional scale and associated frontal systems and of their impact on the diversity and abundance of zooplankton and fish larvae. We are particularly interested in studies of the Magellan Strait through-flow, tidal, buoyant plume and shelf break fronts off southeastern South America.
- The effect of the continental runoff and its variability on the sediment composition and distribution over the continental shelf off southeastern South America.
- We will also welcome applications dealing with societal impact of ocean variability through its influences on coastal climate and fisheries.

The applicants should have recently completed their master or doctoral work, or be graduate students in Oceanography, Marine Biology or a related field. The proposed work should be carried out at a research facility located in one of the IAI Member Countries (refer to [www.iai.int](http://www.iai.int)). Applications from advanced undergraduates, who are completing their thesis, are welcomed. The fellowship is intended for partial support of ongoing research or short-term visits to other institutions. In the later case, the fellowships will provide monthly stipends only, at the host institution rates and depending on funds available. Airfare and other travel expenses will not be covered by SACC.

Applications should include a short proposal describing the proposed activity and time required to complete the work. The proposal should take into consideration the SACC's scientific objectives (see below) and Research Subjects (see above). The applicants should indicate the institutions where they expect to carry out their scientific work. In case of travel, letters of the host institutions stating their acceptance of the students are also required.

Applications should be sent to Jose H. Muelbert, at [saccfellow@furg.br](mailto:saccfellow@furg.br), no later than **27 November, 2006**. The SACC Executive Committee will evaluate applications. Applications must include:

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| a- Curriculum Vitae (2 pages)                     | filename: <i>lastname_cv.doc</i>                                |
| b- Two letters of recommendation                  | filename: <i>lastname_ref1.doc</i> and <i>lastname_ref2.doc</i> |
| c- Letter of endorsement from your advisor        | filename: <i>advisor.doc</i>                                    |
| d- A short proposal (2 pages)                     | filename: <i>lastname.doc</i>                                   |
| e- Letter from the host institution (visits only) | filename: <i>lastname_end2.doc</i>                              |

**IMPORTANT: Application and all supporting material should be prepared in English and sent electronically.** Please attach **all** files to your application e-mail.

The South American Climate Change (SACC) Consortium is an initiative sponsored by the Inter-American Institute for Global Change Research (IAI) through the Cooperative Research Networks (CRN) Program. The general purpose of the SACC Consortium is to coordinate and enhance human and institutional resources in South American countries, in order to advance the understanding of the coupled effects of global change and climate variability on the oceanic, atmospheric and terrestrial ecosystems.

The primary scientific goal of SACC is to advance our understanding of the physical mechanisms that influence the biological processes in highly productive regions of the western South Atlantic.

The scientific objectives are:

- 1) Evaluate the role of thermohaline fronts in the enhancement of biological production
  - Study the effect of the circulation and mixing on the distribution of early life stages of species of economic importance (i.e. shrimp, squids, fish)
  - Study changes in biological properties associated to mesoscale oceanographic features, such as fronts, eddies and upwelling
  - Produce scenarios of biological production under different oceanographic conditions
- 2) Identify the physical mechanisms that control the mass, vorticity, energy and biogeochemical (species, nutrients, CO<sub>2</sub>, sediments) exchanges between the deep ocean and the continental shelf, and their variability from the subseasonal to interannual time scales
  - Explore the role of western boundary currents mesoscale variability on the nutrient enrichment of the outer shelf and shelf break via eddy pumping and shelf/deep ocean exchanges.
- 3) Determine the influence of buoyant inflows on the production and biodiversity of the marine environment
  - Evaluate the buoyancy and nutrient supply from the Straits of Magellan, the Plata and Patos Lagoon, and their variability from synoptic to interannual time scales
  - Characterize the paleo-environmental conditions of continental discharges based on a sedimentological study of the continental shelf.

Additional information on the SACC research activities can be obtained at the project website: <http://glaucus.fcien.edu.uy/pcmya/sacc/>