The Laboratory for investigation of Socioenvironmental Systems- LiSS at INPE has an opportunity for a PosDoc scholarship from FAPESP. Registration is open until May 31, 2021.

Below is a summary of the project. Attached are 3 documents with more details.

- 1 An extended SUMMARY of the project and necessary qualifications.
- 2 THE CALL itself with necessary documentation and deadlines.
- 3 The Work Plan to be developed

SUMMARY:

This PostDoc opportunity is linked to a FAPESP sponsored project that is part of the transnational project, "Integrated risk mapping and targeted snail control to support schistosomiasis elimination in Brazil and Cote d'Ivoire under future climate change", promoted by Belmont Forum and with participating teams from United States, United Kingdon, Africa and Brazil. The postdoc fellow will be supervised by Dr. Antonio Miguel Vieira Monteiro, at National Institute for Space Research, INPE at São José dos Campos, São Paulo, in partnership with researchers and labs of the four countries.

The micro-region of Ourinhos has a combination of environmental and social factors (hidrology, vegetation, soil characteristics, land cover and land use, dams, an agrarian dynamics, the health system services) that has kept schistosomiasis transmission active in the region. The objective of this project is to produce innovative cartographies to represent elements of the natural landscape and the social landscape in an integrated manner for an area, in the midlle section of the Paranapanema river, of active transmission of schistosomiasis involving municipalities in the micro region of Ourinhos, SP. The project involves mainly the use of optical images form the Earth Observation Satellites Programs (Landsat-USA/NASA), CBERS-China/Brazil and Sentinel-EU/ESA) and images generated by drone with embedded multispectral Camera and Laser Scanner sensors. In addition to the remote sensing data information from different sources for hydrographic databases, land use and coverage databases, geomorphometric databases, geology and pedology mappings and the point-localization of intermediate hosts (snails), the demographic and agricultural censuses and the CNEFE (IBGE) bases, the information from the CAR (Cadastro Rural Ambiental) and data form the health information systems. The resulting cartographies must describe the

characteristics of this regional landscape associated with the conditions involved in the production of the risk for schistosomiasis in this territory.