Job: Postdoctoral fellowship in landscape genomics at the Vale Institute of Technology (Belém, Brazil)

We are looking for an outstanding postdoctoral fellow to join the Biodiversity and Ecosystem Services research group at the Vale Institute of Technology. Our group contributes towards a compromise between mining and the conservation of biodiversity, and comprises renowned botanists and ecologists. Several mines are already operating in the Carajás National Forest (Pará, Brazil), and the world's largest iron-ore mine just began operating in the region. There is thus a pressing need to revise conservation actions and effectively restore the iron-rich tropical grasslands known as Canga, where most mining activities are concentrated. The main goal of the postdoctoral project is to employ novel landscape genomic tools to understand how landscape-scale processes shape the population dynamics and processes of local adaptation in native Canga plants, and thereby help guide Canga conservation and restoration efforts. By identifying local adaptations to environmental conditions and assessing the vulnerability of different genetic variants to future climate change, the work is expected to help guide restoration efforts that effectively recover ecosystem functions in degraded Canga habitats.

The fellow’s main duties include designing research, collecting plant samples in the field, performing DNA extractions and quality assessments in the lab, sending samples overseas for Next Generation Sequencing (RAD-Seq), analyzing large SNP datasets, lecturing and supervising graduate students from our Master’s program, and coordinating thematic seminars and workshops. Candidates must have completed a PhD, have published at least one scientific paper, and be prepared to move to Belém by October 2017. Preferred skills include knowledge of one or more programming languages (including R) and experience in bioinformatics, population genetics/genomics, and/or spatial analyses (GIS). The fellowship has a duration of two years and a value of R$ 7000 per month. All research expenses will be covered by the Vale Institute of Technology.

Applicants are asked to submit a cover letter of one page introducing themselves, an updated CV and the contact information of two professional references. All documents should be merged into a single PDF and sent by September 15th 2017 to Dr. Rodolfo Jaffé: rodolfo.jaffe@itv.org

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