

Postdoctoral position in Plant Cytogenetics

A two-year postdoctoral position in **Plant Cytogenetics** is available in the Department of Botany, University of São Paulo, Brazil.

1. General information

1.1. Grant: Sapindales: phylogeny and diversification in the neotropical region (FAPESP: 14/18002-2)

1.2. Project sub-discipline: Plant Cytogenetics

1.3. Principal investigators: José Rubens Pirani and Pedro Dias

1.4. Supervisor for this project: José Rubens Pirani

1.5. Institution/Department: University of São Paulo/Biosciences Institute / Department of Botany

1.6. Fellowship: R\$ 6.143,40 per month (there are no taxes on fellowships in Brazil)

1.7. Research contingency funds: intended for use in activities developed by the fellowship holder, strictly related to the fellowship research project, during the term of the fellowship. The additional funds are equivalent to 15 per cent of the annual value of the fellowship

1.8. Deadline for application: November 21, 2015

1.9. Published: October 21, 2015

2. Project description: “Repetitive DNA in Sapindales: evolutionary impacts at a global scale”

Sapindales representatives have highly variable chromosome numbers and genome sizes, which are usually associated with repetitive DNA. The fellow will investigate 1) chromosome numbers and genome sizes, (2) repetitive DNA (e.g., transposons and satellite DNA), and 3) evolutionary patterns in DNA content and karyotypes. This project will use flow cytometry, standard painting and FISH techniques. Also, Illumina sequencing technology will be used.

3. Tasks

The position is part of a research project, supported by FAPESP (2014/18002-2) at University of São Paulo, on the phylogeny and diversification of the Sapindales in the Neotropical region. The work includes the use of flow cytometry, standard painting and FISH techniques. During the first year, the fellow is requested to acquire abilities on sample preparation to Illumina platforms.

The labwork will be conducted at three labs: Plant Systematics Laboratory of the Department of Botany and Biomedicine of the School of Arts, Science and Humanity, both at University of São Paulo, in São Paulo; and Biosystematics and pollination of the State University of Campinas, in Campinas.

4. Qualifications

To be qualified for the postdoctoral position the applicant should have:

4.1. PhD degree in Cytogenetics/Systematics/Phylogenetics/Evolutionary Biology or similar direction of studies, and PhD dissertation on plant cytogenetics. The PhD degree should have been received no more than three years before the deadline for applications.

4.2. Publication record in floral anatomy and morphology (if in Sapindales, it will be a plus).

4.3. Fluent English and availability to spend sometime abroad.

4.4. Experience with cytogenetics techniques, flow cytometry, and FISH.

4.5. Availability to initiate working on the project as soon as FAPESP finishes documentation checking and approves the application.

* Retired candidates are not allowed

5. Criteria for selection

Among qualified applicants, selection is made according to scientific merits, quality of the PhD dissertation, personal skills, the applicant's documented knowledge in subjects of relevance for the research area, ability to master English language (both spoken and written), analytical ability, creativity, initiative, independence, teamwork and ability to cooperate. Previous experience with Sapindales and knowledge of relevant theory and methods (phylogenetic analyses) weigh heavily. Experience with botanical fieldwork, taxonomic work, and DNA labwork are considered as additional qualifications.

Omissions in this announcement will be decided by the PI of the FAPESP grant, safeguarding the rules established by FAPESP (<http://www.fapesp.br/en/5427>).

6. More information

Please contact José R. Pirani (pirani@usp.br) or Pedro Dias (pdias@usp.br)

7. To be included in the application (pdf format only)

- 7.1. Maximum one A4-page of personal presentation and your reasons for applying (letter of intent)
- 7.2. Curriculum vitae with publication list (please include DOI links)
- 7.3. Copy of three selected publications. Copy of PhD dissertation and PhD degree certificate or date of scheduled defense (until November 30, 2015)
- 7.4. A list of two persons who may act as references (with e-mail addresses)

Please send your application, marked with “FAPESP 2014/18002-2 – PD4 – Cytogenetics” in the subject field, to both pirani@usp.br and pdias@usp.br no later than November 21, 2015.

Applications will be reviewed on November 23, 2015, but are also considered after this date until the position is filled.