

**EL COLEGIO DE LA FRONTERA SUR  
(ECOSUR)**

**RESEARCH POST OPPORTUNITY**

**To all researchers interested in occupying a full time Associated or Titular research post in the field of:**

**Tropical Mushrooms**

**JUSTIFICATION**

The cultivation of edible mushrooms in Mexico is considered an efficient rural development strategy as it is an activity that allows food production, improved resource exploitation (mainly waste and agricultural sub-product management), generate employment, generate family income, reduce rural emigration and incorporate women as part of family economic activities.

Fungi cultivation has been so successful in Mexico that currently, after more than 20 years since its initiation. Mexico is the principal producer of *Pleurotus* mushrooms spp in the Americas. Overall, introduced mainly European strains are used for commercial production, thus drawing attention to indifference regarding species richness and diversity of native mushrooms which are not exploited even though they are better adapted to the environmental conditions in Mexico and grow well on regional substrates. This situation could be partly due to that these native varieties are of lower quality than commercial varieties.

Since the creation of the Tropical Mushrooms research area in Ecosur during the 1990's, a collection of live strains of macromycetes, predominantly from edible species, has been established. This culture collection contains over 400 native and introduced strains, belonging to 34 genera of edible fungi. The fact that 80% are species and varieties of *Pleurotus* gives the collection special value as it is probably the largest collection of this type in the Spanish speaking world.

Notwithstanding the importance of fungi cultivation and the availability of strains, Ecosur has furthered little in the selection and genetic improvement of strains of commercial interest. In order to address this, a researcher with a foundation in genetics and molecular biology is required; to firstly contribute to the generation of new variety and hybrid strains and then

subsequently widening their research towards other genera of edible and medicinal fungi that benefit the growers and consumers of Mexico and Central America. An additional interest is the genetic improvement of strains already selected by traditional methods in our laboratory for the bioremediation of effluents contaminated with pesticides such as endosulfan and chlorotalonil.

### **POST DESCRIPTION**

- Plan, develop and run research projects and publish the results
- Coordinate staff under your responsibility and administer material and financial resources assigned to you.
- Participate in the formation of human resources through teaching.
- Develop wide links with diverse sectors of society such that results from research can efficiently respond to social demands.
- Obtain funding for the financing of research projects.
- Fulfill the requirements indicated by the Ecosur Academic Staff Statute and other applicable arrangements.

### **POST REQUIREMENTS**

- A PhD in genetics, biotechnology, molecular biology, biochemistry, microbiology, mycology or related areas
- Preference is given to experience in phylogenetic studies, fungi genetic improvement and physiology of macromycetes
- An active academic production over the last few years. Knowledge and experience of the zone are desirable but not indispensable.
- An excellent handling of English (speaking, reading, writing).

For the Titular position, the following requirements should also be fulfilled:

- At least four years in scientific research or technology development following PhD completion, demonstrating individual contributions and an ability to direct research groups or projects.
- Proven experience through refereed publications.
- Scientific production published by refereed journals that demonstrates the candidates capacity for research work and the relevance and consistence of contributions to their specialist field ( at least eight refereed publications, of which at

least half should be in journals registered in the ISI index or in the CONOCYT Register of Mexican Scientific Journals).

- Participated in the formation of human resources for research through teaching and directed at least one masters or doctorate thesis.
- Demonstrate an ability to obtain external resources by being responsible for at least one financed research project.

## **SALARY**

Depending on academic opinion and post availability, the monthly salary for a titular researcher can vary between 21,541.60 and 30,475.20 Mexican pesos. Information regarding health and other benefits provided by ECOSUR can be consulted at <http://portaltransparencia.gob.mx/pot/remuneracionMensual/showConsulta.do?method=showConsulta& idDependencia=11109>

Write "1" in the "Clave de Puesto" box and press "buscar" (search). All researchers participate in the institutes "incentives for productivity program"

## **LOCATION OF VACANT POST.**

The post will be at the Tapachula Unit of ECOSUR, located on Carretera Antiguo Aeropuerto km 2.5, Tapachula, Chiapas, Mexico. The selected candidate will sign a letter pledging his/her attachment to this unit for a minimum period of five years

## **ABOUT THE INSTITUTION AND ACADEMIC AREA**

El Colegio de la Frontera Sur is a public multidisciplinary research centre focused on the development and knowledge management of Mexico's southern border. Its programs are orientated to the generation of scientific knowledge, human resource formation and the design of technologies and strategies that contribute to sustainable development. It belongs to the system of public research centres of the Consejo Nacional de Ciencia y Tecnologia (CONACYT) (National Science and Technology Council) and has 123 researchers. The post is within the Tropical Mushroom Research Line, Department of Environmental Biotechnology which belongs to the Alternative Production Systems Academic Area. For more information about ECOSUR consult the website [www.ecosur.mx](http://www.ecosur.mx)

## REQUIRED DOCUMENTS

Interested candidates must complete the form at [http://www.ecosur.mx/index.php?option=com\\_artforms&formid=18&lang=esp](http://www.ecosur.mx/index.php?option=com_artforms&formid=18&lang=esp) which must be sent together with the following documents:

- Letter of presentation
- Curriculum Vitae
- Proof of completed PhD
- Copy of recent scientific publications
- Research project proposal (6 pages, Font 11, spacing 1.5, pdf format)

NOTE: the research project proposal document must not have your name on it. The committee that determines who are invited to the next stage of this process, evaluates this document on an anonymous basis

- Three references accompanied by electronic mail contact addresses (NOT recommendation letters)

## SELECTION PROCESS

Applications will be received in electronic format until **7<sup>th</sup> October 2011.**

The selection process will be carried out in two phases. In the first, the presented project and curriculum will be assessed in order to select the aspirants for the second evaluation phase. The candidates that pass to the second phase will be **contacted on the 14<sup>th</sup> of October** and will be **interviewed on the 21<sup>th</sup> or 24<sup>th</sup> of October** at the **Tapachula unit** of ECOSUR. The interview will include the presentation of one previous research study (20 min) and the research project to be developed in ECOSUR (10 min). The final decision will be based on the academic quality of the proposal, the candidate's experience, and the congruence of personal interests with institutional interests. The selected candidate for the post will be informed on the **25<sup>th</sup> of October**. Depending on the conditions necessary for the incorporation of the selected person, the post can be occupied from the **1<sup>st</sup> of November**.

## **SOLICITUDE FOR THE REPATRIATION OR RETENTION OF THE SELECTED RESEARCHER**

If the selected individual is of Mexican nationality and has never received support from the program of Consolidacion Institucional de CONACYT (repatriation or retention modality ) it will be required as part of the application to this post that the candidate submits his/her solicitude to this program. Applications for this program close on the **31<sup>st</sup> of October**. Incorporation to this program must be completed by 15<sup>th</sup> April 2012.

### **IMPORTANT INFORMATION FOR FOREIGN CANDIDATES.**

If the selected researcher does not possess Mexican nationality they must fulfill any immigration requirements. Any immigration procedures must be satisfactorily completed before occupying the post.

**More information can be requested at the following email address:**

[convocatorias@ecosur.mx](mailto:convocatorias@ecosur.mx).

**To facilitate the selection process telephone calls or faxed documents will not be received.**

If the committee so decides, the application process can be declared void.

We urge all qualified women candidates as well as residents of the southern border region to apply for the post.