**Internship – Plant Regeneration form Single Cells**

**Target Start of Internship**

Flexible

**Organizational Setting**

Department: Nuclear Sciences and Applications

Division: Joint FAO/IAEA Centre for Nuclear Techniques in Food and Agriculture

Section: Plant Breeding and Genetics

Unit: Plant Breeding and Genetics Lab in Seibersdorf

**Main Purpose**

The Plant Breeding and Genetics Laboratory (PBGL) develops /adapts innovative tissue culture procedures to accelerate mutation-assisted breeding of particularly trees or perennial crops such as coffee. Under the guidance of a Technical Officer, the intern will assist and interact with PBGL staff to develop and document robust methods to regenerate plants from single cells. These activities will provide the intern with a unique learning experience at the interface of biology, crop improvement, and International Development Cooperation.

**Tasks / Key Results Expected**

* Assist in optimising protocols to regenerate plants from single cells using advanced in vitro techniques
* Assist in the application of mutagenesis techniques to plant cell culture
* Analyse data and assist in writing protocols and training material for wider dissemination to Member States

**Knowledge, Skills and Abilities**

* Knowledge and practical experience in plant tissue culture is required
* Knowledge of plant biology is required

**Qualifications and Experience**

* University degree in a biological science, agricultural science, or related field.
* Documented work experience or strong interest in in vitro plant tissue culture techniques

**Internships**

The IAEA accepts a limited number of interns each year. The internships are awarded to persons studying towards a university degree or who have recently received a degree (see Internship web pages for further details).

The purpose of the programme is:

* To provide interns with the opportunity to gain practical work experience in line with their studies or interests, and expose them to the work of the IAEA and the United National as a whole;
* To benefit the IAEA's programmes through the assistance of qualified students specialized in various professional fields.
* The duration of an internship is normally not less than three months and not more than one year.

**Applicant Eligibility**

* Candidates must be a minimum of 20 years of age and have completed at least three years of full-time studies at a university or equivalent institution towards the completion of a first degree.
* Candidates may apply up to one year after the completion of a bachelor's, master's or doctorate degree.
* Candidates must not have previously participated in the IAEA's internship programme.
* Good written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Russian, Spanish) an asset.
* Candidates must attach two signed letters of recommendation to their application.