



**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS**  
**Terms of Reference for Intern**

<b>Name:</b>	
<b>Job Title**:</b>	Database development to support crop irradiation service for the FAO and IAEA Member States
<b>Division/Department:</b>	Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture (AGE)
<b>Programme/Project Number:</b>	
<b>Duty Station:</b>	Seibersdorf, Austria
<b>Expected Start Date of Assignment:</b>	1Q2019
<b>Duration:</b>	6 months
<b>Reports to: Name:</b>	Mr Qu Liang
<b>Title:</b>	Director AGE

**GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED**

The Plant Breeding and Genetics Laboratory develops/adapts technologies to assist member states to develop improved crop varieties using mutation breeding and related *in vitro* and molecular technologies for food security. The laboratory conducts applied R&D and training in the area of crop mutation breeding and related biotechnologies and also provides a crop irradiation service for all FAO and IAEA Member States and this since many decades.

The main tasks of the intern will be to develop and populate a database that will catalogue all relevant information related to PBGL's crop irradiation service. The intern is expected to have appropriate IT skills to advise on the type of database, such as for example Access or other type of database. This database is intended to be searchable using different queries such as crops/varieties irradiated, Member State requests, amongst others. Optional and depending on the IT knowledge and skills, the intern can be connected with the IT Department of the IAEA with regards to the design and implementation of a web interface linking the database with Member States requests for crop irradiation. The overall objective is to enhance the efficiency of handling and documenting requests for crop irradiation by the FAO and IAEA Member States. The intern can also assist with the analysis of data entered to detect new developments and trends for crop mutation breeding by Member States.

Tasks

- Develop a database for PBGL's crop irradiation service
- Data entry into the database
- Assist with the analysis of crop irradiation requests to identify recent trends in crop mutation breeding by FAO Member States

**KEY PERFORMANCE INDICATORS**

<b>Expected Outputs:</b>	<b>Required Completion Date:</b>
<ul style="list-style-type: none"> <li>• A searchable database for the crop irradiation service of PBGL</li> <li>• Database populated using available information/historical records since the 1970's</li> <li>• Data analysis of information stored in this database to retrieve relevant information with regards to recent trends in crop improvement using mutation breeding</li> </ul>	As required by the supervisor and by the end of the contract.