



## 1 Research Engineer position on chloroplast biogenesis

Laboratoire de Physiologie Cellulaire & Végétale, Grenoble, France

One Research Engineer position is available for 24 months in the Cell and Plant Physiology Laboratory (Univ. Grenoble Alpes, France) and more specifically in the team Chloroplast Proteome Dynamics and Biogenesis, to work on chloroplast biogenesis using *Arabidopsis* as a model. This position is supported by the ANR project "POLYGLOT". This project aims to uncover scaffolds of molecular interactions of cytosolic ribosomes with the chloroplast surface and provide functional roles for this interaction.

### Scientific context:

Intracellular trafficking of mRNAs and localized protein synthesis are fundamental mechanisms to control protein localization. It has been proposed for years that translation was mostly cytosolic or associated with the endoplasmic reticulum. However cytosolic mRNAs and ribosomes were also found associated with the mitochondria or chloroplast surfaces in many organisms such as fungi, animals or plants. In parallel, recent studies suggest that cytosolic ribosomes are heterogeneous and specialized, and directly implicated in the spacio-temporal regulation of translation.

The main objective of the ANR funded collaborative project "POLYGLOT" is to characterize the translation platforms associated with plant mitochondria and chloroplasts, and to explore the functions and regulations of mRNA targeting and translation at the surface of organelles. This project associates colleagues from IBMP Strasbourg and our team in Grenoble.

The mission of the Research Engineer, in the frame of POLYGLOT, will be to characterize the cytosolic ribosomes bound to the surface of chloroplasts, *i.e.* to determine their composition and how they interact with the chloroplast surface. He/she will also explore the mechanisms of mRNA targeting to chloroplast, using approaches previously developed in the teams of Grenoble and Strasbourg.

### Candidate profile:

Candidates must have a PhD in biological sciences. They should be able to work independently and cooperatively within a team. An expertise in plant molecular biology, biochemistry and plant biology is required. Preference will be given to candidates who have hands-on experience with RNA technologies, high-throughput screening and bioinformatics. Experience in organelles biology would be helpful but is not a prerequisite.

### Application:

This offer <http://bit.ly/32fFbFa> can be viewed at EmploiCNRS. Applications should be directly made on this site. Alternatively, applicants can also submit their application, as a single PDF document, by email to Norbert Rolland and Marcel Kuntz. The document must contain: (i) a cover letter describing their research interests, motivation for the position, (ii) an up-to-date CV, and (iii) the names and contact information of two persons willing to provide letters of support.

**Starting date:** from November 2019.

**Duration:** 24 months (renewable contracts of 1 year), according to the experience.

**Salary:** 2000 to 2200 euros / month (net salary), according to the experience.

**Workplace:** Laboratoire de Physiologie Cellulaire & Végétale, 17 rue des Martyrs, 38054 Grenoble cedex 9, France. Team Chlorogenesis: <http://www.lpcv.fr/en/Pages/ChloroGenesis/Presentation.aspx>

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