Postdoc in cell biology/biosensing

Theme:
Plant metabolism is highly dependent on environmental conditions, and in particular on the availability of nutrients such as phosphate and nitrogen in the surrounding environment. Our aim is to understand in a dynamic manner how intracellular phosphate content can influence cell metabolism (Hanchi 2018 DOI: 10.1104/pp.17.01246). There are fluorescent biosensors that can monitor intracellular Pi levels, and their use would be particularly appropriate in this context (Mukherjee 2015 DOI: 10.1104/pp.114.254003).

Description:
The postdoc will bring his or her skills in the utilization/design of new biosensors, in order to apply the use of biosensors to measurements under the physiological conditions used in our laboratory. This will entail optimizing/modifying experimental conditions and/or existing sensors for applications in plants and unicellular organisms. This work will be conducted as part of a collaborative research project between several research teams, funded by the ANR.

The work environment:
Our team ("Plant Signaling for the adaptation to their environment") offers a friendly working environment, within the BIAM institute at the CEA Cadarache. The team comprises 4 PhD students, 1 postdoc, 6 technicians and 7 researchers. The team's research is focused on understanding the mechanisms controlling water and ion absorption in plants. Website: http://biam.cea.fr/drf/biam/english/Pages/laboratories/lbdp.aspx

Qualifications:
The candidate must:
- have solid experience in the use or design of biosensors
- be proficient in cloning techniques
- be rigorous, enthusiastic and creative
- be a team player
- be able to participate in scientific discussions in English
Experience in the area of plant biology is not required.

Recruitment level: The candidate must have completed a PhD in biological sciences

Contract: A full-time fixed-term contract of 2 years (« CDD » 24 months). The contract will start at the beginning of 2020.

Application: Please send a CV, a cover letter and the contact information of 3 referees to helene.javot@cea.fr