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PRE-DOCTORATE CANDIDATE SEARCH
for 1 predoctoral "Marie Curie" fellowship within a recently awarded European "Co-Fund" project. Formal application will be accepted starting September 1, 2024 (deadline not yet open).

WORKING TOPIC:
Our research group studies new pathways that determine plant response to induced stress and aging in plants grown with different types of nitrogen nutrition to determine the underlying signaling mechanisms, and their use in agriculture and biomedicine. Plant physiology, molecular and cellular biology, biotechnology, proteomics, transcriptomics, etc., will be used. Metabolic pathways regulated by reactive oxygen and nitrogen species will be studied, as well as their interaction with other plant signals including those regulated by hormones. The objective is to optimize fertilization and plant production processes, with potential applications in human health. All within a 3-year research project funded by the Ministry of Science, Innovation, and Universities in Spain. Companies in the area are collaborating on the project.

REQUIREMENTS:
- Excellent academic record, motivation for research in biological sciences
- Related experience will be valued (not essential) as well as knowledge of English.
- The candidate must have a degree in Biotechnology, Biology, Biochemistry, Chemistry, Agricultural Engineering, or similar, and have completed (or be completing) a master's degree related to biology. - Availability to carry out stays in centers outside of Spain

RELATED BIBLIOGRAPHY
Urra M, et al (2022) The importance of the urea cycle and its relationships to polyamine metabolism during ammonium stress in Medicago truncatula. **J. Exp. Bot.** 73 (16): 5581–5595.

López-Gómez P et al (2024) A new oxidative pathway of nitric oxide production from oximes in plants. **Molecular Plant** 17, 178–198.

Moran Juez, JF. **Aldoximes as NO donors, and their uses as plant architecture modifiers and in therapy**. Owners: UPNA / Universidad del País Vasco /Universidad de León PCT/EP2023/071478- Priority date: 2023/08/02. Countries: all of the PCT agreement. **European Patent Office**

Moran JF et al. (2024) "Óxido nítrico: la molécula que mejora la salud cardiovascular y ayuda a las plantas a adaptarse al estrés". **The Conversation** (ISSN 2201-5639)

Additional Information
Our research group has stable funding through projects of excellence (PGC) for 16 years practically consecutively. You can consult the group's scientific publications here: https://scholar.google.es/citations?user=wVoP4O8AAAAJ&hl=es

Those persons interested can contact the email and telephone number indicated above.