

 **Job description**

**Senior/ Research Associate in Plant Molecular Physiology (Thermal tolerance)**

**Ref: XXXX**

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| **Job Title:** Senior/ Research Associate in Plant Molecular Physiology | **Present Grade:** 6/7 |
| **Department/College:** Lancaster Environment Centre |
| **Directly responsible to:** Prof Elizabete Carmo-Silva |
| **Supervisory responsibility for:** n/a  |
| **Other contacts** |
| **Internal:**Dr Doug Orr, research staff and students within the Photosynthesis research team and the Lancaster Environment Centre. Administration staff. |
| **External:**Project partners at University of Illinois and other institutions within the RIPE project. Stakeholders as necessary (e.g. Gates Agricultural Innovations). |
| **Major Duties:*** Contribute to / Be responsible for the design of experiments that address the project objectives by testing specific hypotheses.
* Lead research on the thermal sensitivity of Rubisco activase and heat-induced inhibition of net CO2 assimilation in cowpea and soybean.
* Contribute to / Lead the design of gene editing and crop engineering approaches for increasing the thermal tolerance of Rubisco activase in cowpea and soybean. Characterise the photosynthetic productivity of novel germplasm at ambient and elevated temperatures.
* Research and perform appropriate statistical analyses. Develop custom statistical methods and algorithms, as required. Interpret and discuss results.
* Prepare / Lead the conception and preparation of manuscripts for publication of project findings.
* Participate in, and disseminate research at, internal and external meetings, including international conferences.
* Plan and manage own research activities and priorities, as required, to meet project targets. Complete project milestones in an organized and timely fashion.
* Contribute to the preparation of project reports for the funder and stakeholders. Ensure project IP rules are adhered to.
* Liaise with colleagues to resolve practical and theoretical problems concerning methodology, analysis and ethics that arise whilst conducting research.
* Be knowledgeable of standard operating procedures. Contribute to the development of protocols and workflows, as required.
* Follow health and safety guidelines. Contribute to risk assessments, as required.
* Help train / Co-supervise students and colleagues. Share technical, analytical and theoretical knowledge.
* Engage in collaborations with colleagues and co-investigators, locally and internationally.
* Any other duties as may be reasonably required by the line manager.
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