**Post Specification**

|  |  |
| --- | --- |
| Post Title: | Research Assistant |
| Post Status: | Specific-purpose contract- Full time. 2 year contract with possibilities for extension |
| Research Group/ Department/ School: | Developmental Biology research group, Department of Zoology |
| Location: | Department of Zoology, School of Natural Sciences, College Green, Trinity College Dublin, Dublin 2 |
| Reports to: | Prof. Paula Murphy |
| Salary: | Commensurate with experience (starting at €27,609 pa) |
| Hours of Work: | 39hours per week |
| Closing Date: | 10th July 2022 |

**Post Summary**

Applications are invited for the position of Research Assistant to join the Developmental Biology research group in the Zoology Department in Trinity College Dublin. The Research Assistant will work on an international interdisciplinary collaboration (developmental biology, biomechanics, mechanobiology, nanomedicine and materials science) providing a unique opportuning to work at the forefront of tendon development and application to tissue engineering. Laboratory techniques will involve molecular biology, embryology (chick and mouse), tissue collection and processing, histological analysis, gene expression analysis including in situ hybridisation, qRT-PCR, immunohistochemistry, fluorescence imaging and western blotting. Gene delivery and gene editing within cells of the intact embryo will be used to alter molecular pathways. Three-dimensional tissue engineering constructs will be used to generate mini-tendons, employing nanoparticle gene delivery in culture.

We are seeking an enthusiastic, motivated person with high levels of initiative, capable of working independently and within a team. The candidate should have a background in biological sciences, ideally with laboratory skills and familiarity with molecular and cellular techniques. The candidate should also have excellent communication, organisational, planning and interpersonal skills.

**Enquiries and applications** should be made to [paula.murphy@tcd.ie](mailto:paula.murphy@tcd.ie)

**Duties and Responsibilities of the Post**

1. Assist in experimental procedures.
2. Keep excellent laboratory records of procedures and outcomes, enabling interpretation of results with team members. Must be able to communicate effectively, orally and in writing.
3. Appropriate training will be provided for all techniques and procedures, but experience would be advantageous.
4. Responsible for developing new protocols and optimising procedures, under direction and consultation with research group leaders.
5. Overseeing the day-to-day operation of the laboratories.
6. Activities will include ordering, stock control, monitoring and routine maintenance of equipment.
7. Operate at all times in compliance with Trinity guidelines and regulations.
8. Engagement with the public through various social media channels about the nature of the project and the scientific findings, as appropriate.
9. Perform other duties as may be required.

**Qualifications**

Prospective candidates should hold a degree in relevant biomedical sciences, ideally with post-graduate qualification or experience.

**Knowledge, experience and skills (Essential and Desirable)**

Essential

* Experience in molecular biology research laboratories or similar (includes B.Sc./M.Sc. research projects)
* Demonstrated ability to learn new technologies quickly and assist in protocol development
* Experience of organising own work schedule with minimum supervision
* Highly motivated and enthusiastic with can-do attitude and a collaborative approach
* Good computer/data analysis skills
* Ability to work independently and as a member of a team.

Desirable

* Previous research experience and day-to-day management of laboratory
* Experience with biological tissue processing
* Expertise in molecular analysis, including Protein, DNA and RNA
* Experience with in vitro cell culture
* Knowledge of laboratory health and safety regulation and compliance
* Operational and project management skills

**Application Procedure**

Applicants should send a PDF consisting of a cover letter (outlining suitability for the post), CV and the names and contact details of 2 referees by email to Prof. Paula Murphy, email: paula.murphy@tcd.ie.