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 **Postdoctoral Researcher**

**Host-Parasite Interactions: Discovery of Immuno-Biotherapeutics**

**Applied Molecular Parasitology Laboratory (AMPL)**

**Infection & Immunity Cluster,**

**School of Natural Sciences**

**NUI Galway**

**Ref. No. NUIG 097-19**

Applications are invited from outstanding and highly motivated candidates for a fixed term position as Postdoctoral Researcher in the Applied Molecular Parasitology Laboratory (AMPL), Infection & Immunity Cluster, at the National University of Ireland, Galway.

This position is funded by Science Foundation Ireland (SFI) and is available for up to three years, beginning September 1st 2019, subject to an initial one-year probationary period. The successful candidate will be a member of a dynamic research team working on helminth parasites, principally *Fasciola hepatica*.

Elucidation of the molecular and immunological interplay between worm and host can teach us novel things about the immune system. Worm parasites are ‘master immune-regulators’ and hence, we can learn new ways to control and manipulate the immune system from them. Most importantly, we can discover parasite molecules that carry out the function of immune regulation and exploit these in the treatment or prevention of major immune-related disorders in humans, including Diabetes, Crohn’s Disease, Multiple Sclerosis (MS) and Rheumatoid Arthritis (RA).

With support from the European Research Council (ERC) and Horizon 2020 over the last five years we have made tremendous advances in understanding host-parasite interaction, principally by applying various –omic technologies to both parasite and host. The candidate will assess/screen proteins and glycan molecules that helminthsemploy to regulate and modulate the host immune system in pre-clinical rodent models for their therapeutic potential in the treatment of immune disorders and conditions. He/She will utilise the laboratory models and technologies available at the SFI-Research hubs at NUI Galway (CURAM and REMEDI) to define the mechanisms by which these molecules regulate cellular responses and pathways. Molecules with potential for the *in vivo* amelioration of major human immune-related diseases will be selected for future early-phase clinical trials.

**Job Description:**

The successful Postdoctoral Researcher will investigate molecules involved in host-parasite interaction, especially those that are involved in modulating host innate and adaptive immune responses. They will be responsible for bringing these forward into pre-clinical trials using laboratory models of immune-related disease.

**Duties:**

* Be responsible for coordinating progress within the objectives, milestones and deliverables of the SFI-funded programme.
* Conduct research independently under the supervision of the Director and collaboratively with laboratory, and national and international university and industrial collaborators.
* Co-supervision of postgraduate and undergraduate students
* Coordinate and perform a variety of independent tasks and team activities involved in the research collection, analysis, documentation and some interpretation of information/results.
* Conduct literature and database searches and interpret and present the findings of the literature searches as appropriate.
* Write up results from own research activity (e.g. as project report) for review by Director that could include preparing technical reports, conclusions and recommendations.
* Contribute to the publication of findings and the writing of grant applications.
* Provide input into the research project’s dissemination, in whatever form (report, papers, chapters, book) as directed by the Director/project manager. Authorship will be decided in line with guidelines such as the Vancouver Protocol, or similar authorship guidelines as appropriate.
* Present on research progress and outcomes e.g. to bodies supervising research; stakeholder groups; other team members, as agreed with the Director/project manager.
* Attend and contribute to relevant meetings/conferences.
* Assist in analysis and interpretation of results of the general laboratory research.
* Assist in the archiving of samples/reagents and keeping of records
* Assist in the organisation of meetings, conferences, outreach programmes.

**Qualifications/Skills required:**

**Essential Requirements:**

* PhD in Immunology, Parasitology, Infectious Diseases, or a closely related discipline.
* Strong background in biochemistry, immunology, molecular biology or cell biology techniques.
* Expertise in isolation of immune effector cells, *in vitro* cell culture and immuno-cellular assays
* Expertise in flow cytometry, cytokine and antibody ELISA, immunoblotting.
* Experience with animal models of infection
* Knowledge and expertise in parasite immunology.
* Ability to supervise and lead postgraduate and undergraduate students.
* Track record of peer-reviewed publications in the field.
* Computer skills including, Microsoft office package.
* Ability to work and think independently.
* Excellent team-worker.
* Excellent writing and oral communication skills.
* Excellent organizational skills.
* High levels of initiative and motivation.

**Desirable Requirements:**

* Knowledge of glycomics, glycan structure and biochemistry.
* Expertise in protein isolation and characterisation.
* Experience in immuno-therapeutics discovery.

**Salary range**: €37,223 - €46,853 per annum

**Start date**: Position is available from September 2nd 2019.

**Continuing Professional Development/Training**:

Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans.

Further information on research and working at NUI Galway is available on [Research at NUI Galway](http://www.nuigalway.ie/our-research/)

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

**To Apply:**

Applications to include a covering letter, CV, and the contact details of three referees should be sent, via e-mail (in Word or PDF only) to Prof. John P. Dalton at johnpius.dalton@nuigalway.ie

Please put reference number **NUIG-97-19** in subject line of e-mail application.

**Closing date for receipt of applications is 5pm (Irish Time) on Friday 14th June 2019.**

All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment

National University of Ireland, Galway is an equal opportunities employer.

