

Postdoctoral Researcher - Informal Science Education

Cell EXPLORERS Outreach Programme School of Natural Sciences National University of Ireland, Galway Ref. No. NUIG-048-19

Applications are invited from suitably qualified candidates for a full-time, fixed term position as a Postdoctoral Researcher with the Cell EXPLORERS outreach programme in the School of Natural Sciences at the National University of Ireland Galway. This position is funded by Science Foundation Ireland and is available from 1st July 2019 to 31st December 2020 (18 months).

Cell EXPLORERS is a science education and outreach programme (www.cellexplorers.com) delivering science activities regionally and nationally. Coordinated by the research team at NUI Galway, the Cell EXPLORERS programme operates as a network of partner teams based at 13 Higher Education Institutions (HEIs) across Ireland. All partner teams in the network use the same unique model for sustainable STEM public engagement in HEIs where local scientist volunteers (undergraduate/postgraduate students and/ or staff researchers) deliver outreach activities to school children and the Irish public in the community. It has the dual benefit of engaging the public in science whilst also developing key graduate student attributes and researchers' public engagement skills in a way and at a scale unique in Ireland.

An important aim of the programme is to provide a positive first experience of science while combatting stereotypes associated to science (e.g. science is boring and difficult) and scientists (e.g. scientists are typically old, white, mad men with unkempt facial hair wearing glasses and a lab coat). To do this, the programme provides positive engagement between young children and local scientist role models through educational activities designed to give an authentic insight into how real scientists work. In particular, the Fantastic DNA session has been specifically tailored, through cyclical evaluation and improvement, to provide participants with positive, authentic science experiences. Children are given the opportunity to perform a science experiment successfully (extracting DNA from a banana), using real science equipment and materials, in small groups guided by approachable, encouraging local scientist role models.

Job Description:

The successful candidate will run a study on the influence of the "Fantastic DNA" school visits on children perception of science and scientists. The study will involve data collection through interviews and focus groups before and after two Fantastic DNA school visits as well as classroom observations of the visit. The study has already obtained ethical approval from the research ethics committee at NUI Galway. The postdoctoral researcher will be integrated into the Informal Science Education research team based in Biochemistry at NUI Galway and made up of Dr Muriel Grenon (Principal investigator and Director of Cell EXPLORERS), Postgraduate education researcher Sarah Carroll and the Cell EXPLORERS national coordinator. The researcher will both contribute to the group research projects as well as the delivery of some of the public engagement activities run by the programme during the year.

Duties:

Research and publications:

- Conduct a study on the influence of the "Fantastic DNA" school visits on children perception of science and scientists under the supervision and direction of the Principal Investigator and in collaboration with the research team
- Contribute to other aspect of research taking place within the Cell EXPLORERS programme.
- Dissemination of the results of her/his research under any suitable forms (write up

reports or articles, present at conferences...) to all relevant groups (partners, peers, institutions, policy makers...) nationally and internationally

- Write academic articles, conference papers, and other publications on the research conducted
- Carry out administrative work associated with the research study as necessary and maintain accurate project records and project confidentiality.
- Proactively develop funding proposals and write research grant proposals in line with the group research interest

Project Supervision, Teaching & Training

- Mentor, assist or supervise, as appropriate and as directed, junior members of the research teams including Postgraduate student(s)
- Supervise, as appropriate and as directed, the final year undergraduate project students or Summer Interns of the Cell EXPLORERS group
- Train and supervise, as appropriate, team volunteers who are also contributing to some aspects of the Cell EXPLORERS programme research and evaluation, for example by processing of data collected through paper questionnaires.
- As a member of the Cell EXPLORERS NUI Galway team, contribute to the programme of activities of run by the NUI Galway team during the year
- Acquire generic and transferable skills (including project management and undergraduate mentoring/supervision).
- Engage in appropriate training and development opportunities as required
- Develop their own career reputation and career development

Qualifications/Skills required:

The ideal candidate will have both interest and experience in informal science education research and researching the impact of informal science education activities on young people.

Essential Requirements:

- PhD in Education research or Science education or equivalent relevant experience.
- Skilled at the design, management and conduct of high-quality research projects
- Experience in qualitative research methods including running of focus group, interview and observation (use of audio or video recording).
- Experience in both quantitative and qualitative research methods, with particular emphasis on conducting and analysing data from focus groups, interviews and both video- and audio-observation.
- Proficiency in the use of software programmes to assist in both qualitative (NVivo) and quantitative (SPSS) data analysis
- Publication of PhD research in high impact peer-reviewed journals
- Presentation of research work at international conferences
- Evidence of academic and report writing skills
- High level of interpersonal skills
- Proven ability to work independently, on its own initiative and in a team environment.

Desirable Requirements:

- Experience of applying for research funding and/or reporting for funders
- Teaching experience/qualification and/or experience of working with students
- Experience in designing of STEM public engagement/outreach activities
- Experience in delivery of STEM public engagement/outreach activities
- Experience in disseminating research on social media platforms
- Full Driving Licence
- Enthusiasm, motivation and flexibility

Salary: €39,530 per annum

Start date. POSITION IS AVAILABLE FROM 1st OF JULY 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](#)

For information on moving to Ireland please see www.euraxess.ie

Further information about Cell EXPLORERS and Biochemistry is available at www.cellexplorers.com and www.nuigalway.ie/biochemistry/

Informal enquiries concerning the post are welcome and can be made to Dr Muriel Grenon (Muriel.grenon@nuigalway.ie)

NB: Garda vetting is a requirement for this post

To Apply:

Applications should be sent, via e-mail (in word or PDF only) to Muriel Grenon :

Muriel.grenon@nuigalway.ie

Application must include:

1. Cover letter outlining the applicant's relevant experience for the post and her/his motivation in joining the project
2. CV detailing relevant experiences
3. The applicant's most relevant peer-reviewed publications (up to 3)
4. The name and contact details of 3 referees

Please put reference number **NUIG-048-19** in subject line of e-mail application.

Closing date for receipt of applications is 5.00 pm 16th of April

Optional: Interviews are planned to be held on the 7th of May

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.

