# **David L Nieland**

# Subject:

Post-Doc Position Population-Landscape Genetics - Trinity College Dublin

Post-doc research position (18 months) in population/landscape genetics in Yvonne Buckley's population ecology research group, Trinity College Dublin.

A post-doctoral position in population/landscape genetics is available in Professor Yvonne Buckley's ecology group <a href="http://www.tcd.ie/Zoology/research/research/buckley/">http://www.tcd.ie/Zoology/research/research/buckley/</a>

in collaboration with Prof. Trevor Hodkinson's molecular systematics group <u>https://www.tcd.ie/Botany/staff/trevorhodkinson.php</u> at Trinity College Dublin. The post-doc is for 18 months. You will be part of a team funded by a Science Foundation Ireland grant to develop general predictions of the ecological and evolutionary responses of plant populations to the environment.

You will work with data and samples from PLANTPOPNET, a coordinated distributed observational network for population ecology of Plantago lanceolata <a href="http://plantago.plantpopnet.com/">http://plantago.plantpopnet.com/</a>. You will be co-supervised by Prof. Trevor Hodkinson (Botany, School of Natural Sciences, Trinity College Dublin). You will develop microsatellite markers and/or use SNPs for P. lanceolata, design a sampling scheme, collect and analyse samples and analyse the resulting spatial and genetic data to determine how molecular diversity of Plantago lanceolata varies across its native and non-native ranges worldwide. There is scope to design landscape level sampling strategies in order to model population genetics at a finer scale. Additional data from PLANTPOPNET on trait distributions, population structure, density, management and environmental covariates will be available for testing hypotheses for how gene flow varies with the environment.

You will work with international networks of collaborators including, PLANTPOPNET ARC Centre of Excellence for Environmental Decisions <u>http://ceed.edu.au/</u> and the COMPADRE plant matrix database <u>http://www.compadre-db.org/</u>. Yvonne Buckley is the coordinator of the PLANTPOPNET global observational network for Plantago lanceolata population biology.

Candidates will enjoy working in a collaborative team but must be highly self-motivated and work well independently. Candidates will be expected to undertake high quality research of international significance and produce peer-reviewed publications in high impact international journals. Candidates may be expected to mentor PhD students and undergraduate students undertaking projects closely related to their work. Candidates are expected (and will be supported) to present their results at an international conference during the course of their postdoc. Candidates will be expected to take part in collaborative workshops either in Ireland or overseas to lead and work with collaborators on multiauthored papers.

The closing date for application is 15/02/16 with the position to start on or after 04/04/16. This is an 18 month position.

Specific requirements for each position are given below, followed by details of the application process.

#### Essential criteria:

- 1. PhD in a relevant area in evolution, ecology, population biology, genetics, plant sciences or zoology.
- 2. Experience in laboratory and analytical population genetics with SSRs and/or SNPs.

#### Desirable criteria:

 High quality publications in international peer reviewed journals 2. Experience with developing and using population models 4. Use of R for data manipulation and analysis 5. Experience with comparative analysis using modern phylogenetic and population genetic methods 6. Experience with population genetics and/or landscape genetics software 7. Experience working in multi-author collaborations/workshops 8. Experience with GIS 9. Experience with database design and/or use 10. Bioinformatics experience

#### Qualifications:

For all positions the candidate's PhD must have been attained by 01/04/2016.

# Salary range:

Post-doctoral salary is based on the Irish Universities Association researcher salary scales for entry level postdoctoral researchers: The gross salary is €37,750 (+ pension contributions). Applications for part-time positions will be considered (pro-rata salary).

# Facilities

The postdocs will be based in the Zoology Building, Trinity College Dublin and use resources in the Botany and Zoology buildings and with collaborators/co-supervisors. The post-doctoral researchers will have access to a newly renovated terrestrial ecology lab and a population genetics lab.

#### Application process

Send an email to <u>buckleyy@tcd.ie</u> with an attached cv, the names of two referees, a full publication list, and cover letter addressing all of the essential criteria and giving evidence for the desirable criteria which you meet. Use one paragraph of the cover letter to outline your research ambitions through the post-doc. Closing date for receipt of applications: 5pm GMT 15/02/16.

Likely interview date: Interviews will be conducted by skype, telephone or in person in March.

Likely start date: Post-doc positions can start on or after 04/04/2016.

Only applications received before the closing date will be considered.