

THE CHARLES DARWIN FOUNDATION FOR THE GALAPAGOS ISLANDS IS SEEKING A JUNIOR INVESTIGATOR IN GEOGRAPHICAL INFORMATION SYSTEMS

TERMS OF REFERENCE

Position: Junior Investigator in Geographical

Information Systems

Work load: Full-time

Location: Galapagos Islands, Ecuador

Supervised by: Senior Marine Ecologist

Supervises: Volunteers and scholarship holders

Deadline/Closing Date: December 15th, 2016

Estimated/Required start date: Early 2017

I. BACKGROUND

Thanks to a generous donation from Leona M. & Harry B. Helmsley Charitable Trust several job vacancies have opened at the Charles Darwin Foundation (CDF). Ideally, candidates applying for these positions are outstanding professionals who are committed to the conservation of the wide variety of ecosystems present in the Galapagos Marine Reserve (GMR), a UNESCO World Heritage Site.

The job vacancies are within the Marine Sciences Department (Biomar) of the Charles Darwin Research Station in scientific projects that seek to address knowledge gaps about marine systems within the archipelago. These projects are highly collaborative and incentivize the inclusion and participation of local stakeholders with the aim to provide strong scientific background that will inform the conservation policies applied within the GMR.

II. OBJECTIVES OF THE POSITION

In order to continue working on the conservation of Galapagos' Protected Areas and supporting the re-zoning of the Galapagos Marine Reserve and Galapagos National Park, there is a need for the best geographical information available to support decision-making processes. The main tasks of the investigator will be data curing and analysis, geoprocessing, mapping, and cataloguing of relevant geographical information particularly in



three key research areas: (i) the ecology and population dynamics of marine species of commercial interest, (ii) the ecology and movement patterns of sharks and mantas, and (iii) the assessment of the main ecosystem services provided by mangrove and seamount habitats.

The successful candidate will report directly to the Senior Marine Ecologist but is also expected to work in a collaborative manner with other members of Biomar, the Galapagos National Park Directorate (GNPD) and other strategic partners. Moreover, the candidate is expected to be able to maintain and develop relationships with local, national and international collaborators.

Finally, the candidate will also assist in the management of Biomar's office with the aim to ensure it remains in good condition. The junior investigator will also assist in the supervision of volunteers and scholarship holders as to guarantee that correct procedures are followed at all times when facilities are used.

II. KEY RESPONSIBILITIES

- Data entry, management and update of databases; perform spatial data analyses for different projects under our key research areas.
- Review and revision of different ecological databases from CDF's projects.
- Digitalization of environmental units.
- Content revision of mapping databases.
- Production of high quality maps for different biophysical and ecological projects.
- Supervise volunteers working in related research projects.
- Publish at least one scientific paper per year in one of the key research areas.
- Write technical and donor reports, which may include expert's reports for court and administrative proceedings.
- Assist in the management of Biomar's office.
- Participate (e.g., purchase of supplies, equipment preparation, etc.) in field trips related to projects in key research areas.
- Collaborate in the development and/or improvement of methodologies and experimental designs to ensure project objectives are met.
- Maintain a strong working relationship with the GNPD and other strategic partners to ensure productive collaborative work continues.



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III. CANDIDATE PROFILE

- BSc (Hons)/Engineering in geography, ecology, biology or related fields. Postgraduate in GIS would be an advantage.
- **Proficiency in GIS**: digitizing, geo-referencing, importing XY data, performing joins, basic spatial analysis (union, clip, append, etc)
- Desirable experience in on-screen digitizing from satellite imagery/orthophotos
- Experience in creating professional looking maps ready to be printed (ArcGIS' Layout).
- Skilled in the use of tabulated data and spreadsheets (Excel). Capable of mapping tabular data (including GPS data).
- Knowledge of ArcGIS software; Quantum GIS would be an advantage.
- Excellent verbal and written communication skills in English and Spanish. Ability to present complex information in a clear manner to a wide variety of audiences.
- Previous experience and/or ability to analyse and manage databases.
- Previous experience to write technical reports and scientific publications.
- Proficiency in the use of statistics software (e.g., R, SPSS, Primer).
- Rescue Diver qualifications or above, and extensive scientific diving experience will be considered an advantage.
- Ability to multitask and meet deadlines.
- Awareness of local culture and country in general are also advantageous

IV. SALARY (REMUNERATION) AND CONDITIONS

Salary will be set based on the candidate's experience and qualifications. We offer private medical insurance and 30-day paid annual leave.

V. HOW TO APPLY

Interested applicants need to send the following documents (in English or Spanish) via email investigador.jr.sig@fcdarwin.org.ec

- Up-to-date CV.
- Cover letter explaining how your experience and skills meet the requirements for this position.
- Three professional letters of reference, including the names and e-mail addresses of the referees.



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Names and e-mail address of two people who can provide personal refere	nces.
	Puerto Ayora, Santa Cru Galápagos, Ecuado

