Applicant: Garcia, Gerardo Organisation: Chester Zoo Funding Sought: £11,200.00

# **DIR27FW\1021**

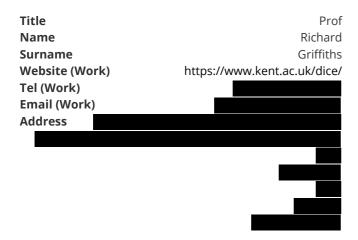
Capitalizing on a two-phased process of training in the UK, the fellow will (1) emerge with the skills to become a leader of in-situ/ex-situ conservation planning for amphibians in Madagascar; (2) undertake PhD-level research that has been prioritized within 'A Conservation Strategy for the Amphibians of Madagascar (ACSAM)'.

### **Section 1 - Contact Details**

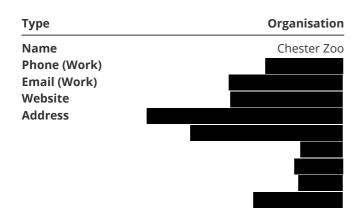
### **PRIMARY APPLICANT DETAILS**

Title Dr
Name Gerardo
Surname Garcia
Organisation Chester Zoo
Website (Work) https://www.chesterzoo.org/what-wedo/our-zoo/biographies/dr-gerardo-garcia/
Tel (Work)
Email (Work)
Address

### **CONTACT DETAILS**



### **GMS ORGANISATION**



## Section 2 - Title, Dates & Budget Summary

### Q3. Name and official address of proposed Darwin Fellow

(include email address). Please include a one page CV with the package of CVs for Q7.

Name	Rodlis Raphali Andriantsimanarilafy		

### Q4. Summary of proposed Fellowship i.e. Outcome

Capitalizing on a two-phased process of training in the UK, the fellow will (1) emerge with the skills to become a leader of in-situ/ex-situ conservation planning for amphibians in Madagascar; (2) undertake PhD-level research that has been prioritized within 'A Conservation Strategy for the Amphibians of Madagascar (ACSAM)'.

### Q5. Project dates

Start date:	End date:	Duration (e.g. 1 year, 2 months):
01 July 2021	30 June 2022	1 year

### **Q6. Budget summary**

	2021/2022	2022/2023	Total
Darwin funding request (Apr – Mar) £	6,040.00	5,160.00	11,200.00

### **Section 3 - Principals**

### Q7. Principals in the Project

Please give the details of the individuals from the Lead Organisation (and other institutions if relevant) who would be directly involved in supervising/working with the Darwin Fellow. Please provide a one page CV for each of these named individuals and remember to include the Fellow's CV in the PDF.

Details	Project Leader	Other Expert	Other Expert	Other Expert
Surname	Garcia	Griffiths	Daudet	Claire
Forenames(s)	Gerardo	Richard	Andriafidison	Raisin
Post held	Curator of Lower Vertebrates and Invertebrates	Professor of Biological Conservation	Programme Manager	Field Programmes Coordinator - Madagascar & Mascarenes
Organisation	Chester Zoo	DICE, University of Kent	Madagasikara Voakajy	Chester Zoo

### Do you require more fields?

Yes

Details	Other Expert	Other Expert	Other Expert
Surname	Williams	Bland	No Response
Forenames(s)	Leah	Adam	No Response
Post held	Conservation Scientist- Behaviour/Welfare	Lead Keeper - Amphibians	No Response
Organisation	Chester Zoo	Chester Zoo	No Response
			No Response

Please provide a one page CV for each of these named individuals, including the Fellow named at Q3, uploaded as one PDF.

- & CVs
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### Section 4 - Aims, Activities & Achivements

### Q8. Describe briefly the aims, activities and achievements of the Lead Organisation

#### (Large organisations please note this should describe your unit or department)

The North of England Zoological Society (NEZS) is a leading conservation and education charity, based at Chester Zoo in the UK, which it owns and runs. We deliver our mission of 'Preventing Extinction' at the Zoo and through our partnerships across the globe, guided by our Conservation Masterplan, which promotes an integrated approach and provides a set of targets covering species and populations, conservation landscapes, empowerment of people and influencing policy for wildlife.

We deliver high impact projects in close collaboration with in-country partners, where our combination of both practical and scientific expertise enables us to make a unique contribution. In 2020, despite the constraints of the global pandemic, we delivered 47 conservation projects across 21 countries in partnership with 41 organisations. We also supported 35 Conservation Scholars and Fellows who work on our projects. We have received Darwin Initiative funding for several projects focused on human-wildlife conflict and livelihoods.

# Q9. Describe briefly the aims, activities and achievements of the proposed Darwin Fellow's employing organisation.

### (Large organisations please note this should describe your unit or department)

For the next five years, Madagasikara Voakajy will:

- 1. Increase the sustainably of harvested species
- 2. Reduce deforestation rates in all conservation areas
- 3. Increase habitat restoration in all conservation areas
- 4. Reduce impact of diseases affecting communities around conservation areas
- 5. Increase unrestricted income

To achieve those objectives we will:

1. Identify species and develop harvesting procedures across the supply chain with all stakeholders

- 2. Monitor impacts of harvesting and trade and adapt the procedures accordingly
- 3. Develop management plans for key conservation areas
- 4. Prioritize restoration in conservation areas
- 5. Build partnerships with health institutions working near the conservation areas
- 6. Build staff capacity for fundraising and financial management
- 7. Develop and promote ecotourism

Achievements relevant to this proposal include: creation of seven protected areas; conservation strategies for the golden and harlequin mantellas; implementation of ecotourism at Mangabe new protected area; building capacity within CITES.

# Q10. Describe briefly the proposed Fellow's current role within their organisation and their link to a Darwin project (if applicable), including the project reference number, his/her role in that project and any ongoing involvement.

# If the Fellow has no link to a Darwin project please discuss their involvement in implementing the biodiversity conventions, treaties and agreements supported by the Darwin Initiative.

The Fellow holds the position of Species and Conservation Programmes Manager at Madagasikara Vokajy. To develop his career further, the Fellow is also a PhD student at the University of Tulear, Madagascar. His job involves liaison with the IUCN SSC Amphibian Specialist Group and the delivery of 'A Conservation Strategy for the Amphibians of Madagascar (ACSAM)'.

The UK team are advisors for the PhD and action plan, and this Fellowship provides training to becoming a conservation leader:

Current skills, duties and knowledge (pre-Fellowship): teamworking, species and habitat survey design, data management, report-writing, training of students and practitioners.

Proposed skills, duties and knowledge (post-Fellowship): leadership, budgeting, grant-writing, advanced amphibian husbandry, in-situ/ex-situ conservation planning; statistical modelling and GIS; training programme design and delivery. Many of the current skills and duties undertaken by the Fellow stem from two previous projects funded by the Darwin Initiative through DICE (University of Kent, UK), both in partnership with Madagasikara Voakajy:

- Chameleon trade and conservation in Madagascar, 2009-2012, ref: 17-010
- Implementing CITES in Madagascar, 2012-2015, ref: 19-014

The Fellow is currently the main contact for ongoing collaboration between Madagasikara Voakajy and the Chester Zoo Madagascar programme.

#### Please provide a combined PDF of all Letters of Support.

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# **Section 5 - Outcomes & Objectives**

### Q11. Provide a concept note for the Darwin Fellowship. This should include:

# Q11a. A clear outline of the aim and objectives of the Fellowship, and an indication of how the achievement will be measured

Although capacity for delivering biodiversity action plans in Madagascar has increased in recent decades, there remains a shortfall in in-situ/ex-situ conservation planning. This Fellowship aims to upskill Mr Andriantsimanarilafy to (1) develop and lead projects with ex-situ components in Madagascar; and (2) completes priority research on amphibian conservation for his PhD at the University of Tulear:

AIM 1: Fellow equipped with the practical skills to lead in-situ/ex-situ recovery programmes for Critically Endangered amphibians and their habitats:

- Population, behaviour and habitat assessment methods (CZ)

- In-situ/ex-situ conservation planning (CZ)
- Modelling & GIS (CZ/DICE)

(July-September 2021).

INDICATOR 1: Evaluation of training by Chester Zoo and DICE (September 2021).

In-situ/ex-situ feasibility report using Best Practice guidelines; https://www.eaza.net/conservation/programmes/#BPG (July 2021).

AIM 2: Fellow equipped with transferrable skills for leading programmes and building capacity in Madagascar:

- Project management (CZ)
- Conservation education (CZ)
- Community based conservation and social surveys (CZ & DICE)
- Ecotourism (DICE)
- Budgeting/ fundraising (CZ)
- Equality, inclusivity and diversity (CZ)

(July-September 2021).

INDICATOR 2: Evaluation of training by Chester Zoo and DICE (September 2021).

AIM 3: Fellow delivers training workshop in Madagascar

(September 2021)

INDICATOR 3: Evaluation of training by Chester Zoo and DICE (July 2022).

AIM 4: Dissemination of project findings nationally and internationally

(April-June 2022).

INDICATOR 4: Presentations at conferences (July 2022). PhD thesis chapter(s) and scientific papers drafted and reviewed by project team (October 2022 onwards - legacy).

AIM 5: Legacy formulated:

- Ongoing plan to complete PhD
- Further training needs identified
- Schedule of future activities place

(April-June 2022).

INDICATOR 5: Outcomes evaluated using Chester Zoo project evaluation toolkit.

PhD thesis plan agreed with UK/Madagascar supervisors.

Programme for legacy training agreed with Chester Zoo.

Project outcomes evaluated against Chester Zoo Conservation Masterplan

(June 2022 onwards - legacy).

### Q11b. The role of the Lead Organisation, and others where relevant

Chester Zoo has committed to supporting Madagasikara Voakajy through its new Conservation Masterplan for 2021-2031. This Fellowship helps deliver outcomes of that plan, which includes reconnecting forest patches within a new protected area (Mangabe). The project will be led by Dr Gerardo Garcia who has over 20 years of experience working in Madagascar and currently leads the largest zoo-based herpetological team in the UK. He will be supported by the Field Programmes Coordinator for Madagascar and the Mascarenes, Dr Claire Raisin, who has also worked with Madagasikara Voakajy for several years, and other members of the science and field programme teams. Chester Zoo is therefore optimally positioned to support the Fellowship.

Designed in collaboration with the Fellow and DICE, the Fellowship comprises two phases of training in the UK, before and after a field project delivery component. This will allow assessment of feedback and evaluation prior to delivery of Phase 2 of UK training. Both UK organisations have extensive experience of working with the Fellow and Madagasikara Voakajy through previous and ongoing projects. The training breakdown between Chester Zoo and DICE is complementary (see section 11a).

Phase 1 in the UK will equip the Fellow with the leadership skills and knowledge he needs to (i) build capacity in in-situ/ex-situ conservation planning through his own training workshops with collaborators in Madagascar; and (ii) organising, supervising and carrying out research on Critically Endangered mantella frogs that has been prioritized by the IUCN SSC Amphibian Specialist Group. During the field component (November 2021-March 2022), the UK partners will continue to support the Fellow remotely. On completion of the fieldwork, the Fellow will return to the UK for Phase 2. Following feedback and evaluation, during Phase 2 he will receive support for analysing and writing-up the data assembled from the field.

### **Section 6 - Legacy & Collaboration**

### Q12. Legacy

Provide information on how the Darwin Fellow will utilise, promote and disseminate the benefits of the Fellowship on return to their home country. Will a strategy be developed during the Fellowship to ensure this is achieved?

Following Phase 1 in the UK, the Fellow will return to Madagascar in October 2021 to deliver practical and technical training for Madagascar team members and collaborators, including members of the IUCN SSC Amphibian Specialist Group. This will include, for example, amphibian husbandry and captive breeding, survey/marking methods, recording data, field logistics and health and safety.

Following Phase 2 in the UK, the fellow will return to Madagascar in July 2022 and will deliver training on data analysis, report writing, GIS, and in-situ/ex-situ conservation. In addition to conservation practitioners, these presentations will be available to students at four Universities (Antananarivo, Tulear, Morondava and Ambositra). During the two phases based in the UK, the Fellow will also disseminate his work to national and international zoo and conservation organisations (e.g. Amphibian and Reptile Taxonomic Advisory Group of EAZA (ARTAG), Reptile and Amphibian Working Group of BIAZA (RAWG), and the British Herpetological Society.

The training will also include communication skills and delivery through remote learning. A strategy for delivering the long-term legacy is included in the forthcoming Chester Zoo Conservation Masterplan for 2021-2031, which comprises the wider goal of reconnecting forest patches in Mangabe new protected area.

# Q13. How will the Fellowship assist the Fellow's organisation and/or local communities and/or home country in working towards the objectives (or implementation) of the Conventions, Treaties and Agreements supported by the Darwin Initiative?

#### Please refer to specific Articles or cross cutting themes as appropriate.

This Fellowship supports the objectives of:

Convention on Biological Diversity (CBD)

Convention on International Trade in Endangered Species (CITES)

Global Goals for Sustainable Development (SDGs)

The project relates to Aichi Biodiversity Targets 5, 7, 9, 10, 12, 14, 18 and 19 to ensure an improved evidence base to inform sustainability and ecosystem services and reduce biodiversity loss. It will improve integration of biodiversity and sustainability into development policies and business models, thereby supporting Aichi Biodiversity Targets 2 and 4. Several species that will be the target of the fieldwork phase are CR and listed on CITES Appendices I and II (e.g. golden and harlequin mantellas). Ongoing monitoring will provide essential data needed by the Madagascar Scientific and Management Authorities to determine evidence-based non-detriment findings.

Through the local communities, the project will promote sustainable economic development e.g., ecotourism, reforestation, education and alternative incomes. It thereby supports 10 out of the 17 Sustainable Development Goals: 1 (No poverty), 3 (Good health and well-being), 5 (Gender equality), 8 (Decent work and economic growth), 9 (Industry, innovation and infrastructure), 10 (Reduced inequalities), 11, (Sustainable cities and communities), 12 (Responsible consumption and production), 15 (Life on land), 17 (Partnerships for the goals).

# Q14. What collaboration has there been with the Darwin Fellow to date in developing the proposal, and what collaboration is planned for the duration of the Fellowship?

#### Where relevant, describe any consultation or collaboration by the proposed Fellow within their own country.

This Darwin Initiative Fellowship was first proposed during a meeting involving the Fellow, Madagasikara Voakajy, Chester Zoo and DICE in Mangabe Forest in December 2018. Although focusing on Mangabe Forest with a view to developing ecotourism focusing on lemurs and the golden mantella (Mantella aurantiaca), this three-way partnership has expanded its remit to include a number of other highly degraded sites, including those supporting the last remaining Harlequin mantellas (Mantella cowanii). The collaboration will involve working closely with the IUCN SSC Amphibian Specialist Group (Madagascar), with the proposed activities following closely those prioritised within the national 'A Conservation Strategy for the Amphibians of Madagascar (ACSAM)' for amphibians as well as the subsequent dedicated action plans for the species concerned. These include establishing potential ex-situ captive populations with Chester Zoo. With the support of

all the organisations involved, the Fellow has registered as a PhD student at the University of Tulear to deliver the research components of the action plans. He will continue to oversee the amphibian and reptile components of Madagasikara Voakajy's conservation work while undertaking this PhD.

### Q15. Where will the Darwin Fellow be based?

#### Please be specific with organisational details and dates (where more than one location).

Although the total duration of the Fellowship is 12 months, funding is only being sought for the two phases of training in the UK (6 months). The first three months (Phase 1) will be spent at Chester Zoo (July-August 2021) and DICE (September 2021). This will be followed by the field project phase in Madagascar, supported by Chester Zoo and other funders. After 1 month (October 2021) delivering training to local teams and collaborators, the main wet season will be divided between Mangabe Forest (amphibian, chameleon and lemur surveys) and Antoetra (harlequin mantella surveys) (November 2021-March 2022). On completion of the fieldwork, the Fellow will return to the UK for a further three months (Phase 2) to undertake evaluation, data analysis and report writing. This will comprise 2 months at Chester Zoo (April-May 2022) and 1 month at DICE (June 2022). For the activities to be conducted at the respective institutions see 11a and 16. When the Fellowship finishes at the end of June 2022, the Fellow will return to Madagascar to resume his work with Madagasikara Voakajy and continue with his PhD, with ongoing support from Chester Zoo under the Conservation Masterplan.

### Section 7 - Programme of Work & Funding

# Q16. Provide a programme of work, including key milestones, through the duration of the Fellowship

Provide a project implementation timetable that shows the key milestones in project activities. Please complete the Excel spreadsheet linked below to describe the intended workplan for your project.

Fellowship Implementation Timetable Template

For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the months in which an activity will be carried out.

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### Q17. Costs

Using UK Government Financial Years (April 2021 – March 2022), please complete your budget using the template provided here and upload below.

Fellowship Budget Template

Please note, this should not be presented as academic years.

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### Q18. Other Sources of funding: provide details and amounts

Date applied for	Donor Organisation	Amount (include currency)	Comments (including confirmed/unconfirmed)
01 December 2020	Chester Zoo	£	Confirmed. Conservation scholar grant for Raphali's PhD training programme.
30 January 2021	British Herpetological Society	£	Unconfirmed, but invited application. Grant on ex situ research on Mantella cowanii (PhD Raphali)
No Response	No Response	No Response	No Response
No Response	No Response	No Response	No Response

### Q19. FCO Notification

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise details of the Darwin Fellowship and the resultant work in the UK or the Darwin Fellow's home country.

Unchecked

Please comment on whether you require a visa to undertake this Fellowship. If you require a visa, do you foresee any difficulty in being granted a visa?

A visa (current cost £ will be required for visiting the UK.

### **Section 8 - Certification**

### Certification

On behalf of the

Trustees

of

Chester Zoo

I apply for a grant of

£11,200.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

• I enclose one page CVs for project principals and letters of support as requested in the Guidance.

Checked

Name Dr Gerardo Garcia

Position in Organisation	Curator of Lower Vertebrates and Invertebrates
Signed	& <u>Signature Garcia</u>
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Dated	19 January 2021

## **Section 9 - Submission Checklist**

I have read the Guidance.	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
l have provided actual start and end dates for the Fellowship.	Checked
I have provided my budget based on UK government financial years i.e. 1 April – 31 March.	Checked
I have checked that my budget is complete, correctly adds up and that I have included the correct final total in the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have included a 1 page CV for the proposed Fellow and the experts listed in Question 7.	Checked
I have provided the relevant letters of support.	Checked
I have checked the Darwin website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on GOV.UK.	Checked

### We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

#### Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available <u>here</u>. This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information, but not personal data, may be used when publicising the Darwin Initiative including project details (usually title, lead organization, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).