

Applicant: **Jones, Julia**
Organisation: **Bangor University**
Funding Sought: **£29,500.00**

DIR27FW\1020

Susan will develop skills in using local knowledge to develop under-utilized trees for use in restoration (and increase her conservation knowledge and networks). She will do this through studying at Bangor, working with Treborth Botanic Garden, and doing research and apply it to help implement ITPGRFA and CBD in Uganda.

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title Prof
Name Julia
Surname Jones
Website <https://www.bangor.ac.uk/natural-sciences/staff/julia-jones/en>
Tel (Work) [REDACTED]
Email (Work) [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]

CONTACT DETAILS

Title Dr
Name Tim
Surname Pagella
Tel [REDACTED]
Email [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]

CONTACT DETAILS

Title Dr
Name Shaun
Surname Russell
Tel [REDACTED]
Email [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]

GMS ORGANISATION

Type	Organisation
Name	Bangor University
Phone	[REDACTED]
Email	[REDACTED]
Address	[REDACTED]

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	Komukama Susan Kazoora Jackie
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Q4. Summary of proposed Fellowship i.e. Outcome

Susan will develop skills in using local knowledge to develop under-utilized trees for use in restoration (and increase her conservation knowledge and networks). She will do this through studying at Bangor, working with Treborth Botanic Garden, and doing research and apply it to help implement ITPGRFA and CBD in Uganda.

Q5. Project dates

Start date:	End date:	Duration (e.g. 1 year, 2 months):
01 September 2021	30 September 2022	13 months

Q6. Budget summary

	2021/2022	2022/2023	Total
Darwin funding request (Apr – Mar) £	24,300.00	5,200.00	29,500.00

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	Jones	Pagella	Russell	<i>No Response</i>
Forenames(s)	Julia P G	Tim	Shaun	<i>No Response</i>
Post held	Professor of conservation	Lecturer in agro-forestry	Director of Treborth Botanic Garden	<i>No Response</i>
Organisation	Bangor University	Bangor University	Bangor University	<i>No Response</i>





Do you require more fields?





No

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

 [CV PAGELLA 2020 Darwin](#)
 13/01/2021
 16:58:05
 pdf 78.39 KB

 [CV RUSSELL 2020](#)
 13/01/2021
 16:58:03
 pdf 64.58 KB

 [CV JONES 2020 full Darwin](#)
 13/01/2021
 16:57:59
 pdf 69.37 KB

 [CV for fellow Susan Komukama](#)
 13/01/2021
 16:57:20
 pdf 79.28 KB

Section 4 - Aims, Activities & Achievements

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

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

Founded by quarrymen and farmers who wanted to give the local people of North Wales the chance to access higher education, Bangor University opened in 1884.

The 2014 Research Excellence Framework recognised that more than three-quarters of Bangor's research is either world-leading or internationally excellent. The University is also rated as delivering Gold Standard Teaching.

The School of Natural Sciences at Bangor University, conducts world-leading research and teaching with particular strengths in forestry and conservation. We teach a range of post graduate courses including Conservation and Land Management, Agro-Forestry, Sustainable Tropical Forestry and Environmental Forestry.

Treborth Botanic Garden covers an area of 18 hectares on the shores of the Menai Strait and has been owned by Bangor University since 1960. The garden comprises native woodland, species rich unimproved grassland as well as ex situ collections. We have 6 glasshouses with specialist collections including orchids, cacti, succulents and carnivorous plants.

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)

The aim of the Plant Genetic Resources Centre at National Agricultural Research Organization Entebbe Botanical Gardens is to ensure conservation, management and sustainable use of Uganda's plant genetic resources for food and agriculture (PGRFA). It is the focal point of ITPGRFA

Activities include:

- Species phenotypic, molecular, and phytochemical characterisation.
- Managing germplasm for crop improvement.
- Bio-prospecting studies for valuable medicinal species
- Developing species propagation protocols.
- Making policy recommendations for plant genetic resource conservation and use.

Achievements:

- Our collection comprises 11% of Uganda's plant genetic resources.
- We have led inventorying and mapping of plant genetic resources.
- We have established a network of community seed banks.
- As the National focal point of PGRFA, we have contributed to the development of the national policy for ITPGRFA implementation.
- We have domesticated valuable medicinal plants such as *Warbugia Ugandensis* and *Mondia whytei*.

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.

Susan's current role is focused on ecological restoration of forest habitats along the Albertine rift in Uganda. Susan works with NGOs, the private sector, local government, local communities and scientists to develop effective restoration strategies. This has involved developing appropriate agroforestry initiatives (of established crop trees) where appropriate but also identifying under-utilized species which have potential.

She has been involved in collection, characterisation and conservation of Uganda's plant genetic resources, conducting scientific research in the areas of genetic diversity erosion, seed behavior, developing appropriate methods and approaches for managing germplasm in situ and ex situ as well as bio-prospecting studies for new promising crops.

While she is primarily a scientist, she has also developed skills in conservation education and public


awareness as she has been supporting farmers and farming communities in the use of crop genetic diversity to control pests and diseases, in climate change vulnerability assessment and mitigation. However she has not had formal training in social research methods including participatory approaches. This is the primary reason for applying for the fellowship.

She also is involved in developing proposals and activity work plans for her department.

Please provide a combined PDF of all Letters of Support.

 [combined letters of support](#)

 14/01/2021

 10:56:10

 pdf 453.02 KB

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

As we enter the UN decade of restoration there is increased global policy focus on ecological restoration but many technical and social challenges remain. This fellowship will allow a key member of staff from NARO at Entebbe Botanic Garden to contribute to Uganda's national efforts in Forest Landscape Restoration (Uganda has pledged under the Bonn Challenge to restore 2.5 million ha), and contribute to the implementation of the CBD and ITPGRFA in Uganda in a variety of ways.

The specific objectives of the fellowship are:

1. Increase Susan's knowledge, skills and capacity in conservation science and natural resource management. In obtaining her MSc she will sharpen her critical thinking, understanding of the use of evidence in policy, her analytical and research skills. She will share this knowledge through presentations to her institution and mentoring interns and junior staff.
2. Build relationships between Entebbe Botanic Garden and Treborth Botanic Garden Bangor. Susan will create links between these gardens which can contribute to shared projects and further exchange of expertise in future.
3. Conduct research on the potential of *Psorospermum febrifugum* in Forest Landscape Restoration. Sue will do her dissertation research on the potential contribution of *Psorospermum febrifugum* to forest landscape restoration in Uganda. Her research will focus on acquiring local knowledge about the tree, its potential for domestication, and local interest in cultivation and conservation within agroforestry systems. *Psorospermum febrifugum* is under rapidly increasing threat due to commercial collection of bark by the cosmetics industry but its importance to local livelihood systems is less well understood. This research will inform NARO's work on this potentially important species. Susan's new skills on the use of participatory research to support use of underutilized trees in agroforestry will be more widely applied by the institution in future.

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

Susan will be registered as an MSc student in Conservation and Land Management in the School of Natural Science, Bangor University. Modules will include Conservation Science (led by Prof Julia Jones), Natural

Resource Management (led by Dr Tim Pagella), Botanical Ecology and Ecosystem Services, and Management Planning. The School has an international reputation for excellence in research and training in both tropical forestry and conservation and there are a wide range of active projects around the world from which Susan will be able to learn. For example, Prof Jones has a project on Forest Landscape Restoration and local people in Madagascar.

Susan will spend time at Treborth Botanic Garden working closely with the community of curator, interns and conservationists there. Dr Shaun Russell, the director, will ensure she integrates well and will explore opportunities to build collaboration between Entebbe Botanic Garden and Treborth through Susan. He will also facilitate her visiting other botanic gardens during her visit ideally Kew or Edinburgh.

Bangor has a long history of local knowledge research (initiated by Dr Fergus Sinclair, who has a joint appointment with ICRAF, the World AgroForestry Centre in Nairobi). This includes recent research on how structured stakeholder engagement leads to development of more diverse and inclusive agroforestry options. This work has fed directly into tree domestication programmes. Susan will have access to the researchers involved in this work through our ICRAF links; and, in country, with ICRAF staff in Uganda (many of whom are Bangor alumni)

Bangor University will administer the fellowship, pay Susan's stipend etc.

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?

According to Uganda's National Development Plan III, better environmental management is critical. However, there is insufficient technical capacity. This fellowship will ultimately contribute (in a modest way) to Uganda's delivery of its Bonn challenge, CBD and ITPGRFA commitments.

When Susan arrives in Bangor in September, the Bangor-based staff will meet with her and her supervisor in Uganda (Dr John Wasswa Mulumba) to discuss the timeline for the fellowship, reflect on opportunities we have identified already and identify further opportunities for impact. We will have a second meeting before Susan returns to Uganda to update this plan.

Susan will use the fellowship to both strengthen capacity within her institution (NARO) and to develop international partnerships and networks.

On her return she will give a series of presentations to different audiences at NARO and Entebbe Botanic Garden (including a general presentation about her time in Bangor and what she learnt and more specific technical presentations about her research findings). Susan will also utilise her new skillset to build capacity for participatory research in Uganda, particularly aimed at increasing understanding of the potential role of underutilised agroforestry trees in addressing degradation and meeting livelihood needs. The knowledge generated will feed into domestication activity.

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 is strongly connected with the ITPGRFA. Susan's employer (Plant Genetic Resources Centre at NARO) is the focal point of ITPGRFA in Uganda and they have identified the research she will do and the skills she will learn as a strategic priority. They are interested in this fellowship both because of the research she will do on the potential of *Psorospermum febrifugum* in agroforestry, but also because of the skills she will develop in using local knowledge to aid in the domestication of under-utilized trees (related to article 5 of ITPGRFA).

The project also relates to the CBD e.g. Article 8f (restoration), 8j (preserve indigenous knowledge), Article 17 (on exchange of information including indigenous knowledge).

Uganda has committed to the Bonn challenge and is aiming to restore 2.5 million Ha. This will be through Forest Landscape Restoration which includes appropriate agroforestry. This fellowship is about developing skills for using local knowledge to contribute to developing under-utilized trees.

There are also connections to the Sustainable Development Goals specifically SDG 1 (ending poverty), 3 (good health and well-being), 5 (gender equality), 8 (decent work and economic growth), 12 (responsible production and consumption), 13 (climate action), and 15 (life on land).

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 proposal was instigated by Susan Komukama. Susan initially wanted to come to Bangor to study for a masters degree with Sophie Williams. Sophie's illness meant Susan lost contact with Bangor. She then approached Julia Jones in August 2020 to explore whether Julia might be interested in working with her to develop a Darwin Fellowship. Julia immediately introduced her to Shaun Russell from Treborth Botanic Garden and they had discussions over a few months. Susan wrote the first draft of the proposal, Julia then put her in touch with Tim Pagella who has relevant expertise on the local knowledge and agroforestry aspects of the research and the project developed further.

While Bangor staff have had input in shaping the direction of the proposal, the initial idea and the focus comes from Susan and the research priorities were developed by NARO to fulfil their needs. NARO have committed to pay █████ of the field costs for Susan's dissertation research and will support her impact plan.

Q15. Where will the Darwin Fellow be based?

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

Susan will be based at Bangor University (spending significant time at the university's botanic garden at Treborth). She will engage with the conservation science group led by Professor Julia Jones, the forestry group (of which Dr Tim Pagella is part) and will be fully engaged with the Treborth Botanic Garden community.

She will give at least one presentation to the conservation science group, the forestry group and to the Friends of Treborth Botanic Garden (this latter opportunity is quite a large public lecture series). We will arrange these early in her stay in Bangor so she can make contacts and identify opportunities early on.

She will return to Uganda in June 2022 for her dissertation field work. Her employer has offered to contribute to her field work. She will do field work in the xxx part of Uganda. She will write up her dissertation from Entebbe Botanic Garden in Uganda (in close contact with her Bangor University supervisors).





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.





-
-  [R27 Fellowship Implementation Timetable Template FINAL Susan](#)
 -  13/01/2021
 -  17:17:12
 -  xlsx 20.72 KB

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.

-
-  [R27 Fellowship Budget FINAL](#)
 -  14/01/2021
 -  10:49:20
 -  xls 73.5 KB

Q18. Other Sources of funding: provide details and amounts

Date applied for	Donor Organisation	Amount (include currency)	Comments (including confirmed/unconfirmed)
01 January 2021	NARO	£ [REDACTED]	contribution to the field work costs
<i>No Response</i>	<i>No Response</i>	<i>No Response</i>	<i>No Response</i>
<i>No Response</i>	<i>No Response</i>	<i>No Response</i>	<i>No Response</i>
<i>No Response</i>	<i>No Response</i>	<i>No Response</i>	<i>No Response</i>

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?

The fellow is required to apply for a Tier 4 (General) student visa to study in the UK. She has already been granted admission to Bangor for the Conservation and Land Management Course. She will get a CAS letter 3 months before the course starts to allow her to get the visa. We do not foresee any difficulties.

Section 8 - Certification

Certification

On behalf of the

Trustees

of

Bangor University

I apply for a grant of





£29,500.00

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	Ben Davies
Position in Organisation	finance manager
Signed	 F009531 Section 8 Certification signed  15/01/2021  14:19:18  pdf 1.49 MB
Dated	15 January 2020

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
I 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.

Unchecked

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 [here](#). 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).