***Exemplar justifications of resources for HEFCE-funded Technicians and High Performance Computing (updated May 2022)***

 ***GEE Informatics Technician***

We request funds for an informatics technician (10% time for 3 years). The technician will support the PI and PDRA in scripting/programming new analytical techniques, running analyses on UCL’s High Performance Computing platforms, and making data available for international researchers through online databases. The role will be filled by the Grade 6 GEE Informatics Technician (Henry Ferguson-Gow).

***Technical Support***

We are requesting 10% FTE technical support position at UCL to maintain the computational infrastructure required for the project (computing cluster, backups, web service maintenance, etc.

***ESRC Research Grant Justification of Resources***

Funding for 10 % of the salary of a departmental technician is sought to help with databasing and preparing data for archiving and sharing. The technician will also write the scripts for the project website and assist with data analysis.

***UCL Staff technician***

UCL Staff technician (10%) is requested for years 1 and 2. This person will be responsible for receiving DNA samples from Latin America, maintaining the sample repository at UCL, verifying DNA concentrations, preparation of aliquots and sample shipment to the genotyping facility.

***Research staff***

The proposal involves two broad research activities. The first is the collation of empirical datasets of abundance trends, life history and environmental data. The second is the development of a suite of models, and building simulations to answer specific objectives about abundance dynamics. I seek the support of a Post-Doctoral Research Assistant for 36 months who will undertake the majority of this data collection and analytical work. I also seek 10% of a specialist GIS and computer programmer Research Technician’s time over the same period to extract and manipulate the environmental GIS layers, and help with programming, data storage and continuity, and ensuring impact. The Research Technician is within the Centre for Biodiversity & Environment Research, Department for Genetics, Evolution & Environment, at University College London.

***BBSRC grant requesting 10% of laboratory manager and 10% of administrator***

Professional Support Staff: Funds are requested towards the salaries of two key UCL-embedded staff within Professor Partridge’s lab, who are vital for the smooth running of the project: 10% of the Laboratory Manager, who ensures the efficient operation of all lab facilities and equipment, including running the media kitchen and preparing fly food which is essential for the maintenance of all fly stocks and the running of lifespan experiments; and 10% of Prof Partridge’s Executive Officer, who will oversee all administrative matters including project reporting, finance management and routine monitoring of the budget, meeting schedules, travel and expenses, and the recruitment and advertising of the post-doctoral research assistant.

***Lab manager***

Lab manager: We have requested a contribution of 10% of the time of Giovanna Vinti, the lab manager of our unit. The lab manager provides support for eight research groups in our unit and her role is essential for the successful execution of the research. The lab manager takes care of every aspect of the laboratory operation on a daily basis. The operation of the cell culture facilities, laboratory instruments, purchasing of reagents and equipment, maintenance of equipment, compliance with safety and other regulations and many other would be almost impossible without assistance from our lab manager.

**Fly Kitchen Technician**

5% of the salary of the IHA’s full time fly-food kitchen technician is also requested. This is essential

for the production of large batches of food for stock maintenance as well as for maintaining a

generally clean environment to ensure our invaluable stock collection remains uncontaminated and

mite-free.

***RC Application - Directly allocated costs***

This project will require the use of three members of staff that are shared by the fly workers at the institute, as detailed below. They will all spend 7% of their time directly and solely on this project.

1) Ms Mumtaz Ahmed is responsible for making the food for fly maintenance and all experiments. It is crucial, especially for lifespan experiments, that the food be made in a standard and reproducible way and this is why there is one person dedicated to the task for the whole institute.

2) Ms Giovanna Vinti is the laboratory manager at the IHA and her duties include running and managing the laboratory, all the instruments and facilities as well as ordering consumables. Since this project will use shared space and facilities and does not have another dedicated laboratory manager, Giovanna’s time will be required for this project.

3) Mr Michael Wright is the administrative assistant at the IHA, performing roles that the UCL administration does not cover, including direct grant administration and management, and facilitating employment and local human relations. Since the administration for the institute is centralised, Michael's time will be required as part of this project.

***Data Storage Costs (except Wellcome Trust Projects)***

We request £150\*(#Years of grant) to cover long-term data storage infrastructure, including data backup.

***High Performance Computing (HPC) -Directly Allocated Costs***

For all grants making use of UCL’s HPC. There are three components – storage, compute and support, as listed below. You can include just (i) if your need is for storage only. However, if you include (ii) then please also include (iii)

(i) Please calculate data storage cost using the formula Cost = £ #TB \* #Years \* 50

(ii) Calculate the CPU/GPU cost. Suggest contributions should be in multiples of £10k depending on the extent of HPC to be used

(iii) Include sysadmin support cost if you are going to use UCL HPC extensively. The precise cost will vary over time, and will be available from your grants officer, but currently this is ~£3k per annum, so for a typical 3-year grant this cost would be approx. £10k

Suggested Text:

(i) This project will require #XXX TB of data storage for #Years attached to UCL HPC. We request £(#XXX \* #Years \* 50) to cover this cost.

(ii) This project will make extensive shared use of UCL’s HPC clusters. We request a contribution of £10k\*#multiplier towards rolling replacement of CPU/GPU nodes.

(iii) We request 5% of the cost of a system administrator to support the HPC activities of this project. The sysadmin is responsible for managing the computer cluster, installing and maintaining software packages, helping to write and optimise job submission scripts etc.