

STFC Landscape Awards, Funding Allocation Formula - Guidance

The STFC Landscape Awards Funding Allocation Formula is used to allocate STFC studentships to Research Organisations (ROs) based on a combination of quality (Q) and capacity (volume - V).

ROs eligible for an STFC studentship quota will be those with research activity funded by STFC through STFC's grant/programme budget. The overall allocation of studentships to each area will be proportional to the overall budget assigned to each area by STFC, in order to reflect STFC's core research activity.

The RO studentship quota will be proportional to the product of research volume (V) and quality (Q) within each RO, with an adjustment for previous submission rates.

This will ensure that the spread of studentships reflect STFC core research activity within ROs that have the capacity to support them.

The volume (V) is, broadly, the number of unique¹ academics (Project Leads, Project Co-Leads, Fellows) funded through STFC's grant/programme budget on awards starting in the previous four full calendar years (weighted at 0.2). The quality (Q) is proportional to the number of STFC-funded Researcher Co-Leads and Research and Innovation Associates supported on these awards (weighted at 0.33). The constant of proportionality is chosen such that the total number of studentships equals the number available for allocation.

Allocation of studentships will continue to be carried out through the provision of doctoral training grants to ROs. Allocations will be based on integer numbers of 3.5-year studentships, rounded within each subject area. To smooth out, over time, the perturbations caused by rounding (which, at least in the case of small groups, may have a significant effect), the residuals in each subject area left over after rounding will be carried forward to the next year. For example, if the funding formula generates 9.7 in astronomy for an RO, it gets an allocation of 10 in that area, with -0.3 carried over to the next year.

Details of the Proposed Formula

Definition of volume (V)

The number of Project Leads and Project Co-Leads funded on research grants in each of five science areas (Astronomy; Particle Physics Experimental; Particle Physics Theory; Nuclear Physics; 'Other'²), that started in the previous four full calendar years, weighted at 0.2, plus

¹ Unique academics is a calculation that ensures individuals who feature on multiple grants are not counted multiple times to safeguard against artificially inflated capacity.

² 'Other' includes STFC awards outside of the four areas list above, such as Particle Astrophysics, Quantum, and Computing.

The number of STFC Ernest Rutherford Fellows starting in the previous four full calendar years weighted at 0.2; plus

The number of UKRI Future Leader Fellows in the STFC remit starting in the previous four full calendar years, weighted at 0.2.

We will include all STFC grants, as well as UK Space Agency grant schemes³ administered by STFC, apart from:

Public Engagement awards; IPS awards (inc. CLASP); ODA awards; Travel awards; Follow-On-Funding; training grants. In addition, Infrastructure and Capital awards are excluded (where possible; STFC endeavour to identify all capital and infrastructure awards using grant categories and schemes, opportunity names and project titles and summaries).

Definition of quality (Q)

The number (Full Time Equivalent: FTE) of PDRA (Researcher Co-Lead, Research and Innovation Associate) posts awarded on STFC and eligible UK Space Agency grants (awarded on the grants included in the Volume measure). The weighting for all these posts in the formula will be 0.33.

Submission rates

PhD submission rates data will be used, as a success measure of studentship training, as part of the allocation method. Small reductions may be applied to an RO's allocation if the percentage of STFC funded students submitting in four years, measured over the previous four-year period, falls below 70%. The reduction, to the unrounded allocation, would be 10% for submission rates between 50% and 70%, and 20% for submission rates under 50%. However, the reduction will not be applied if it equates to less than 0.5 of a student – instead, the fractional reduction would be carried forward to future years and added to any further reductions until this threshold is reached.

Long-term sickness or other mitigating circumstances such as maternity leave, shared parental leave or other personal circumstances that have caused a delay in submission will be taken into account. Project delays will not be classed as mitigating circumstances.

The formula and process

The formula will follow the process outlined in this document to provide a set of results, leading to a recommendation for funding provided to individual ROs. The formula will be run by STFC data analysts, with a quality assurance process which follows the UKRI QA policy. The formula processes and any policy decisions on data fields have been approved by STFC PD senior management.

³ Space Science (astronomy, astrophysics, cosmology and planetary and solar science) and Exploration, which are all processed on behalf of the UKSA by STFC. The UKSA's National Space Science Programme and the Science & Exploration Bilateral Programme both follow this route.

The process will produce outputs relating to STFC funding and supported staff at ROs, which will be verified and validated internally.

The formula will be run separately within each area, defined by grants panel (i.e. Astronomy; Particle Physics Experimental; Particle Physics Theory; Nuclear Physics; 'Other'). The overall allocation of studentships to each area will be proportional to the Total Allocated Budget (TAB) assigned to each area (Astronomy; PP; NP; Other) by STFC, in order to reflect STFC's core research activity:

$$V+Q*(TAB/Total\ V+Q)$$

A further split of PP will be made following the initial allocation using the volume measure to measure capacity in PPE and PPT. Allocations to ROs will be made within these subgroups and will help to ensure a balanced split within PP, reflecting the Programme.

ROs will have the opportunity to attribute grants falling outside the main grants panel areas ('Other') to another area within the STFC remit.

RO studentship allocations will be rounded within each subject area with subject-specific residuals carried forward to the next allocation. However, as in previous years, these subject-based allocations are notional and ROs retain the flexibility to allocate studentships to projects within any of the four areas as they wish.

Data Sources:

Relevant data sources have been chosen to suit the purposes of this formula. The primary data source is the UKRI DataBank, and includes administrative and grant data for STFC, UKRI and UKSA.

STFC will only use data sources which are accessible to the office, verifiable and Quality Assured according to the UKRI QA Policy and Processes.

More detailed notes on the data can be found in the 'STFC Landscape Awards Funding Formula Data Notes' document.