

SKILLS EXCHANGE AND DEVELOPMENT TRAVEL AWARD GUIDANCE

These awards enable ACED Researchers to visit another ACED Member Centre or Centres to learn or impart a key skill or technique, and to sow the seeds of future research collaborations.

Due to the potential for ongoing Covid-related restrictions to travel, Awards are anticipated to be completed at any time during the period from 1st May 2022 to 31st May 2023. ACED researchers can also apply for virtual opportunities to teach a skill/technique/process.

Applicants are eligible to be reimbursed for any costs associated with running the training (e.g. online platform, distribution of any training materials, etc.). Researchers are not eligible to be reimbursed for their salary if their salary is covered full time by their academic institution (according to [CRUK's policies of funding salaries](#)). If researchers choose to do so, they can include in their application a request for funding for training/career development opportunities (courses, conferences, workshops, etc.) for up to 40 hours at a maximum cost of £3,000 GBP or \$4,000 USD.

Submit completed applications to your local Programme Manager (Section 3: Useful Contacts) in Word format by the stated deadline.

1.1. SUMMARY OF AWARD

Amount

Up to £40,000 (approx. \$50,000) per award to cover a visit of up to 4 months (no minimum length).

Eligibility

Applications will be accepted from Alliance researchers regardless of career stage; however, at this time this excludes PhD students who are not eligible to apply for this scheme as Principal Applicant. Applicants must be a researcher at an ACED Member Centre from one of the following institutions: Canary Center at Stanford University, the University of Cambridge, the OHSU Knight Cancer Institute, University College London or The University of Manchester.

Host and visiting institution support

To be eligible, each application must include a letter of support from the Principal Investigator or the research group from any Centre(s) that you wish to visit. Collaboration between US – UK Member Centres is encouraged where travel restrictions allow, but not mandatory.

It is the applicant's responsibility to approach a potential Alliance Member Centre to find suitable learning and development opportunities.

Application and Scope

The purpose of this award is to allow an ACED researcher to visit another ACED Member Centre to learn or impart a new skill or technique that will transfer knowledge across the Alliance and enable significant progress in career development and/or research interests. Funding is available for travel,

accommodation, applicable university and visa fees and necessary research expenses. The applicant's salary is not covered by this award.

Applications must include a letter of support from the Principal Investigator of the research group(s) that the applicant wishes to visit, a clear explanation of how the experience will provide a step-change in their career and/or research interests (or those of researchers at the host Member Centre), how knowledge transfer will benefit the Alliance with the expectation that this will seed future collaborative research projects/initiatives. Where required, the application should outline whether a visa is required and relevant details regarding the timing of the Award around visa processing if known.

Timelines

Successful applications are anticipated to complete the skills exchange and development opportunity within 12 months of receiving the award.

Restrictions

Applications must be for skills exchange and development opportunities with another Alliance Member Centre or Centres and must be signed by the Applicant's Centre Director and accompanied by signed letters of support from the Principal Investigator of the host research group and the Supervisor of the Applicant where the Applicant is not an independent researcher. Awards are not restricted to US-UK exchanges only. Recipients are obliged to return to their host institution following completion of the award. Each proposed award could encompass visits to multiple Alliance Member Centres if applicable to the skills exchange and development opportunity.

If you are applying to other funding bodies at the same time with funds allotted to this skills exchange and development opportunity, please note that we cannot accept the same application. If you submit an application to the Alliance that is already being considered by another funding body, your application will not be accepted.

1.2. REMIT OF THE ACED SKILLS EXCHANGE AND DEVELOPMENT TRAVEL AWARD

What is suitable for the ACED Skills Exchange and Development Travel Award?

You can apply for an ACED Skills Exchange and Development Travel Award in any research area(s) listed in the [ACED scientific strategy](#) with a focus on early detection of **primary** cancer. This award provides up to a maximum of 4 months of funding of up to £40,000 (approx. \$50,000) to support knowledge exchange between Alliance Member Centres.

This award is to fund the learning or imparting of a new skill relevant to scientific research that will provide a step-change in career development of the applicant and/or research interests of the applicant or host research group. The goal of the award is to enable skills and/or knowledge exchange between the applicant and host Centre that will benefit early detection research towards the Alliance's strategic aims. The Award also provides the opportunity to facilitate future collaborative research across different Alliance Centres. You must demonstrate that the training or development is not currently available within your host institution.

The Award will support knowledge exchange and training across the diverse research areas involved in early detection, for example, basic biology and technology development through to translational and population research.

Areas that could be considered include (but are not limited to):

- Learning opportunities in applying state-of-the-art technology to applicable research questions
- Learning opportunities in novel wet-lab techniques critical to your area of research interest
- Development opportunities in mathematical modelling, health economics, trial design, bioinformatics
- Establishment of new collaborations to tackle an early detection area of need that will benefit the wider Alliance community

1.3. WHAT IS FUNDED?

Funding available through this award can cover travel, accommodation, training, applicable university and visa fees and necessary research expenses for the duration of the skills exchange and development opportunity. Subsistence and reimbursement of the applicant's salary are not eligible to be covered by this award (see [CRUK's policies of funding salaries](#)).

Due to the potential for ongoing Covid-related restrictions to travel, applications for virtual opportunities to teach a skill/technique/process will also be considered. Applicants are eligible to be reimbursed for any costs associated with running the training (e.g. online platform, distribution of any training materials, etc.). If researchers choose to do so, they can include in their application a request for a bursary for training/career development opportunities (courses, conferences, workshops, etc.) for the following amounts: up to 40 hours of training at a maximum cost of £3,000 (\$4,000).

1.4. ASSESSMENT CRITERIA

Your application will be assessed on the following criteria:

- **Relevance to the Alliance's scientific strategy and remit:** All applications must be within the Alliance's scientific strategy to advance the understanding of early cancer and improving how and when cancer is detected. An abbreviated Alliance scientific strategy is available to all Alliance members.
- **Learning opportunity:** All applications must have a strong rationale to support the learning and development opportunity, demonstrating how it is valuable to the applicant's research and career development (or that of researchers at the host Member Centre), as well as beneficial to knowledge exchange for the wider Alliance community.
- **Excellent team and collaborative environment:** All applications should outline the suitability of the applicant and host Member Centre to undertake the learning and development opportunity, and detail the resources and facilities required for the successful fulfilment of the award. Applications should highlight the importance of the Alliance environment in supporting the opportunity and enabling progress in early detection research. Multi or cross-disciplinary applications are encouraged.
- **Resources requested:** The costs can be requested for travel and reasonable accommodation costs, as well as the direct costs of the research and reasonably justified in line with the training and experimental plans, leveraging existing resources where appropriate.

- **Benefit to the wider Alliance:** Applications should detail the actual and potential benefits to the wider Alliance community, and how the skills/knowledge learned will be shared with the wider Alliance community.

2. THE APPLICATION PROCESS

2.1 PROCESS OVERVIEW

The application and award process of the ACED Skills Exchange and Development Travel Award is designed to be quick and straightforward. Your Member Centre Director must approve your application before you have submitted it, so please submit your completed application to your local ACED Programme Manager (Section 3: Useful contacts) before the indicated deadline. Following submission, applications are considered at a meeting of the Alliance Training Working Group, recommendations for Awards to be funded will then be ratified by the Alliance Executive Board. The applications will not be sent for external review.

2.2 APPLICATION

Please use the template provided to complete details on the skills exchange and development opportunity (Section 3.1 of the accompanying application template). **Section 3.1 of the application template should not exceed two standard pages using Arial 10-point font, including figures. References are not included as part of the page restriction. In this section, you should aim to address the content outlined in the table below.**

In your application please include:

- How the opportunity will help establish your research (or that of researchers at the host Alliance Member Centre) in the early detection field
- A clear explanation of how the experience will provide a step-change in your career and/or research interests (or those of researchers at the host Alliance Member Centre)
- Justification of the selection of the Alliance Member Centre and collaborative team you are wishing to visit
- How learnings from this experience will be applied to Alliance (both the wider community and/or any potential future Alliance research projects)
- Your plan for seeding foundations for potential future collaborative research projects with other Alliance Centres

Contents of the opportunity description (Section 3.1 of the application)

CHALLENGE	<ul style="list-style-type: none"> • State briefly the research and/or clinical challenge or need the proposed opportunity looks to address. Include details of the current approach, and how the opportunity will drive progress in the early detection of primary cancer.
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<p>TEAM COMPOSITION</p>	<p>Please provide information on the composition of the team you will be visiting, including:</p> <ul style="list-style-type: none"> • Whether this is a new or existing collaboration. • Justification of the selection of the Alliance Member Centre and collaborative team you wish to visit. • Outline key people in the visiting institution that will be responsible for hosting the skills exchange/development opportunity. • Address how the Alliance environment is critical in supporting the opportunity and the potential of future collaborative research projects/initiatives. • Address how this opportunity will accelerate progress toward the Alliance’s strategic aims compared to not pursuing this opportunity.
<p>DEVELOPMENT OPPORTUNITY AND MILESTONES</p>	<ul style="list-style-type: none"> • Provide details of the opportunity and any milestones in your development plan. Explain clearly how this opportunity will address the early detection challenge you have identified and how it will provide a step-change in your career and/or research interests (or those of researchers at the host Alliance Member Centre). Briefly explain your plan for seeding foundations for potential future collaborative research projects and how this opportunity will help you achieve this. • Include details of any experimental methods, techniques and analyses that will be part of this opportunity.
<p>EXPECTED OUTPUTS</p>	<ul style="list-style-type: none"> • State the expected outputs of this opportunity. Include a brief description of your vision for future research proposals which may lead on from this opportunity.
<p>REFERENCES</p>	<ul style="list-style-type: none"> • Give full details of any references, including authors, publication year, title and journal name, volume, page numbers. We won’t accept shortened references. • Number your references in the order in which they appear in the text, and list them in the Vancouver style (as <u>outlined by the US National Library of Medicine</u>).

2.3 ADDITIONAL RESEARCH INFORMATION

Please use the provided template to complete the following sections.

Additional information for all applications

<p>JUSTIFICATION FOR SUPPORT REQUESTED</p>	<p>Please list running expenses and provide justification for the associated costs. Costs should be divided and reported separately for each UK and US Member Centre(s) in the local currency of the country in which they are incurred in (e.g. GBP (£) for UK and USD (\$) for US). For example, if costs are associated with US Member Centres, it should be reported as <i>Stanford or OHSU- USD (\$) amount</i>. Costs associated with UK Member Centres, should be reported as <i>Manchester or Cambridge or UCL - GBP (£) amount</i>.</p> <p>Running Expenses:</p> <ul style="list-style-type: none"> • Please list your travel and accommodation costs.
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- Please list lab consumable costs.
- Please list specific costs separately from general consumables.

Example table:

Description	Additional Information	Duration (days)	Costs Total
Train travel	Travel from Cambridge to Manchester	Round trip	£565 (incurred by Cambridge)

CELL LINES

Only complete if applicable

Please provide details of any cell lines you will use during your skills exchange and development opportunity. These should include:

- Details of how you will maintain good cell culture practices throughout your research project.
- If new cell lines will be introduced to your lab, please give the source will be authenticated when they enter your lab.
- If new cell lines will be generated, please tell us how these will be made available for others to use.
- Justification for the use of any cell lines that have been misidentified (e.g. Chang liver cells).

You can request funding (under running expenses) to support cell line authentication (e.g. screening for contamination by mycoplasma, STR profiling for human cell lines or DNA fingerprinting for non-human cells). You'll need to validate your cell lines according to the [Guidelines for the use of cell lines in biomedical research](https://doi.org/10.1038/bjc.2014.166) (doi:10.1038/bjc.2014.166), which should be referenced in any publications resulting from the Award.

ANIMAL STUDIES

Only complete if applicable

You should complete this section if you are proposing to use animals during your skills exchange and development opportunity. You should ensure you are familiar with the relevant [NC3Rs guidelines](#), in particular the [Responsibility in the Use of Animals in Bioscience Research](#) document, the [ARRIVE Guidelines](#), and the [NC3Rs Guidelines: Primate Accommodation, Care and Use](#). When completing this section, you should describe how any relevant activities during the skills exchange and development opportunity adheres to the expectations set out in these guidelines.

Animal Costs:

- Please include a full breakdown of the purchase costs and husbandry costs (e.g. per mouse per week).
- Please list animal purchase, maintenance and experimental costs separately.

Justification of proposed animal studies

Please briefly justify the use of animals by outlining:

- Why animal research is necessary for this opportunity and details of all species you propose to use;
- Why the species/model you have chosen is the most appropriate physiological model to use for the research objective(s);
- If you are developing any new models why this is necessary and how you will ensure that these will be disseminated to the research community more broadly;
- The efforts you will take to minimise animal usage.

For your critical experiments, please provide an outline of your experimental design and power calculations. Where details of specific experiments are not known, you may provide an illustrative example. This should include:

- An overview of the experimental approach summarising; primary and secondary experimental outcomes, number of experimental and control groups, the number of experimental units in each experimental group, the total number of experimental units to be measured and the number of times each unit will be measured, number of independent replications of each experiment and how you plan to minimise experimental bias (e.g. randomisation and blinding) or an explanation of why this would not be appropriate.
- An explanation of how effect sizes have been calculated and a justification of their biological relevance
- The power calculations used to determine your sample size (or a principled explanation of an alternative basis for calculations, justifying why you haven't used statistical calculations). Explanations based solely in terms of 'usual practice' or previously published data will not be considered adequate.
- Details of breeding strategies that will be implemented (if applicable).
- A brief description of your planned statistical analyses in relation to the sample size, and list any statistical advice available.
- You may present this in the form of a table or diagram, if appropriate.

Please note that the NC3Rs website includes a number of useful [experimental design resources](#), including the Experimental Design Assistant (EDA), a free online tool to help optimise experimental design. The EDA can be used to create a visual map of your planned experiments (or a few of them) that may be useful in discussions with your team and statistical advisors. If you use the EDA, you are encouraged to submit the EDA report as a PDF upload.

Please note that applications proposing research on specially protected species or pigs must undergo an additional independent peer review by the NC3Rs.

For any animal studies to be performed outside of the UK, we also require a letter to be included with your completed application from the relevant applicant leading this work to confirm that the research proposed will adhere to all relevant local regulatory systems, and also that the welfare standards will be consistent with UK standards.

2.4 ADDITIONAL DOCUMENTS

Letter(s) of Support: A Letter of Support must be included from the institution you wish to visit (e.g. the Principal Investigator of the relevant team). This letter should briefly detail the skills exchange and development opportunity and outline their support in you pursuing this opportunity. Submit any Letters of Support in PDF format, signed, dated and on headed paper alongside your completed application.

If you are not an independent researcher, you must include a brief letter of support from your supervisor/line manager.

3. USEFUL CONTACTS

Once you have read these guidelines, please contact ACED@cancer.org.uk if you have any questions or need more information.

Affiliation	Name	Role	Contact Information
Cancer Research UK	Karolin Kroese	ACED Programme Manager	Karolin.Kroese@cancer.org.uk
Cambridge	Wendy Alderton	Programme Manager	wa266@cam.ac.uk
University College London	Daniel Kelberman	Programme Manager	d.kelberman@ucl.ac.uk
OHSU	Erin Watson	Programme Manager	watsoner@ohsu.edu
Stanford	Ryan Spitler	Programme Manager	rspitler@stanford.edu
Manchester	Martin Bone	Programme Manager	martin.bone@manchester.ac.uk