



COLLABORATION AGREEMENT

Cover and contents pages

This Agreement is made this 3rd day of October 2019

Between

1. The University of Greenwich, acting through its Natural Resource Institute (hereinafter "UK Project Lead and/or NRI") whose registered office is at Old Royal Naval College, Park Row, Greenwich, London, SE19 9LS, UK

and

2. London School of Hygiene and Tropical Medicine (hereinafter "LSHTM") whose registered office is at Faculty of Epidemiology and Population Health, Keppel Street, London, WC1E 7HT

and

3. Instituto de Investigacion Nutricional (hereinafter "Peru Project Lead and/or IIN") whose registered office is at Av. La Molina 1885, La Molina, Lima, Peru

and

4. Instituto de Investigaciones de la Amazonia Peruana (hereinafter "IIAP") whose registered office is at Av. José A. Quiñones km 2.5, Iquitos, Loreto, Peru

each a **"Party"** and collectively **"the Parties"** or **"Collaborators"**.

WHEREAS:

- A. The Parties to this Agreement wish to collaborate on a research project entitled *"Intercultural models to improve nutrition and health of indigenous populations through gender-sensitive agroforestry practices in Peru"* ("**the Project**") which is funded by both the Medical Research Council (MRC) and FONDECYT.
- B. Medical Research Council (MRC) has awarded a Grant award to the UK Project Lead Party for them and the UK Institutions to carry out the Project as set out in Appendix II ("**UK Head Terms**"); and
- C. FONDECYT has awarded a Grant award to the Peru Project Lead Party for them and the Peru Institutions to carry out the Project as set out in Appendix III ("**Peru Head Terms**"); and
- D. This Collaboration Agreement sets out the terms under which the Parties shall perform the Allocated Work.

Medway Campus

Central Avenue,
Chatham Maritime,
Kent ME4 4TB
United Kingdom

Tel: +44 (0)1634 880088
Web: www.nri.org Page 1

University of Greenwich,
a charity and company limited
by guarantee, registered in England
(reg. no. 986729).

Registered Office:
Old Royal Naval College, Park Row,
Greenwich, London SE10 9LS.



FS 54723
ISO 9001

IT IS HEREBY AGREED as follows:

1 DEFINITIONS AND INTERPRETATION

1.1 The words and phrases below shall have the following meanings:

Background IPR	Means any IPR controlled or owned by any Party prior to the date of commencement of this Agreement or IPR generated by any of the Parties independently of the Project and controlled or owned by that Party or any IPR to which the Party has the necessary rights for the purpose of the Project.
IPR	Means any intellectual property rights of any description including but not limited to patents, copyrights, design rights (registered or unregistered), trademarks, know-how and database rights.
Party or Parties	Means any one or more of the signatories to this Agreement.
Resulting IPR	Means any IPR arising from and developed in the course of the Project by any of the Parties.
Funders	Medical Research Council (MRC) and FONDECYT.
The Start Date	Means 19 th April 2019 for UK Collaborators and 1 st June 2019 for Peru Collaborators.
Grant Offers	Means the offer contained in the individual Offer Letters provided to each of the Parties.
The Project	Means the project entitled " <i>Intercultural models to improve nutrition and health of indigenous populations through gender-sensitive agroforestry practices in Peru</i> " to be undertaken by the Parties in accordance with the Grant Offers and The Project

1.2 In this Agreement, unless otherwise expressly provided or unless the context otherwise requires:-

- 1.2.1 References to the singular include the plural and vice versa.
- 1.2.2 References to words denoting any gender shall include all genders.
- 1.2.3 References to persons include companies, partnerships, government departments and agencies and all other forms of body corporate or unincorporate.
- 1.2.4 References to Clauses and Schedules are to Clauses of, and Schedules to, this Agreement.
- 1.2.5 References to laws and statutory provisions shall include reference to any subordinate legislation made pursuant thereto and shall be construed as referring to those laws, provisions and subordinate legislation as respectively amended or re-enacted from time to time.



- 1.2.6 The headings of this Agreement are for ease of reference only and are not part of this Agreement for the purposes of construction.
- 1.2.7 Any undertaking by a Party not to do an act or thing shall be deemed to include an undertaking not to permit or suffer such act or thing to be done by another person.
- 1.2.8 References to the Parties include their respective successors in title, permitted assigns and legal personal representatives.
- 1.3 The Schedules and Recitals form part of this Agreement and shall have effect as if set out in full in the body of this Agreement and accordingly any reference to this Agreement includes the Schedule and Recitals.
- 1.4 In the event of any conflict between the terms of this Agreement and the terms of the applicable Grant for each Party, the terms of the relevant Grant will prevail. This agreement is meant to complement the head Grant agreements and other agreements which have been put in place between UK/Peru Project Leads and Collaborators. Subject to the foregoing, this Agreement shall take precedence over any other agreement signed between the Parties relating to the subject matter hereof and over any other documents referred to herein.

2 PURPOSE AND SCOPE

- 2.1 The Project shall be undertaken at all times by the Parties in accordance with the terms of the Project Proposal (Appendix I) and each Party will adhere to their own Grant Offer conditions.
- 2.2 Subject to Clause 2.1, the terms of this Agreement shall govern the rights and obligations of the Parties. These obligations include their respective Contributions and remuneration, the management structure and all other terms of collaboration to be complied with in connection with the Project.

3 DURATION

This Agreement shall remain in full force and effect for the period of 36 months from the Start Date unless terminated earlier in accordance with the provisions of Clause 7 or Clause 12.

4 RESPONSIBILITIES AND LIABILITIES

- 4.1 Each Party shall make its respective contributions to the Project.
- 4.2 Each Party confirms that it will act in good faith when complying with its respective obligations under this Agreement.
- 4.3 In respect of Background IPR, Resulting IPR, information and/or materials supplied by one Party to another under this Agreement, the supplying Party shall be under no obligation or liability and no warranty condition or representation of any kind is made, given or to be implied as to the sufficiency, accuracy or fitness for purpose of such information or materials or, the absence of any infringement of any proprietary rights of third parties by the use of such information and materials and the recipient Party shall in any case be entirely responsible for the use to which it puts such information and materials. Notwithstanding the foregoing, no Party shall supply Background IPR to another Party under this Agreement in the knowledge that the use of the Background IPR by that Party will infringe the proprietary rights of any third parties.



- 4.4 Each Party shall comply with requests for information from the UK & Peru Project Leads and make best endeavours to provide reports, grant claims and audits in a timely fashion.
- 4.5 Each Party shall indemnify each of the other Parties, in respect of liability resulting from acts or omissions of itself, its employees or its agents provided always that such indemnity shall not extend to claims for indirect or consequential loss or damages such as, but not limited to, loss of profit, revenue, contracts or the like.

5 ADDITION OF NEW PARTIES

- 5.1 New parties may join the Project with the unanimous agreement of all Parties and the Funders, subject to Clause 5.2.
- 5.2 New parties shall be bound by the terms of this Agreement and such other conditions as the original Collaborators may specify. New Commercial Parties may be required to pay a sum towards the cost of the Project, the level of which will be determined by the original Collaborators. Factors determining such sum may include (without limitation) the future contribution of the new party and the benefit accruing to the new party on joining the Project.

6 WITHDRAWALS

- 6.1 Any Party (the "Withdrawing Party") may withdraw from the Project with the unanimous consent of the other Parties and subject to such conditions as the other Parties may unanimously decide.
- 6.2 In the event of withdrawal of a Party the remaining original Collaborators will make all reasonable attempts to reallocate the obligations of the Withdrawing Party under this Agreement either within the remaining Parties or to a third party acceptable to the remaining Parties and the Funders provided that such third party agrees to be bound by the terms of this Agreement.
- 6.3 Subject to the agreement of the applicable Project Lead/Funder, the Withdrawing Party shall be permitted to recover the costs it has properly incurred, up to the agreed date of its withdrawal from the Project; it shall also comply with all conditions imposed pursuant to Clause 6.1 which shall include (without limitation);
- 6.3.1 rights granted to the other Parties in respect of the Withdrawing Party's Background IPR shall continue for the duration of the Project subject to the restrictions contained in this Agreement;
- 6.3.2 to the extent that exploitation of any other Party's Resulting IPR is dependent on the Withdrawing Party's Background IPR, then the Withdrawing Party shall, subject to any existing third party obligations, grant to the other Parties a non-exclusive licence to such Background IPR on fair and reasonable terms to be agreed;
- 6.3.3 the Withdrawing Party shall grant to the other Parties a non-exclusive, royalty-free licence to use the Withdrawing Party's Resulting IPR for the purposes of carrying out the Project. For the avoidance of doubt any exploitation of such Withdrawing Parties Resulting IPR will be dealt with in accordance with clause 10;



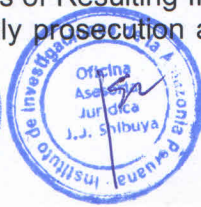
- 6.3.4 all rights acquired by the Withdrawing Party to the Background and Resulting IPR of the other Parties shall cease immediately other than in respect of the Withdrawing Party's interest in any jointly owned IPR;

7 FINANCIAL MANAGEMENT

Each Party shall be responsible for managing their finances as per the relevant Funders' terms and conditions and as may be further outlined in separate agreements they hold with either the UK or Peru Project Lead.

8 IPR OWNERSHIP

- 8.1 Each Party shall promptly disclose in confidence to the other Parties all Resulting IPR during the term of this Agreement and all Parties shall co-operate, where required, in relation to the preparation and prosecution of patent applications and any other Resulting IPR applications, and in relation to any legal proceedings concerning such patents and patent applications and any other Resulting IPR applications.
- 8.2 Each Party shall own the Resulting IPR generated by it under the Project and shall be responsible for securing ownership of such Resulting IPR from its employees, students and other agents.
- 8.3 Subject to clause 6.3, nothing contained in this Agreement or any licence agreement pertaining to this Project shall affect the absolute and unfettered rights of each Party in all inventions, discoveries and intellectual property contained in its Background IPR and the provisions of clause 12 shall apply to all such Background IPR.
- 8.4 Unless agreed otherwise, each Party shall undertake and continue at its expense the timely prosecution and maintenance of all Resulting IPR which is solely owned by that Party. In the event that the owner of the IPR is unable or unwilling to comply with its obligation under this Clause, the other Collaborators shall consider how best to deal with such Resulting IPR and shall have the option to require an assignment of such Resulting IPR to another Party to enable prosecution and maintenance of such Resulting IPR by that other Party at its own cost. In the event that any Party wishes to exploit commercially any Resulting IPR assigned pursuant to this Clause 8.4 that Party shall pay to the assigning Party a royalty and/or other appropriate form of remuneration which is fair and reasonable taking into consideration the factors set out under Clause 9.3.
- 8.5 If, during this Project, it is accepted that two or more Collaborators have contributed to the production of such intellectual property rights, the Collaborators agree that they shall have joint ownership of such IP. The Collaborators shall strive to set up, as soon as possible, after the generation of such IP, an appropriate agreement regarding the allocation and terms of exercising the provisions of the joint ownership, taking into account the contributions invested by each of the Collaborators, during the course of the Project. Such contributions should take into account: ownership of Background IP, human and financial resources (including levels of competency or expertise of the personnel) and the direction and coordination of the research efforts, committed by each of the Collaborators.
- 8.6 In the event that any of the Parties are jointly responsible for generating Resulting IPR such Resulting IPR shall be jointly owned by such Parties in accordance with the inventive contribution made by each Party to such Resulting IPR.
- 8.7 Joint owners of Resulting IPR shall agree between them on who shall be responsible for the timely prosecution and maintenance of all such Resulting IPR and the Party



that is nominated to be so responsible shall be entitled to charge the other joint owners with a percentage of the costs of so doing as agreed between the joint owners. In the absence of any agreement to the contrary between joint owners the costs shall be equally shared.

9 USE OF IPR

9.1 It is intended that every reasonable effort should be made to ensure that the intellectual assets obtained during the Project, whether protected by intellectual property rights or not, are used to the benefit of society and the economy. All research outcomes should be disseminated to both research and more widespread audiences for example to inform potential users and beneficiaries of the research.

9.2 Each Party grants to the other Parties (and their respective Affiliates) a non-exclusive, royalty-free licence to:

9.2.1 use its Resulting IPR for their own internal research and development purposes but not for the purposes of commercial exploitation; and:

9.2.2 subject to any existing third-party obligations, use its Background IPR for the purpose of undertaking the Project and to enable the use of the Resulting IPR pursuant to Clause 9.2.1 but not for the purposes of commercial exploitation.

9.3 In the event that any Party wishes to exploit commercially Resulting IPR owned by another Party, the owner of the Resulting IPR shall grant to such Party a non-exclusive licence to use such Resulting IPR for that purpose, subject to the agreement of appropriate terms in relation thereto, including a royalty and/or other appropriate form of remuneration which is fair and reasonable taking into consideration the respective financial and technical contributions of the Parties concerned to the development of the Resulting IPR, the expenses incurred in securing intellectual property protection thereof and the costs of its commercial exploitation and any use of Background IPR.

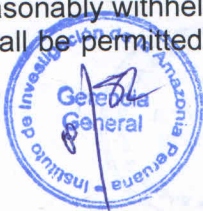
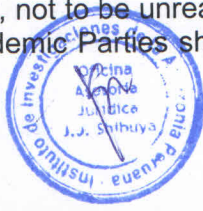
9.4 Should any of the Parties wish to exploit its own Resulting IPR with a third party during the duration of the Project, that Party must notify the other Parties before approaching said third party, always provided that the disclosure of information required for such exploitation is subject to the obligations of confidentiality at least equivalent to those under Clause 12.

9.5 Each Party agrees (where it is free and reasonably able to do so) to license on fair and reasonable terms its Resulting IPR and Background IPR that may be required to enable any other Party to exploit its own Resulting IPR, always subject to the obligations of confidentiality under Clause 12.

9.6 With regard to joint inventions, the Parties owning such inventions agree to co-operate fully in the protection of such joint inventions and each Party shall be entitled to make use of such joint inventions subject only to negotiating a licence in good faith from the other Party for its interest in such joint inventions on similar terms to those set out in clause 9.3.

10 PUBLICATION AND ANNOUNCEMENTS

10.1 Subject to the provisions of Clauses 9 and 12 no Party shall disclose or publish information or Resulting IPR for the duration of the Project and for 3 (three) years thereafter without the consent of all the other Parties, such consent, subject to Clause 10.2, not to be unreasonably withheld or delayed. Notwithstanding the foregoing, the academic Parties shall be permitted to publish the Results of the Project which they



have undertaken in accordance with normal academic practice, subject always to the provisions of Clauses 9 and 12, and providing such disclosure does not jeopardise any application for Resulting IPR protection by any Party or the successful exploitation of Resulting IPR. Request for such consent must be submitted together with the material proposed for publication to the other Collaborators. If any Party can reasonably demonstrate that such a disclosure contains material that would prejudice the value of any Background IPR and/or Resulting IPR, that Party shall inform both the Project Lead's in writing within 28 days of that Party receiving a copy of the proposed publication and in that event the disclosure shall be amended so as to meet the objections of that Party.

- 10.2 Subject to the provisions of Clause 9 where in the opinion of the other Collaborators a proposed publication contains patentable or commercially sensitive subject matter which needs protection then the Party proposing to publish may be requested to refrain from doing so for a maximum of 6 months initially. If a longer period is required, then up to maximum of two 6 months extensions can be added in order to allow for application for patent protection in the name and at the cost of the relevant owner of the Resulting IPR. The provisions of Clause 9 shall apply in respect of any licence to such Resulting IPR.
- 10.3 Nothing contained in this Agreement shall prevent the submission of a thesis to examiners in accordance with the normal regulations of any academic Parties subject where appropriate to such examiners being bound by conditions of confidentiality in no less terms than those outlined in Clause 12, nor to the placing of such thesis in the library of the appropriate Research Party provided that access to such thesis shall only be available on conditions of confidentiality no less onerous than those contained in Clause 12 hereof.

11 TERMINATION

- 11.1 In addition to the remedies contained in Clause 6 (Withdrawals); in the event that any Party shall commit any breach of or default in any terms or conditions of this Agreement, the other Collaborators may decide by unanimous vote of the non-defaulting Parties to instruct the Project Leads to serve 2 weeks written notice of such breach or default on the defaulting Party and in the event that such Party fails to remedy such default or breach within sixty (60) days after receipt of such written notice any of the Parties may, at their option and in addition to any other remedies which they may have at law or equity, remove the defaulting Party and continue with the Agreement or terminate this Agreement by sending notice of termination in writing to the other Parties to such effect. Any removal of the defaulting Party shall be effective as of the date of the receipt of such notice whereupon the provisions of Clause 6.3 shall apply to the defaulting Party.
- 11.2 If any Party (a) materially breaches any provisions of this Agreement; or (b) passes a resolution for its winding-up; or if (c) a court of competent jurisdiction makes an order for that Party's winding-up or dissolution; or makes an administration order in relation to that Party; or if any Party (e) appoints a receiver over, or an encumbrancer takes possession of or sells an asset of, that Party; or (f) makes an arrangement or composition with its creditors generally; or (g) makes an application to a court of competent jurisdiction for protection from its creditors generally; the remaining Collaborators shall meet to either suspend or terminate that Party's involvement in the Project. Any removal of the defaulting Party shall be effective as of the date of the receipt of such notice whereupon the provisions of Clause 6.3 shall apply to the defaulting Party.



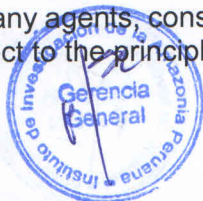
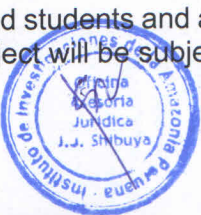
- 11.3 In the event that it is agreed by all the Parties that there are no longer valid reasons for continuing with the Project the Project Lead's may decide by unanimous vote to terminate this Agreement by sending notice of termination in writing to all the Parties to that effect.

12 CONFIDENTIALITY

- 12.1 For the purpose of this clause "Confidential Information" shall mean all information of a commercially sensitive nature including (but not limited to) specifications, drawings, circuit diagrams, tapes, discs and other computer readable media, documents, techniques and know-how which are disclosed by one Party to the other for use in or in connection with the Project.
- 12.2 The Parties hereto agree to use all reasonable endeavours to ensure that any Confidential Information disclosed or submitted in writing or any other tangible form to one Party ("Receiving Party") by the other ("Disclosing Party") shall be treated with the same care and discretion to avoid disclosure as the Receiving Party uses with its own similar information which it does not wish to disclose. Any information disclosed orally that is identified by the Disclosing Party as Confidential Information shall be treated the same as if it had been reduced to writing at the time of disclosure to the Receiving Party.
- 12.3 The Receiving Party shall not, during a period of five (5) years after the termination of this Agreement, use any such Confidential Information for any purpose other than the carrying out of its obligations under this Agreement or other than in accordance with the terms of this Agreement.
- 12.4 The undertaking in Clause 12.3 above shall not apply to Confidential Information:
- 12.4.1 which, at the time of disclosure, has already been published or is otherwise in the public domain other than through breach of the terms of this Agreement;
 - 12.4.2 which, after disclosure to the Parties, is subsequently published or comes into the public domain by means other than an action or omission on the part of any of the Parties;
 - 12.4.3 which a Party can demonstrate was known to him/her or subsequently independently developed by him/her and not acquired as a result of the Project, nor using, derived from, referring to or in any way relates to the Confidential Information;
 - 12.4.4 lawfully acquired from third parties who had a right to disclose it with no obligations of confidentiality to any of the Parties; or
 - 12.4.5 is required to be disclosed by applicable law or court order or by any Party's regulatory body, which is empowered by Statute or Statutory Instrument, but only to the extent of such disclosure and the Receiving Party shall notify the Disclosing Party promptly of any such request.

- 12.5 A Party breaching the obligation of confidentiality may be required by the other Parties to withdraw from the Project and will be subject to the conditions of Clauses 6 and 11 above.

- 12.6 Staff and students and any agents, consultants or sub-contractors engaged to work on the Project will be subject to the principles of confidentiality outlined in this Clause 12.



13 DISCLAIMER

- 13.1 Each Party undertakes to use reasonable endeavours to ensure that its work on the Project is carried out in accordance with accepted professional and scientific principles and standards but makes no representation or warranty that any Resulting IPR will be fit for any particular purpose, and accepts no responsibility for any use which may be made of any Resulting IPR, materials, information, apparatus, method or process arising from its work or otherwise supplied to or to which a Party gains access.
- 13.2 It is therefore agreed that any Party utilising such Resulting IPR, materials, information, apparatus, method or process is fully responsible and liable for any subsequent loss, costs, claims and demands arising from that use, unless such loss, costs, claims and demands arise out of the default or negligence on the part of the supplying Party.

14 FORCE MAJEURE

- 14.1 Except for payment of money due, a Party shall not be liable for failure to perform its obligations under this Agreement, nor be liable to any claim for compensation or damage, nor be deemed to be in breach of this Agreement, if such failure arises from an occurrence or circumstances beyond the reasonable control of that Party.
- 14.2 If a Party affected by such an occurrence causes a delay of three months or more, and if such delay may reasonably be anticipated to continue, then the Parties shall, in consultation with the Funders discuss whether continuation of the Project is viable, or whether the Project and this Agreement should be terminated.

15 NON-ASSIGNMENT

This Agreement or any of the rights or obligations hereunder may not be assigned or otherwise transferred or sub-contracted by any Party, in whole or in part, without the express prior written consent of the Project Leads and the Funders.

16 GOVERNING LAW

- 16.1 This Agreement shall be governed by and construed in accordance with English Law and each Party agrees (subject to Clauses 8.1 and 19) to submit to the exclusive jurisdiction of the English Courts as regards any claim or matter arising under this Agreement.
- 16.2 Furthermore, whilst carrying out this Project, the Parties shall comply with all applicable laws, regulations and rules, including those affecting health and safety requirements/recommendations and ethical approval. Similarly, the Parties will also ensure that it does not infringe, misappropriate, or violate the intellectual property, privacy, or publicity rights of any third party, whilst undertaking this Project and this obligation shall continue after this Project has ended.

17 NO PARTNERSHIP

Nothing in this Agreement shall create or be deemed to create a partnership (within the meaning of the Partnership Act 1890) or to have created the relationship of principal and



agent, a membership or any other legal entity between the Parties other than as specifically set out herein.

18 DISPUTE RESOLUTION

18.1 The Parties shall use good faith efforts to resolve any dispute, claim or proceeding arising out of or relating to this Agreement. In the event that any disputes cannot be resolved at this level then the senior executives of the relevant Parties who have authority to settle the same shall use good faith efforts to resolve the same. If the matter is not resolved through negotiation, it shall be settled as agreed by the Project Lead's either by:

18.1.1 mediation in accordance with the Centre for Dispute Resolution ("CEDR") Model Mediation Procedure (the "Model Procedure"). To initiate a mediation a Party must give notice in writing to the other Parties to the dispute requesting a mediation pursuant to the Model Procedure. A copy of the request shall also be sent to CEDR. The mediation shall be before a single, jointly agreed upon, mediator.

18.1.2 reference to the jurisdiction of the Courts in England. In this event, each of the Parties shall have the right to take proceedings in any other jurisdiction for the purposes of enforcing a judgement or order obtained from the Courts in England.

18.2 If the Project Leads are unable to select a mutually agreeable mediator or cannot agree on the forum in which any dispute is to be held within 60 days of a dispute being notified to the Project Lead's, then the provisions of Clause 18.1.2 shall apply.

19 ENTIRE AGREEMENT

This Agreement and its Schedules, which are incorporated into and form part of this Agreement, constitutes the entire Agreement between the Parties with regard to the Project. Any variation to this Agreement shall be in writing and signed by authorised signatories for all Parties. Material changes may not be implemented without the prior agreement of the Funders.

20 NOTICES

Any notice to be given under this Agreement shall be sent by email and confirmed by registered mail to the following addresses:

- (1) University of Greenwich, Natural Resources Institute for the Attention of Professor Andrew Westby, A.Westby@greenwich.ac.uk, Director of NRI, Natural Resources Institute, University of Greenwich, Central Avenue, Chatham Maritime, Kent ME4 4TB, UK
- (2) London School of Hygiene and Tropical Medicine for the Attention of Alex Hollander, Alex.Hollander@lshtm.ac.uk, Head of Research Contracts Research Operations Office, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E
- (3) Instituto de Investigacion Nutricional for the Attention of Victor Iván Lozano Delgado, ilozano@iin.sld.pe, Administrative Director, Av. La Molina N° 1885, La Molina - Lima

12



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18.1.2 reference to the jurisdiction of the Courts in England. In this event, each of the Parties shall have the right to take proceedings in any other jurisdiction for the purposes of enforcing a judgement or order obtained from the Courts in England.

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- (2) London School of Hygiene and Tropical Medicine for the Attention of Alex Hollander, Alex.Hollander@lshtm.ac.uk, Head of Research Contracts Research Operations Office, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E
- (3) Instituto de Investigacion Nutricional for the Attention of Victor Iván Lozano Delgado, ilozano@iin.sld.pe, Administrative Director, Av. La Molina N° 1885, La Molina - Lima



- (4) Instituto de Investigaciones de la Amazonía Peruana for the Attention of the M.Sc. Pablo Eloy Puertas Meléndez, presidencia@iiap.gob.pe, President of the Instituto de Investigaciones de la Amazonía Peruana, Av. Abelardo Quiñonez, km. 25, Iquitos, Perú

21 MISCELLANEOUS

- 21.1 No Party or Parties shall hold another liable for any damages, dispute or injury arising during the undertaking of the Project unless caused by the negligence of an employee, student or agent of that Party or Parties. Neither shall any Party be liable to another for indirect or consequential loss or damage arising from their use of the results of the Project.
- 21.2 If any part or any provision of this Agreement shall to any extent prove invalid or unenforceable in law, including the laws of the European Union, the remainder of such provision and all other provisions of this Agreement shall remain valid and enforceable to the fullest extent permissible by law, and such provision shall be deemed to be omitted from this Agreement to the extent of such invalidity or unenforceability. The remainder of this Agreement shall continue in full force and effect and the Parties shall negotiate in good faith to replace the invalid or unenforceable provision with a valid, legal and enforceable provision which has an effect as close as possible to the provision or terms being replaced.
- 21.3 No failure to exercise or delay in the exercise of any right or remedy which any Party may have under this Agreement or in connection with this Agreement shall operate as a waiver thereof, and nor shall any single or partial exercise of any such right or remedy prevent any further or other exercise thereof or of any other such right or remedy.
- 21.4 Except as otherwise expressly provided for herein, the Parties confirm that nothing in this Agreement shall confer or purport to confer on any third party any benefit or any right to enforce any term of this Agreement for the purposes of Contracts (Rights of Third Parties) Act 1999.
- 21.5 This Agreement is not intended to establish and shall not be construed by either Party in the future as having established, any form of business partnership between themselves. Moreover, neither Party shall use the other's name, crest, logo or registered image for any purpose without the express permission of the other Party.



EXECUTED by the Parties

SIGNED BY: 

For and on behalf of Natural Resources Institute

Name: PROFESSOR BEN BENNETT

Position: NRI DEPUTY DIRECTOR

SIGNED BY: 

For and on behalf of London School of Hygiene and Tropical Medicine

Name: Alex Hollander

Position: Head of Centre

SIGNED BY: 

For and on behalf of Instituto de Investigacion Nutricional

Name:

Position:

SIGNED BY: 

For and on behalf of Instituto de Investigaciones de la Amazonia Peruana

Name: Pablo Eloy Puertas Melendez

Position: President



APPENDIX I

Project Proposal

CASE FOR SUPPORT

Title: Intercultural models to improve nutrition and health of indigenous populations through gender-sensitive agroforestry practices in Peru

Importance of the research

Despite progress at a national level, high levels of poverty, food insecurity and child mortality and morbidity persist amongst indigenous peoples in Peru ^[1,2]. A quarter of the Peruvian population identify themselves as being native to one of the 55 indigenous groups present in the country, 51 of which live in the Peruvian Amazon ^[3]. In this area, over half of indigenous children under 5 years old suffer from chronic undernutrition (compared with a national average of 13%) and anaemia (compared with a national average of 34%) ^[4,5]. In addition, rural indigenous migrant communities (*colonos*) share many of the health challenges of indigenous peoples native to the Amazon ^[6].

The Government of Peru approved the "Sectoral Policy of Intercultural Health" as part of a reform of the national health system in 2016. This policy endorses intercultural, gender and social inclusion by promoting the integration of traditional and conventional medicine and strengthening human resources in intercultural health ^[7]. It also demonstrates the country's commitment to addressing current inequities and encourages the creation of intercultural models, which regard nutrition and health as being the result of complex biological, sociocultural and environmental interactions.

The health systems of the diverse indigenous populations of the Peruvian Amazon are based on an integrated understanding of the world, whereby trees support plant and animal biodiversity, provide adequate resources for good nutrition and health and hold significant cultural value ^[8]. For these Amazon-dwelling populations, agroforestry (broadly defined as an agricultural land use where crops, livestock and fish production are managed in association with trees to enhance ecosystem services) is the closest agricultural practice to traditional indigenous ways of life because it supports high levels of cultivated and non-cultivated biodiversity, similar to those observed in nearby forests.

There is limited evidence to date of the impacts of agroforestry on human nutrition and health ^[9]. Some studies have recorded the diverse practices and economic benefits of agroforestry ^[10], whereas others have examined the nutrient intakes of indigenous populations ^[11]. However, to date, inter-disciplinary research integrating agroforestry, nutrition and health has not been done in the Peruvian Amazon. Further, despite known ethnic diversity in the region, there is inadequate research on the influence of sociocultural norms on food and nutrition security and maternal and child health outcomes. There is a need to better understand the impacts of plant and animal biodiversity on nutrition and health and how these may be mediated by sociocultural norms, women's roles in agroforestry and workloads and their food environments ^[12,13,14]. As in other agricultural systems, gender is a key consideration in agroforestry, where responsibilities, access to knowledge and resources and involvement in decision-making differ for men and women ^[8]. To support women's key role as mediators of agroforestry-nutrition interactions, gender-sensitive approaches are vital ^[15].

The major contribution of this research will be to co-design culturally-appropriate and gender-sensitive agroforestry options and food-based recommendations that have the potential to sustainably improve nutrition and health of indigenous populations in the Peruvian Amazon. This project's use of intercultural models represents a major step change in the development of approaches to address chronic undernutrition and high anaemia prevalence in indigenous populations, and buffer them against future nutrition and health shocks.

Our evidence-led approach will document how socio-cultural norms, gender dimensions and the food environment mediate the multiple pathways through which agroforestry practices contribute to maternal and child nutrition and health. Understanding these dynamic processes is essential to ensure intercultural nutrition and health interventions are effective. The main objectives of the study are:

1. To understand temporal transitions on the socio-ecological contexts, agricultural, health care and dietary practices of indigenous communities.
2. To develop an inventory of local plant and animal biodiversity which contributes to food and nutrition security of communities in the Peruvian Amazon.



3. To understand the roles, opportunities, constraints, priorities and outcomes for women working in cocoa- and coffee-based agroforestry systems of the Peruvian Amazon, using a culturally- and gender-sensitive approach.
4. To characterise the nutritional status of women and young children in indigenous communities of the Peruvian Amazon, including the prevalence of stunting, wasting, short stature, overweight and obesity, and anaemia.
5. To determine whether women's food-related sociocultural norms, time use, and empowerment are associated with the nutritional status and dietary adequacy of women and young children in the Peruvian Amazon.
6. To develop an evidence-based understanding of the multiple pathways linking agroforestry systems and nutrition among women and children in native and migrant indigenous communities of the Peruvian Amazon.

Why this research is ODA compliant

In the past decade, Peru has shown substantial progress in improving health outcomes and nutritional status at a national level, including reductions in the infant mortality rate from 23% to 17%, and in the prevalence of stunting in children under five years from 25% to 14%^[5]; however, regional, ethnic and gender disparities challenge further progress. Women and children, particularly from indigenous communities in rural areas, are nutritionally vulnerable population groups. Agroforestry offers a promising set of land use practices that can help buffer indigenous communities against health and nutrition shocks. This study directly addresses these development challenges by co-developing agroforestry strategies and food-based recommendations that take into account gendered perceptions and roles and local socio-ecological systems to sustainably improve nutrition and health.

Scientific potential and expected outcomes

People and track record

- **Dr Pamela Katic (UK PI, NRI)** has a published record of developing agricultural and natural resource management strategies that improve the livelihoods and nutrition of rural communities in Africa and Latin America. She has managed major research for development projects in West Africa, working with local public authorities and institutions to design and implement nutrition-sensitive agricultural interventions. She will manage the UK component of the project, and applications for ethical approvals.
- **Dr Sabine Mercier (Peru Director, IIN)** is a nutrition and epidemiology expert who has been leading the INRA/CIRAD-funded DIVERSYCAO project evaluating the food security and dietary diversity of indigenous *Awajun* populations practising agroforestry in the Peruvian Amazon. Her network of local contacts and collaborators includes anthropologists, medical doctors, NGOs, and international research centers such as CIRAD and ICRAF, with extensive knowledge and experience in agroforestry in Latin America and Peru. Sabine will plan and implement the dietary assessment exercise, manage staff and research activities in Peru, and gain ethical approval.
- **Dr Pedro Andres Toribio Francke Ballve (Peru PI, PUCP)** is an economist specialising in social inclusion and health sector policies. He has been the Executive Director of the Social development and Cooperation Fund (FONCODES), Technical Secretary of the Interministerial Commission of Social Affairs, President of the Metropolitan System of Solidarity (SISOL) and General Manager of *EsSalud*. Pedro will lead PUCP's engagement and support a doctoral student in nutrition-sensitive agroforestry in indigenous communities.
- **Dr Dennis del Castillo Torres (Peru PI, IIAP)** has more than 25 years of experience conducting participatory research with local Amazonian communities and implementing projects of rural development, biodiversity conservation, soil and forest management and sustainable use of natural resources. He will lead the inventory of biodiversity and agroforestry practices and support a masters student in Amazonian studies.
- **Dr Kate Wellard (NRI)** has 20 years' experience of doctoral and post-doctoral research in research design and management in agricultural innovations, gender and food and nutrition security. She will lead the design of metrics to measure women's time use in the communities of the project.
- **Dr Aurelie Bechoff (NRI)** is a food technologist who has worked extensively in LMICs. Her main expertise is on the effect of food preparation and processing on nutrient loss. She has experience in working with communities on traditional processing and has been leading a DFID-funded project about nutritional losses at postharvest stages. She will be involved in steps 2 and 3.



- **Dr Julia de Bruyn (NRI)** is a nutrition researcher and veterinarian with experience in the use of qualitative and quantitative methods to explore agriculture-nutrition linkages in resource-poor settings. She is currently testing novel approaches to assess dietary diversity and quantify access to food resources across seasons in low-literacy populations. Julia will contribute to participatory rural appraisal activities to evaluate available food resources, quantitative evaluation of local diets and mapping of agroforestry-nutrition linkages (steps 2, 3 and 4).
- **Dr Elaine Ferguson (LSHTM)** is a public health nutrition researcher with 94 publications in international peer-reviewed journals and over 25 years of experience working in Africa, Asia and Latin America. She is internationally recognised for her expertise in dietary assessment, and for diet modelling, having developed the tool "Optifood". She also has expertise in micronutrient nutrition, including the measurement of biochemical iron status. In this project she will contribute to research in steps 3 and 4.
- **Mr Jan Priebe (NRI)** will be the Information and Communications Technology expert on the project and has designed and implemented research on the application of ICTs in agriculture in Africa. He will be responsible for designing and integrating the ICT components in the research.
- **Dr Robin Cavagnoud (PUCP)** is a socio-demographer specialising in issues concerning family, life stages, gender and vulnerable populations in the areas of health and education. In the project, he will conduct and analyse multi-generational interviews with people of different ages within the same family (elderly, adults, young people, children) to study the evolution of livelihood strategies and dietary and health practices.
- **Dr Jose Carlos Silva (PUCP)** is a food scientist specialising in ecological economics and societal metabolism and ecological distribution conflicts analysis. In the project he will contribute towards improved understanding of complex ecological distribution conflicts in the Peruvian Amazon, where increasing metabolism is leading to increased environmental destruction.
- **Dr Carmen Yon (PUCP)** is a medical anthropologist. Her research addresses issues of interculturality and health, health and social inequalities, malnutrition and public policies, and development programs. Carmen will participate in the assessment of food-related socio-cultural norms and intercultural health policies.
- **Ms. Miluska Carrasco (IIN)** is a nutritionist who has been working for more than ten years in health, agriculture and nutrition research in the Peruvian Amazon. In this study Miluska will participate in quantitative dietary assessments.
- **Mr. Marcial Trigoso Pinedo (IIAP)** is a forest engineer with more than 30 years of experience working in the Amazonian region of Peru on participatory rural development issues, agroforestry and reforestation in indigenous communities. He belongs to the *Awajun* indigenous group and will lead the participatory engagement with local indigenous communities.
- **Ms. Elsa Rengifo (IIAP)** is a biologist, specialised in ethnobotany, ethnopharmacology and traditional Amazonian medicine. She will participate in the biodiversity inventory of the project, focusing on the role of traditional knowledge of Amazonian fruit and medicinal plants.

Research environment

The **Natural Resources Institute (NRI)** is an internationally-renowned specialist institute of the University of Greenwich, which harnesses expertise in a range of natural and social sciences to conduct research, consultancy and training to support food and nutrition security, sustainable development and poverty alleviation in low- and middle-income countries. The NRI is currently leading two projects and one fellowship grant funded through the DFID Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) scheme. The NRI has strong established links with the International Potato Centre in Peru, through its Root and Tuber Crops in Development programme, and has long been engaged in studies relating to Fairtrade in Latin America, including the impact of certification on the livelihoods of Peruvian coffee producers. The NRI has systems for project management, registered to ISO 9001 by the British Standards Institute, and staff are experienced in management of RCUK-funded projects.



The **London School of Hygiene and Tropical Medicine (LSHTM)** is a world-leading research institute working in over 180 countries to achieve excellence in public and global health research, education and translation of science into policy and practice. In 2009, the School won the Gates Award for Global Health, in recognition of its contribution to improving global health and its strong commitment to supporting teaching and research capacity in resource-poor settings. It places strong emphasis on methodological development, rigour, relevance and engagement of end-users in inter-disciplinary research. Agriculture for nutrition is a strategic priority for LSHTM.

The **Instituto de Investigacion Nutricional (IIN)** includes a multidisciplinary team with extensive experience in working with both qualitative and quantitative dietary, health, community and institutional data and in the design of nutritional interventions for middle and low-income populations. Founded in 1971, the IIN is Peru's leading non-government organisation specialising in nutrition and health research. IIN has developed an extensive database of the nutrient content of foods eaten in Peru and has a wealth of experience in dietary assessments, across a range of demographic groups and indigenous populations.

The Sociological, Economic, Political and Anthropological Center of Investigations (CISEPA) at the **Pontificia Universidad Catolica del Peru (PUCP)** focuses on interdisciplinary research for the design and evaluation of public policies to address the economic, political and social challenges of Peru. It builds capacities through their School of Researchers, allowing the socialization of research results, influencing the public opinion and contributing to the academic and political debate. The CISEPA contains research groups on Environmental and Social Studies; Life Stages and Education and Medical Anthropology and Intercultural Health.

The **Instituto de Investigaciones de la Amazonia Peruana (IIAP)** is a national research institution which supports sustainable development, improved livelihoods and conservation of biological diversity and serves as an authority on a range of issues relating to the Amazon at national and international levels. IIAP is an independent institution, with a council formed by Presidents of the Regional Governments of Loreto, Madre de Dios, San Martín, Ucayali and Amazonas, the Director of the National Council for Science, Technology and Technological Innovation (CONCYTEC), and representatives of Amazonian universities, indigenous communities and the Catholic Church. The institute's headquarters are in the Amazon region (Iquitos, Loreto).

Organisational dependencies

Providing a space for societal debate, in which the actors can negotiate local norms, rules, and power relations related to natural resource use and sustainable development is central to our project. The research team will collaborate with district and regional public health and agricultural departments, and stakeholders at the community level from an early stage. We already have the necessary network of collaborators in place in local areas and have budgeted for their inclusion.

Research plans and deliverables

A five-step interdisciplinary study will be conducted over three years along a transect of coffee and cocoa-based agroforestry systems which support the livelihoods of native (*Awajun*) and migrant (*colonos*) indigenous groups in the Peruvian Amazon. The study will adopt a participatory approach, seeking the active involvement of community members in all stages of the research process. Intermediary research products from each step will feed into the design of subsequent steps, enabling a social learning process between the researchers and indigenous communities.

Initial steps will comprise formative research:

1. Conducting a participatory appraisal of socio-ecological contexts, and perceptions of intercultural approaches that improve the nutrition and health status of local communities;
2. Developing an inventory of agroforestry practices and local plant and animal biodiversity used as food resources within communities, and their perceived benefits for nutrition and health.

These will inform in-depth assessments of maternal and child nutrition:

3. Documenting maternal and child dietary adequacy and nutritional status, the roles of and time spent by women in agroforestry, the sociocultural norms influencing food choices, and their personal and external food environments.

Local contexts, food resources and agroforestry practices (step 1 & 2) and data from dietary and nutrition assessments (step 3) will contribute to:

4. Determining the pathways through which agroforestry impacts diets and nutrition & health status;



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4. Determining the pathways through which agroforestry impacts diets and nutrition & health status;



5. Co-designing culturally-appropriate and gender-sensitive agroforestry options and food-based recommendations to sustainably improve nutrition and health amongst indigenous populations of the Peruvian Amazon.

The project will work in the Amazonas Region with four *Awajun* communities in the Cenepa River Basin (Condorcanqui Province), and four communities of *colonos* in La Jalca District (Chachapoyas Province), which have amongst the highest rates of child undernutrition and anaemia (54% and 45% respectively) in the Amazonas Region. *Awajun* communities will be selected in consultation with the 'Organización de Desarrollo de las Comunidades Fronterizas de Cenepa' (ODECOFROC) and *colonos* communities will be selected based on the practice of agroforestry.

Step 1. Appraisal of socio-ecological contexts, nutrition and health status and intercultural health programs

Participatory rural appraisal techniques ^[16] will be employed to build an understanding of the social and ecological contexts in each of the communities, including community members' perceptions of change over recent decades. Discussions and interviews will be conducted in local languages, with support from interpreters. Groups will be formed according to gender and age and to socioeconomic groups.

Participatory mapping will be used to develop maps of each community as it exists now and as it existed 30 years ago. This visual material will serve as the basis for: (i) a discussion of the communities' current characteristics, including population, land use, vegetation cover and market and health care infrastructure; and (ii) multi-generational interviews with people of different ages within the same family (elderly, adults, young people, children) on the evolution of livelihood strategies and dietary and health practices. It will provide a basis to identify and discuss major changes during the last generation and the drivers of these changes. Matrix ranking will be used to identify the relevant importance of different livelihood strategies, including agroforestry practices.

A second series of key informant interviews and focus group discussions will assess community members' perceptions of the nutrition and health status of the local populations, current challenges and priorities, and the application of intercultural health policies. Separate male and female focus group discussions will also explore gender roles and perceptions of the status and empowerment of women. Key informant interviews will involve conventional and traditional health care providers, health administrators, indigenous organisations and community leaders, NGO staff and multi-level and multi-sector government officials.

Step 2. Development of an inventory of agroforestry practices and biodiversity and their perceived benefits for nutrition and health

In each community, a range of qualitative and quantitative methods will be employed to develop an inventory of (a) agroforestry practices, including crop, livestock and fish production components, and (b) local plant and animal biodiversity used as food resources. Spatial data such as vegetation maps and Google Earth satellite images will support focus group discussions on local concepts and terminology, land use categories, resource management, and activities relating to agroforestry. Participatory ranking of the 20 most important plants and animals found in agroforestry systems and of their products will be conducted separately by groups of men and women using the Pebble Distribution Method (PDM) ^[17].

A detailed exploration of agroforestry practices and their relative contribution to food security and dietary diversity across different seasons will be conducted through interviews with 400 families (200 *Awajun* and 200 *colonos*) selected at random. Inclusion criteria will require that households practice agroforestry and include a mother-child dyad with a child of age 12-60 months. This target group is intended to encompass children likely to be sharing in the family diet. The interviews will serve to identify and quantify land uses at farm level and agricultural practices, cultivated plant diversity, product diversity and uses, and productivity at plot level for one coffee or cocoa-based agroforestry system per family. Interviews will involve free-listing of local food items to develop a general overview, followed by questions on the relative importance of cultivated and non-cultivated foods across seasons and their perceived nutritional benefits for women and young children. This survey will provide a first typology of agroforestry systems. Based on this typology, a sub-sample of 30 plots of each type will be selected randomly to assess cultivated diversity by an inventory of all plants found on a 1000 m² (50x20m) sampling unit, measuring their diameter and total height.

Step 3. Assessment of maternal time use, food-related sociocultural norms, personal and external food environments and maternal and infant dietary practices and nutritional status



A longitudinal mixed methods survey will be undertaken in the dry and the rainy season with the 400 mother-child dyads from the sample of households selected in Step 2. This target group will enable us to examine the effect of maternal factors (e.g. caregiving practices, feeding behaviour) for the two main age groups (≤ 24 months old and 25-60 months old); and allow comparability with the Peruvian national data that reports indicators of maternal and child nutritional and health status [5]

A combination of conventional methods (i.e. direct observations, 24h time-use recall questionnaire and participatory exercises using visual supports and props) and innovative methods (i.e. wearable cameras) will be used to collect data on the roles and time spent by women in agroforestry practices, other livelihood activities, care-giving, household management and the sourcing and processing of food. An individual semi-structured questionnaire will collect data on: (i) indicators of the external and personal food environments based on the recently developed Agriculture, Nutrition and Health Academy's Food Environment framework [14]; (ii) maternal livelihood assets and dimensions of empowerment; (iii) food sourcing, preparation and transformation practices; and (iv) cultural norms, myths, and taboos associated with foods. Market surveys of food vendors accessed by participants will be used to characterise the external food environment (foods available and food prices). For each participant, we will calculate daily mobility and activity space in relation to food acquisition using GPS trackers. Spatial data will be analysed using ArcGIS 10.1. Maternal and child dietary intakes of energy and nutrients will be assessed in the rainy and dry seasons to capture seasonal variations in intakes. In each season, two interactive 4-pass 24h dietary recalls will be collected from each woman, for both the mother and child, with a separation of 3-4 days between repeat recalls [18]. Food recall kits which include standard utensils, measuring cups, spoons, glasses and a weighing scale will be used to quantify all food items recorded [11] by asking the women to show, where possible, the amount of each food eaten. We will also collect details on factors, such as ingredients in mixed dishes and food preparation methods. Daily intakes of energy and nutrients will be estimated using these food consumption data, the IIN food composition table of (raw) Peruvian foods and the literature where needed. For breastfeeding children, we will estimate the quantity of breastmilk consumed as the difference between their estimated mean energy requirements and their mean energy intakes from complementary food (at a group level), assuming a breastmilk energy content of 66 kcal/100g. The percentage of women and children at risk of inadequate nutrient intakes will be estimated using the software PC-SIDE which adjusts nutrient intake distributions for within subject variability. We will calculate the mean probability of adequacy (MPA) for 12 nutrients to provide an overall variable of dietary adequacy [19]

We will formulate seasonally- and culturally-appropriate food-based recommendations (FBRs), for women and children, using the dietary data and our software "Optifood" [20,21,22]. These will be tested and refined using the approach described in ProPAN [23] in which women from each indigenous group (n=20-30 per group) will be asked to trial the FBRs over a 2-week period. Baseline and endline 24-hour diet recalls will be collected to examine changes in dietary practices and in-depth interviews will be held with participants on days 1, 3 and 14 of the trial period to determine the barriers, facilitators and opinions of family and community members to the recommended practices. Based on the trial results the FBRs will be refined and behaviour change material developed to provide inter-cultural FBRs to promote dietary change as one of the strategies for step 5.

Duplicate heights/lengths and weights will be measured using standard methodology. Height will be measured using a vertical measuring board for women and children >24 months, and recumbent length for children ≤ 24 months using a rigid stadiometer accurate to 0.1cm. Weight will be measured using a digital SECA scale both for women and children accurate to 100 grams. Body mass index (BMI) will be calculated for women and the percentage of women who are under-weight, over-weight and obese determined. For children, Z-scores for height/length-for-age, weight-for-length/height and BMI-for-age will be calculated using the WHO Child Growth Standards and the percentage of children with Z-scores $<-2SD$ calculated to determine rates of stunting and wasting.

The prevalence of maternal and child anaemia will be evaluated with a portable haemoglobinometer. This test will be done in situ and the result will be delivered to each participant with nutritional counselling. The dietary and non-dietary predictors of anaemia will be examined



using logistic regression analyses. This component will be developed in close coordination with the local Peruvian health facilities ('Red de Salud') to contribute to their efforts to reduce anaemia.

Step 4. Determination of pathways through which agroforestry impacts diets and nutrition and health status

We will conduct a mixed-methods statistical evaluation of the multiple pathways between agroforestry and nutritional status. We will start by analysing the proximate determinants of food use by indigenous communities through an adaptation of Bhargava's models for household energy use and nutrient densities ^[24]. The mean probability of (dietary) adequacy (MPA) of mothers and children will be explained by background, socio-economic and behavioural factors and agroforestry practices. The nutritional intake of *Awajun* and *colonos* communities will be compared and their association with agroforestry practices in relation to gender roles and family composition examined.

We will complement this analysis of proximate determinants of dietary practices by quantifying direct and indirect pathways from agroforestry practices (AFP) to health and nutrition of women and children. Using structural equation models (SEM) with latent constructs, we will estimate the strength of a priori hypothesised pathways from AFP to maternal and child nutritional status (MNS and CNS) through mediators such as functional variety of foods in maternal activity spaces, farm income, maternal time use, the Women's Empowerment in Agriculture Index (WEAI) or the mean probability of (nutrient) adequacy (MPA). We will operationalise MNS and CNS using maternal body mass index (BMI), and children height-for-age Z-scores (HAZ), and weight-for-height Z-scores (WHZ). This step of the analysis is intended to elucidate the nature of the multiple pathways through which agroforestry impacts maternal and child nutrition, including the increased availability of nutritious agroforestry foods, increased income earned through improvements in the farm resource base and products for sale; and increased workloads of agroforestry practices.

Finally, an integrated assessment of biophysical and socio-economic factors will help generate a holistic vision of the ways in which communities harness local biodiversity within agroforestry systems to sustain human health and nutrition, and how this relates to environmental sustainability. The *Multi-scale integrated analysis of societal and ecosystem metabolism* (MuSIASEM) approach will be used to organise the data collected through steps 1, 2 and 3 on time use (human activity differentiated by age group and gender) and land use (primary forest, agroforestry, fishery, households) with input flows of water, energy and soil nutrients; and output flows of waste water, emissions, and food, including specific human nutrients ^[25]. The approach will be applied in diagnosis and simulation mode to assess how increasing demand for materials and energy flows from agroforestry systems may lead to changes in local power relations related to natural resource use that could worsen or improve nutrition and health outcomes.

Step 5. Co-development of culturally-appropriate and gender-sensitive agroforestry options and food-based recommendations to sustainably improve nutrition and health

In each community we will hold workshops and focus group discussions where we will first present the results from steps 1 to 4 to local participants and then jointly analyse options for the promotion and implementation of agroforestry strategies and food-based recommendations that improve nutrition and health. We will start by prioritising interventions based on results from the previous research steps. We will then analyse each of these by examining its advantages and disadvantages and its management requirements. The participants will ultimately identify the actions needed for the promotion and implementation of each intervention, as well as the people who could be responsible for these actions.

Key deliverables

The key deliverables from this project are: (i) At least one scientific article accepted in a Scopus or Web Science listed journal and a further four submitted; (ii) At least one postgraduate thesis accepted in a Peruvian University; (iii) At least one public event of dissemination; (iv) At least three presentations in relevant local and international conferences; (v) Two policy briefs targeted to public health and agricultural officials, development practitioners and indigenous civil society organisations; (vi) Leaflets and education materials in indigenous languages which will be used to communicate the aims and results of our findings and promote the FBRs to local community members; and (vi) A project website and at least four blogposts published in relevant outlets.

Available infrastructure and justification of resources

NRI and IIN have proven capacity in leading international projects facilitating development worldwide. All organisations have access to communications technology to ensure coordination



between international partners. Resources are required for staff, material and consumables to lead and conduct field work in Peru. We request funds for assistance from local communities to collect data. We have budgeted for international travel to conduct project meetings, and to implement project activities. To ensure maximum impact from our research, we also requested funds for dissemination of results via reports and FBR education materials to Peruvian public health and agriculture authorities, and internationally through publications, conference attendance and the project website.

Novelty and risk

The novelty in our approach lies in the concerted input from multiple disciplines (agroecology, anthropology, economics, environmental sciences and nutrition) to address the intersecting and multifaceted nature and extent of nutrition and health inequalities experienced by indigenous populations. The risks associated with this project and the mitigation strategies we propose are: 1. Research not acceptable to local communities e.g. camera, GPS trackers, haemoglobin test: detailed protocols on community engagement will be developed and fully pre-tested, researchers trained; the Peruvian institutions will lead the engagement with indigenous organizations with the support of local health officers ('Red de Salud'); 2. Low interest from policy maker target groups: the project will actively engage key stakeholders at multiple levels in inception and project closure meetings, briefings etc to reduce this risk.

Consideration of ethical, governance and IP issues around the project

Intellectual property

The Collaboration Agreement detailing access to and exploitation of IP will be agreed and signed by all project partners before research begins. Project partners will have joint ownership of forward IP developed during the project and will be free to access background IP from each institution required for project development. The drafting and signing of the document will be managed by the Contracts Department at NRI, with input from all project partners.

Ethics

Data will be collected from humans to assess their nutritional and health status. There is no medical risk to people, only to potential misuse of personal data. To mitigate the latter, identifying data will be stored on secure servers which only the project team can access. Where dissemination of datasets pertaining to the project is required, all personal data will be removed first and anonymised through replacement of names with alphanumeric codes. No animal work will be conducted in Peru or the UK.

Governance

Appropriate ethical approvals will be coordinated by NRI prior to the start of any work. The proposal, including informed consent, data collection and storage procedures will be reviewed by the appropriate ethics committee at the University of Greenwich and LSHTM (UK) and the IIN (Peru). Human participants will be provided with an information sheet in their native language prior to giving consent. This information will be conveyed verbally in local languages where appropriate, to accommodate low-literacy amongst participants.

Data preservation, exploitation and dissemination

The primary target market for exploitation and dissemination of our results are public authorities and development practitioners working to improve the livelihoods of disadvantaged communities in the Peruvian Amazon. The Peru Director and the Peru PIs have close working relationships with health and agricultural officials at multiple levels. Reports of summary findings will be provided to the heads of regional directorates of health and agriculture for dissemination at district level, and upwards to national agencies. Reports will be drafted in Spanish and other appropriate languages at each level. Results will be disseminated internationally through budgeted attendance to scientific meetings by UK and Peruvian partners. All data and results from this study, alongside published reports and papers, will be anonymised and preserved on the University of Greenwich Open Access repository.

References: [1] Valdivia 2004. *Econ Hum Biol* 2(3): 489-510; [2] Brierley et al. 2014. *Am J Trop Med Hyg* 90(1):180-183; [3] INEI 2018. Peru: Perfil Sociodemográfico Informe Nacional [<https://bit.ly/2NRjR5q>]; [4] Diaz et al. 2015. *Rev Panam Salud Publ* 38: 49-56; [5] INEI 2018. Peru: Encuesta Demográfica y de Salud Familiar [<https://bit.ly/2MJN1yS>]; [6] Riley-Powell et al. *Int J Environ Res Public Health* 15(6): 1271; [7] Ministerio de Salud 2016. Política sectorial de salud intercultural [<https://bit.ly/2NPdQ9j>]; [8] Mathez-Stiefel et al. 2016. *Mt Res Dev* 36(4): 417-430; [9]



Luna-Gonzalez & Sorensen 2018. Public Health Nutr 21(11): 2128-2141; [10] Cotta 2017. Agroforest Syst 91(1): 17-36; [11] Creed-Kanashiro et al. 2009. Traditional food system of an Awajun community in Peru [<https://bit.ly/2D5bnUj>]; [12] Jones et al. 2012. Soc Sci Med 75(9): 1673-1684; [13] Muggaga et al. 2017. Ecol Food Nutr 56(5): 424-447; [14] Turner et al. 2017. Concepts and methods for food environment research in low and middle income countries [<https://bit.ly/2MEwxll>]; [15] Beuchelt 2013. Can nutrition-sensitive agriculture be successful without being gender-sensitive? A human rights perspective. In Virchow (ed). Nutrition-sensitive agriculture: A pillar of improved nutrition and better health; [16] Chambers 1994. World Dev 22(7): 953-969; [17] Lynam et al. 2007. Ecol Soc 12(1): 5; [18] Gibson & Ferguson 2008. An Interactive 24-hour Recall for Assessing the Adequacy of Iron and Zinc Intakes in Rural Communities: International Life Sciences Institute; [19] Arimond et al. 2010. The Journal of Nutrition 11: 2056-2069; [20] Ferguson et al. 2006. J Nutr 136: 2399-2404; [21] Ferguson et al. 2018. Matern Child Health J (in press); [22] Daelmans et al. 2013. Matern Child Nutr 2:116-138; [23] PAHO 2013. ProPAN: Process for the Promotion of Child Feeding [<https://bit.ly/2xm0Oqt>]; [24] Bhargava 2004. Brit J Nutr 92(3): 497-506; [25] Gonzalez-Lopez & Giampietro 2017. Front Environ Sci 5: 54.

Reproducibility and statistical design annex

Experimental outcomes

The primary outcome measured from this project will be the direct and indirect pathways from agroforestry practices to maternal and child nutrition and health.

Experimental groups and units

The experimental unit will be the household, clustered into villages. The number of households per village ranges from 50 to 300 approximately. We will work in four *Awajun* and four *colonos* villages. We will randomly select 200 *Awajun* and 200 *colonos* households that contain a mother-child dyad with a child of age 12-60 months.

Study design

The proposed statistical methods to quantify the direct and indirect pathways from agroforestry practices to nutrition and health are Confirmatory Factor Analyses (CFA) and Structural Equation Modelling (SEM). SEM will be conducted to statistically test the inter-relationships of constructs and observed variables and their mediating relationship with nutrition and health outcome variables. Moderators will be decomposed into various constructs and detailed interrelationships estimated among these constructs. Prior to modelling the relationship between constructs, a CFA will be used to confirm the relationship between the latent variables (constructs) and their indicator variables. This step will allow us to limit the number of constructs to those that meet certain internal consistency and repeatability criteria.

We will estimate the minimum sample sizes required for alternative hypothesised models by conducting proactive Monte Carlo analysis, simulating relationships among the variables specified based on the available research literature. All models will be evaluated using Mplus based on a single group with 10,000 replications of the simulated data. We will set the sample size of a given model and then adjust it (upwards or downwards) based on whether the results meet recommended criteria for acceptable precision of the estimates, statistical power, and overall solution propriety. In our study, we will only apply on the existing data the hypothesised models that require sample sizes <200 cases.

We will use the following three criteria to judge the statistical significance and substantive meaning of the hypothesised models:

- i. The first criterion will be the non-statistical significance of the chi-square test and the root-mean-square error of approximation (RMSEA) values, which are global fit measures. A non-statistically significant chi-square value indicates that the sample covariance matrix and the reproduced model-implied covariance matrix are similar. The RMSEA is relatively insensitive to sample size, since it is a population-based index. A RMSEA value less than or equal to 0.05 is considered acceptable.
- ii. The second criterion is the statistical significance of individual parameter estimates for the paths in the model, which are critical values computed by dividing the parameter estimates by their respective standard errors.
- iii. The third criterion considers the magnitude and direction of the parameter estimates, paying attention to whether a positive or negative coefficient makes sense for the parameter estimate.



APPENDIX II

UK Head Terms

GRANT CONDITIONS

GAC NF 1: ODA compliance

The Newton Fund is part of the UK's Official Development Assistance (ODA). Its aim is to develop science and innovation partnerships that promote the economic development and welfare of developing countries. The investigators must ensure the research part of this grant remains compliant with ODA rules and regulations as set out under the Newton Fund programme. In the event that the research does not remain compliant with ODA rules and regulations MRC reserve the right to terminate the award.

GAC NF 2: Acknowledgements and reporting

In addition to the provisions in RGC22, the investigators must acknowledge the Newton Fund and the MRC in any publications, web pages or events associated with this grant. Investigators must assist the MRC with any additional reporting requirements requested by the Department for Business, Energy and Industrial Strategy.

GAC NF 3: Starting Procedures

This grant must start on the 1st April 2019 at the earliest and 30th April 2019 at the latest. The start of the grant may NOT be delayed beyond this date. Please note that due to the fixed start date, the normal three month start period rules outlined in RCUK Terms and Conditions RGC4 do not apply to this project.

GAC NF 4: Ethical requirements

Research must meet the RCUK Research Governance guidelines outlined in RGC2. For clinical studies involving human participants and/or patients, appropriate consent must be obtained. Additionally, any research undertaken outside the UK must have both UK and respective country ethical approvals. When collaborating with other laboratories, or where animal facilities are provided by third parties, researchers and the local ethics committee in the UK should satisfy themselves that welfare standards consistent with the principles of UK legislation (e.g. the ASPA) and set out in this guidance are applied and maintained. <https://www.mrc.ac.uk/documents/pdf/guidance-for-applicants/>. The Principal Investigator/ Research Organisation must be prepared to furnish MRC with a copy of the ethical approval, and any correspondence with the committees, if requested by the Council. The principal investigator must notify the MRC if a regulator or a research ethics committee requires amendments that substantially affect the research question, methodology or costs to the extent that the project is no longer the same as that approved for funding by the MRC.

GAC NF 5: Government support

This award is dependent on continuing Government commitment for this initiative. In the event that this support is withdrawn, MRC reserve the right to terminate the award.

GAC NF 6: Requests for extensions to awards

Due to financial restraints of the Newton Fund Programme, grant extensions will only be considered under exceptional circumstances (in line with the Equality Act 2010) and will require MRC agreement on a case-by-case basis. The Research Organisation remains responsible for compliance with the terms of the Equality Act 2010 including any subsequent amendments introduced while work is in progress; and for ensuring that the expectations set out in the RCUK statement of expectations for equality and diversity are met.

GAC NF 7: Transfer of funds to UK and overseas organisations

It is important to highlight that the Research Organisation awarded the grant is responsible for the conduct and administration of the grant during the life time of the award (from award, during the grant and on completion). It is accountable for the effective use of public funds, and must therefore ensure that all grant monies are subject to proper financial management processes. It is the Research Organisation's responsibility to ensure that, where funds are transferred to other organisations in the UK and abroad, expenditure is subject to robust controls to ensure value for money and propriety and that all costs should be fully vouched and maintained for possible inspection and checks by, or on behalf of, the funding organisation. This award has therefore been made on the basis that if any funds are transferred to another UK or overseas organisation then the Research Organisation must undertake due diligence checks to ensure that the funding will be appropriately used (as set out above). The Research Organisation may be asked to provide evidence that where funds have been transferred they have undertaken appropriate due diligence to ensure that any risks are recognised, understood and treated as necessary. The Research Organisation may be asked to provide additional information on how the due diligence checks were carried out. Please refer to the MRC for any specific guidance.

GAC NF 8: Collaboration agreement

In accordance with RGC 20, a Collaborative Agreement is required for this project. This must be in place within six months of the start of the project. As the grant is associated with more than one research organisation the basis of collaboration between the organisations, including the allocation of resources throughout the project and ownership of intellectual property and rights to exploitation, is required to be set out in the formal collaboration agreement. It is the responsibility of the lead Research Organisation to put such an agreement in place within six months of the start of the project. The terms of collaboration agreements must not conflict with the Research Councils' terms and conditions.

GAC NF 9: Change in Principal Investigator

This award has been made based on the named individual's suitability to undertake the research and that they have the expertise and experience to lead the project to a successful conclusion, in accordance with its research objectives. This award is made on condition that any request to change the principal investigator will require MRC's prior approval. Requests for a change in principal investigator are to be submitted via the Grant Maintenance facility in Je-S. MRC will then consider and inform the Research Organisation of their decision.



CALL CONDITIONS

RESEARCH COUNCIL CONDITIONS

SCHEME CONDITIONS

Terms and Conditions of Research Council FEC Grants

- Contents
- Introduction
- Definitions
- Data Protection Regulations
- Freedom of Information Act and Environmental Information Regulations

Grant Conditions

RGC 1 Accountability & Responsibilities of the Research Organisation

RGC 2 Research Governance

- RGC 2.1 Research Ethics
- RGC 2.2 Use of Animals in Research
- RGC 2.3 Medical Health Research
- RGC 2.4 Health and Safety
- RGC 2.5 Misconduct and Conflicts of Interest
- RGC 2.6 Modern Slavery Act 2015

RGC 3 Use of Funds

RGC 4 Starting Procedures

RGC 5 Changes in Research Project

RGC 6 Transfers of Funds between Fund Headings

RGC 7 Extensions

RGC 8 Staff

RGC 9 Maternity, Paternity, Adoption and Parental Leave

RGC 10 Sick Leave

RGC 11 Equipment

- RGC 11.1 Procurement of Equipment
- RGC 11.2 Ownership of Equipment
- RGC 11.3 Use of Equipment
- RGC 11.4 Use of Equipment Funds
- RGC 11.5 Equipment Data

RGC 12 Transfer of a Grant to another Research Organisation

RGC 13 Change of Grant Holder

RGC 14 Annual Statement

RGC 15 Expenditure Statements

RGC 16 Disclosure and Inspection

RGC 17 Reporting on the conduct and results of research

RGC 18 Sanctions

-RGC 18.1 Contact Sanctions

-RGC 18.2 Organisation Sanctions

RGC 19 Public Engagement

RGC 20 Exploitation and Impact

RGC 21 Research Monitoring and Evaluation

RGC 22 Publication and Acknowledgement of Support

RGC 23 Disclaimer

RGC 24 Status

RGC 25 Transfer to UK Research & Innovation

Introduction

Terms and Conditions of Research Council FEC Grants

These terms and conditions relate to grants, comprising Research Grants and Fellowships, costing and funded on the basis of full economic costs (FEC), calculated in accordance with the TRAC methodology (universities and other higher education bodies) or by an equivalent methodology by other Research Organisations. Grants awarded by the Research Councils are made to Research Organisations on the basis of this single set of core terms and conditions. The Research Councils are:

- Arts and Humanities Research Council (AHRC)
- Biotechnology and Biological Sciences Research Council (BBSRC)
- Economic and Social Research Council (ESRC)
- Engineering and Physical Sciences Research Council (EPSRC)
- Medical Research Council (MRC)
- Natural Environment Research Council (NERC)
- Science and Technology Facilities Council (STFC)

Individual Councils may add additional conditions to the grant to reflect the particular circumstances and requirements of their organisation, or the nature of a particular grant. Acceptance of a grant constitutes acceptance of both the core conditions and any additional conditions. These conditions also apply to activities subcontracted to 3rd parties. These conditions cannot be waived or varied without the consent of the awarding Research Council. Any request by the grant holder to the council to vary these terms and conditions must be submitted through the Je-S grants maintenance facility and approved in writing by someone authorised to do so on behalf of the Council.



The Research Councils reserve the right to vary these terms and conditions the latest version is available on the RCUK website here:
<https://www.ukri.org/funding/information-for-award-holders/grant-terms-and-conditions/>

Definitions

Research Council (RC): any of the bodies listed above.

Grant: support for a proportion of the full economic costs of a project. A Grant may be either a Research Grant or a Fellowship?

Research Grant: a contribution to the costs of a stated research project which has been assessed as eligible for funding through the procedures established by the relevant Research Council.

Fellowship Grant: an award made through a fellowship competition providing a contribution to the support of a named individual. It covers the cost of the time dedicated by the fellow to their personal research programme, and may or may not include research support costs.

Grant Holder: the person to whom the grant is assigned and who has responsibility for the intellectual leadership of the project and for the overall management of the research. The Grant Holder is either the Principal Investigator (in the case of a Research Grant) or a Research Fellow (in the case of a Fellowship Grant).

Co-Investigator: a person who assists the Grant Holder in the management and leadership of a project.

Research Organisation (RO)/ Grant Awardee: the organisation to which the grant is awarded and which takes responsibility for the management of the research project and the accountability of funds provided.

Third Party: any person/organisation to which the award holding RO passes on any of the grant funds awarded by the RC.

Full Economic Costs (fEC): a cost which, if recovered across an organisation's full programme, would recover the total cost (direct, indirect and total overhead) including an adequate recurring investment in the organisation's infrastructure.

Directly Incurred Costs: costs that are explicitly identifiable as arising from the conduct of a project, are charged as the cash value actually spent and are supported by an audit record.

Directly Allocated Costs: the costs of resources used by a project that are shared by other activities. They are charged to projects on the basis of estimates rather than actual costs and do not represent actual costs on a project by project basis.

Indirect Costs: non-specific costs charged across all projects based on estimates that are not otherwise included as Directly Allocated Costs. They include the costs of the Research Organisation's administration such as personnel, finance, library and some departmental services.

Exceptions: Directly Incurred Costs that Research Councils fund at 100% of fEC subject to actual expenditure incurred, or items that are outside fEC.

Transparent Approach to Costing (TRAC): an agreed methodology used by universities and other higher education bodies for calculating full economic costs.

Funding Assurance Programme: a programme of visits and office-based tests to seek assurance that grant funds are used for the purpose for which they are given and that grants are managed in accordance with the terms and conditions under which they are awarded.

Use of Grant Proposal Information and Data Protection Privacy Notice

The Research Councils will use information provided on the grant proposal for processing the proposal, the award of any consequential grant, and for the payment, maintenance and review of the grant. This may include:

- Registration of proposals. Operation of grants processing and management information systems.
- Preparation of material for use by referees and peer review panels.
- Administration, investigation and review of grant proposals.
- Sharing proposal information on a strictly confidential basis with other funding organisations to seek contributions to the funding of proposals.
- Statistical analysis in relation to the evaluation of research and the study of trends.
- Policy and strategy studies.

To meet the Research Councils' obligations for public accountability and the dissemination of information, contents of funded research proposals will also be made available on the Research Councils' websites and other publicly available databases, including Gateway to Research, and in reports, documents and mailing lists.

During or after completion of the grant, the Research Council may contact the Grant Holder concerning funding opportunities or events, or for the purposes of evaluation. In some instances, the Research Council may wish to authorise an affiliate organisation to contact the Grant Holder on its behalf. By agreeing to these terms and conditions, the Research Organisation consents to this on behalf of the Grant Holder, unless the Grant Holder confirms to the Research Council that s/he does not wish to be contacted in this way. Grant Holders may choose to opt out at any point, provided they comply with all other terms and conditions associated with the grant.

The Research Council is working towards compliance with the General Data Protection Regulation (GDPR), which comes into effect on May 25th 2018. All personal data collected by the Council during the application for or funding of a Grant will be handled in accordance with the GDPR principles.

Freedom of Information Act and Environmental Information Regulations



Attention is drawn to the provisions of the Freedom of Information Act 2000 (FOIA) and the Environmental Information Regulations (EIRs). Research Councils have issued Publication Schemes which set out the types of information publicly available on their websites or published as documents. In addition, Research Councils have an obligation to respond to specific requests and may be required to disclose information about or provided by Research Organisations. In some cases the Research Council may consult the Research Organisation before disclosure, but it is under no obligation to do so. If a Research Organisation considers that any information it provides to a Research Council would be subject to an exemption under FOIA or the EIRs it should clearly mark the information as such and provide an explanation of why it considers the exemption applies and for how long. The Research Council will consider this explanation before disclosure, but it is not obliged to accept it as binding.

Where a Research Council determines that a Research Organisation is holding information on its behalf that it requires in order to comply with its obligations under FOIA or EIRs, the Research Organisation undertakes to provide access to such information as soon as reasonably practicable on request of the Research Council and in any event within 5 working days.

In some cases Research Organisations may be directly responsible for complying with FOIA and the EIRs? in such cases the Research Councils accept no responsibility for any failure to comply by the Research Organisations.

Grant Conditions

RGC 1 Accountability & Responsibilities of the Research Organisation

- The Research Organisation is accountable for the conduct of the research, the use of public funds and for ensuring the proper financial management of grants. These obligations apply wherever the research is carried out; either at the Research Organisation or a collaborating organisation or other third party.
- The Research Organisation must ensure that funds are spent in a way that is consistent with the purpose and conditions of the award.
- The Research Organisation is responsible for the timely and accurate submission of all expenditure statements and reports required by the award.
- The Research Organisation shall ensure that it carries out appropriate due diligence on any third parties used to deliver any part of the work funded by the grant and shall ensure in particular, that activities carried out by such third parties comply with these terms and conditions. The Research Organisation shall provide the Research Council on request with details of expenditure of the Grant by any third party.
- The Research Organisation must ensure that any part of the Full Economic Cost of the project not funded by the Research Council grant is committed to the project before it starts.
- The Research Organisation must ensure that the Grant Holder and co-investigators are made aware of their responsibilities and that they observe the terms and conditions of grants.
- The Research Organisation must ensure that the research supported by the grant complies with all relevant legislation and Government regulation, including that introduced while work is in progress. This requirement includes approval or licence from any regulatory body that may be required before the research can commence.
- The Research Organisation is expected to adopt the principles, standards and good practice for the management of research staff set out in the 2008 Concordat to Support the Career Development of Researchers, and subsequent amendments.
- The Research Organisation must create an environment in which research staff are selected and treated on the basis of their merits, abilities and potential. It must ensure that reliable systems and processes are in place so that the principles of the Concordat are embedded into practice within the Research Organisation. It must ensure compliance with all relevant legislation and Government regulation, including any subsequent amendments introduced while work is in progress.
- The Research Organisation is responsible for compliance with the terms of the Equality Act 2010 including any subsequent amendments introduced while work is in progress? and for ensuring that the expectations set out in the RCUK statement of expectations for equality and diversity are met.
- The Research Organisation is expected to adopt the principles, standards and good practice for public engagement with research set out in the 2010 Concordat for Engaging the Public with Research:
www.ukri.org/public-engagement/research-council-partners-and-public-engagement-with-research/embedding-public-engagement/
- The Research Organisation shall comply with European Union state aid law in their own uses of Research Council funding. In the case of any breach of state aid law the Research Council may be required to recover all or some funding, together with interest. The Research Council may also be required to withhold funding or aspects of funding where the Research Organisation is subject to a state aid inquiry or which has an outstanding recovery notice against it.
- The Research Organisation must create an environment in which public engagement is valued, recognised and supported. It must ensure that reliable systems and processes are in place so that the principles of the Concordat are embedded into practice within the Research Organisation.
- The Research Organisation must appoint a Research Fellow as an employee for the full duration of the award.
- The Research Organisation must integrate the Research Fellow within the research activities of the host department, whilst ensuring that he or she is able to maintain independence and focus on their personal research programme.
- The Research Organisation must notify the Research Council of any change in its status, or that of the Grant Holder, that might affect the eligibility to hold a grant.
- The Research Organisation must ensure that the requirements of the Employing Organisation under the Department of Health's Research Governance Framework for Health and Social Care (or equivalent) are met for research involving NHS patients, their organs, tissues or data, and that the necessary arrangements are in place with partner organisations. Where it also accepts the responsibilities of a Sponsor (as defined in the Governance Framework), it must also ensure that the requirements for Sponsors are met.



-The Research Organisation must ensure that adequate business continuity plans are in place to ensure that operational interruptions to the research are minimised.

-The Research Organisation must retain all accounting information relating to the Grant for the current financial year plus the subsequent six years after the submission date of the final expenditure statement.

RGC 2 Research Governance

It is the responsibility of the Research Organisation to ensure that the research is organised and undertaken within a framework of best practice that recognises the various factors that may influence or impact on a research project. Particular requirements are to ensure that all necessary permissions are obtained before the research begins, and that there is clarity of role and responsibility among the research team and with any collaborators. The Research Councils expect research to be conducted in accordance with the highest standards of research integrity and research methodology.

RGC 2.1 Research Ethics

The Research Organisation is responsible for ensuring that ethical issues relating to the research project are identified and brought to the attention of the relevant approval or regulatory body. Approval to undertake the research must be granted before any work requiring approval begins. Ethical issues should be interpreted broadly and may encompass, among other things, relevant codes of practice, the involvement of human participants, tissue or data in research, the use of animals, research that may result in damage to the environment and the use of sensitive economic, social or personal data.

RGC 2.2 Use of Animals in Research

Wherever possible, researchers must adopt procedures and techniques that avoid the use of animals. Where this is not possible, the research should be designed so that?

- The least sentient species with the appropriate physiology is used.
- The number of animals used is the minimum sufficient to provide adequate statistical power to answer the questions posed.
- The severity of procedures performed on animals is kept to a minimum. Experiments should be kept as short as possible. Appropriate anaesthesia, analgesia and humane endpoints should be used to minimise any pain and suffering.

The provisions of the Animals (Scientific Procedures) Act 1986, and any amendments, must be observed and all necessary licences must have been received before any work requiring approval takes place.

Please see 'RGC 5 Changes in Research Project' in the event of any proposal to change the arrangements for use of animals in a Research project.

RGC 2.3 Medical and Health Research

The Research Organisation is responsible for managing and monitoring the conduct of medical and health research in a manner consistent with the Department of Health's Research Governance Framework for Health and Social Care (or equivalent). There must be effective and verifiable systems in place for managing research quality, progress and the safety and well-being of patients and other research participants. These systems must promote and maintain the relevant codes of practice and all relevant statutory review, authorisation and reporting requirements.

Research involving human participants or data within the social sciences that falls outside the Department of Health's Research Governance Framework must meet the provisions and guidelines of the ESRC's Research Ethics Framework. While this research may involve patients, NHS staff or organisations, it is defined as research that poses no clinical risk or harm to those who are the subjects of research. Research Organisations must ensure that appropriate arrangements are in place for independent ethics review of social science research that meets local research ethics committee standards.

Significant developments must be assessed as the research proceeds, especially those that affect safety and well-being, which should be reported to the appropriate authorities and to the Research Council. The Research Organisation must take appropriate and timely action when significant problems are identified. This may include temporarily suspending or terminating the research.

The Research Organisation is responsible for managing and monitoring statutory requirements for which it accepts responsibility, for example, in relation to legislation on clinical trials, use of human organs, tissues and data.

Guidance by the MRC on the conduct of medical research, and by ESRC on the conduct of social science research, provided on behalf of all Research Councils, must be observed.

RGC 2.4 Health and Safety

The Research Organisation is responsible for ensuring that a safe working environment is provided for all individuals associated with a research project. Its approach and policy on health and safety matters must meet all regulatory and legislative requirements and be consistent with best practice recommended by the Health & Safety Executive.

Appropriate care must be taken where researchers are working off-site. The Research Organisation must satisfy itself that all reasonable health and safety factors are addressed.

The Research Councils reserve the right to require the Research Organisation to undertake a safety risk assessment in individual cases where health and safety is an issue, and to monitor and audit the actual arrangements made.

RGC 2.5 Misconduct and Conflicts of Interest

The Research Organisation is required to have in place procedures for governing good research practice, and for investigating and reporting unacceptable research conduct, that meet the requirements set out in the Concordat to Support Research Integrity (2012) <http://www.universitiesuk.ac.uk/highereducation/Pages/Theconcordatatosupportresearchintegrity.aspx> and the



<https://www.ukri.org/about-us/policies-and-standards/research-integrity/>

The Research Organisation must ensure that potential conflicts of interest in research are declared and subsequently managed.

Guidance on providing declarations of interest can be found at
<https://www.ukri.org/files/legacy/documents/declarationofinterests-applicants-pdf/>

RGC 2.6 Modern Slavery Act 2015

The Research Organisation (RO) acknowledges that as an organization carrying out business in the UK it is required to comply with the Modern Slavery Act 2015. The RO will take steps to ensure its operations and supply chains are trafficking- and slavery-free, including without limitation imposing substantially similar obligations to those in this clause where it is permitted to subcontract its obligations under these grant terms so that multi-level supply chains are addressed.

The RO further agrees that neither it nor any of its officers, employees, nor so far as it is aware any subcontractor or other persons associated with it, have been convicted of any offence involving slavery and human trafficking.

The RO acknowledges and agrees that failure to comply with the Modern Slavery Act 2015 will constitute a breach of these terms and conditions of grant, and that a continuing breach of these terms and conditions of grant will entitle the Research Council to suspend pending remediation, or terminate grant payments.

When requested by the Research Council, the RO must supply a copy of its annual modern slavery and human trafficking statement.

RGC 3 Use of Funds

Subject to the following conditions, grant funds may be used, without reference to the Research Council, in such a manner as to best carry out the research.

Grant funds include a provision for inflation based on the GDP Deflators published by HM Government.

The value of the grant may be varied by the Research Council during the lifetime of the grant in accordance with the deflators or to take into account any other Government decisions affecting the funding available to the Research Councils. Grant funds are provided for a specific research project. Under no circumstances may Directly Incurred and Exceptions funds be used to meet costs on any other grant or activity.

Directly Incurred and Exceptions funds cannot be used to meet the costs of an activity that will fall beyond the actual end date of the grant, e.g. when travel falls after the end of the grant, the costs cannot be charged to the grant even if the tickets, etc. can be purchased in advance.

The Research Councils require public funds to be deployed with due consideration to value for money across all activities.

All travel claims should evidence value for money as the primary consideration. Consequently, these should only include travel by standard class by train and economy class by air for flights. Any exception should be clearly justified and approved within the terms of the RO policy.

See 'RGC 11 Equipment' for further information on use of funds for equipment specifically.

RGC 4 Starting Procedures

The process for activating a grant consists of two separate stages. The Research Organisation must formally accept the grant by completing and returning the Offer Acceptance within 10 working days of the offer letter being issued. Returning the Offer Acceptance will result in the Start Confirmation and the Payment Schedule being issued.

The Start Confirmation must be submitted within 42 (calendar) days of the research/training starting and the start date shown on the start confirmation will be regarded as the start date of the grant. The start of the grant may be delayed by up to 3 months from the start date shown in the offer letter, the duration of the grant remaining unchanged. The grant may lapse if it is not started within this period.

The start of the grant may precede the start date shown in the offer letter, but must not be earlier than the date of the offer letter itself.

The start of the grant should be defined as follows:

- For research grants with DI staff? the date on which the first DI staff supported by the grant start work.
- For research grants with DI staff, but where it is intended that staff should not be in post at the start of the grant? the date on which expenditure on any other DI or DA (excluding estates) heading first occurs?
- For research grants without DI staff: the date on which any DI or DA (excluding estates) expenditure first occurs.

Grants may not be started in any other way without prior approval from the Research Council.

Expenditure may be incurred prior to the start of the grant and be subsequently charged to the grant, provided that it does not precede the date of the offer letter.

RGC 5 Changes in Research Project

The Research Council must be consulted in the event of any major change in the proposed research, including failure to gain access to research facilities and services, or to gain ethical committee approval for the research, particularly those which make it unlikely that the objectives of the research can be achieved.

In addition, for research involving the use of animals or human participation, any substantive changes from the experimental design endorsed by the awarding Board or Panel that might impact on the ethical characteristics of the award must be authorised by the Research Council. Such changes would include, but may not be limited to, the use of different animal species and/or the experimental design or clinical protocol.



If appropriate, revised proposals may be required. The Research Council reserves the right to make a new grant in place of the existing grant, or to revise, retain or terminate the existing grant.

It is the responsibility of the Research Organisation to manage the resources on the grant, including the staff, and the Research Council need not be consulted if staffing levels on the grant are changed. However, a proportionate reduction should be made in the value of Estates, Indirect Costs and Infrastructure Technicians claimed by the Research Organisation in the following circumstances:

- a post that attracts these costs is not filled.
- a staff member who attracts these costs leaves more than six months before the end of the period for which the post was funded and is either not replaced, or is replaced by a category of staff that does not attract the costs e.g. project student or technician.

RGC 6 Transfers of Funds between Fund Headings

Transfers of funds between fund headings are permitted only within and between Directly Incurred costs and Exceptions, excluding equipment.

Funds may only be transferred into studentship stipend or fees to supplement an existing studentship post on the grant. They may not be transferred to create new posts without prior approval from the Council. Transfers will be at the rate applicable for the heading, as set out in the award letter.

Funds can only be transferred and used to meet the cost of activity or activities that meet the agreed aims and objectives of the project. While approval does not need to be sought from the Research Council for transfer of funds, the Research Councils reserve the right to query any expenditure outlined in the Final Expenditure Statement, which has not been incurred in line with the Grant Terms and Conditions.

See RGC 11 Equipment for further information on the transfer of funds for equipment specifically.

RGC 7 Extensions

For Research Grants: After a research grant has started, the duration may be extended at no additional cost by an overall total of up to 12 months, subject to prior written approval. Extensions will be allowed where they are necessary to enable work to be completed following delays due to:

- breaks or delays in the appointment of staff
- maternity, paternity, adoption, shared parental or paid sick leave
- extended jury service
- changes from full-time to part-time working.

In the case of other, exceptional, circumstances, the duration may be extended, at the discretion of the Research Council.

Extensions will be limited to the additional time needed to complete the research. Any request for an extension should therefore state the reasons for the delay and explain how the extra time requested will enable the remaining work to be completed.

Fellowship Grants: After a fellowship grant has started, the duration may be extended to cover maternity leave, paternity leave, adoption leave, shared parental leave, extended jury service or paid sick leave for a Research Fellow in line with the terms and conditions of the fellow's employment. Otherwise, the conditions for extending Fellowship grants are the same as apply to research grants.

Requests for extensions should be made via the Grant Maintenance facility in Je-S once the required duration is known and before the grant ends.

RGC 8 Staff

The Research Organisation must assume full responsibility for staff funded from the grant and, in consequence, accept all duties owed to and responsibilities for these staff, including, without limitation, their terms and conditions of employment and their training and supervision, arising from the employer/employee relationship.

The Research Organisation must provide research staff with a statement, at the outset of their employment, setting out the provisions for career management and development, including personal skills training, and ensure that they have access to appropriate training opportunities.

Provided it is related to the research project on which they are currently working, Research staff and Research Fellows may, during normal working hours, undertake teaching and demonstrating work, including associated training, preparatory, marking and examination duties, and NHS clinical sessions for up to an average of 6 hours a week (pro rata for part-time staff) calculated over the period that they are supported on the grant.

RGC 9 Maternity, Paternity, Adoption and Parental Leave

The Research Organisation will be compensated at the end of the grant to cover any additional net costs that cannot be met within the cash limit of paid parental leave (ie maternity, paternity and adoption leave) for staff within the Directly Incurred and Exceptions fund headings (excluding the principal and co-investigators, unless they are also research fellows or research assistants funded by the grant) if they fulfil the relevant qualifying conditions of the employing Research Organisation. The net cost is the amount paid to the individual less the amount the Research Organisation can recover for Statutory Maternity Pay and Statutory Adoption Pay from HMRC.

Parental leave pay is payable by the Research Council only for directly incurred staff that are funded for 100% of their contracted time on the grant (apart from staff acting as principal or co-investigators unless they are also research fellows or research assistants funded by the grant).



Grant funds, within the announced cash limit, may be used to meet the costs of making a substitute appointment and/or extending the grant to cover a period of parental leave for staff within the directly incurred and exceptions fund headings (excluding the principal and co-investigators, unless they are also research fellows or research assistants funded by the grant). The duration of a grant will be extended only if the period can be accommodated within the maximum period allowed for extensions. Directly Allocated and Indirect funds will not be increased as a result of such extensions.

Research Grants: Research Grant funds may be used to meet the costs of paid parental leave only to the extent that it is taken during the original period of the grant. The Research Organisation will be responsible for any liability for parental leave pay for staff supported by the grant outside the original period of the grant. If, for example, the original end date of a grant falls while a member of research staff is part-way through her maternity leave, the Research Organisation will be responsible for that part of the maternity leave which is taken after the original end date.

Fellowship Grants: Fellows are entitled to take parental leave in accordance with the terms and conditions of the fellow's employment. If requested, consideration will be given to allowing a fellowship grant to be placed in abeyance during the absence of the Research Fellow for parental leave, and the period of the fellowship extended by the period of leave. Consideration will be given to requests to continue the fellowship on a flexible or part-time basis to allow the Research Fellow to meet caring responsibilities.

RGC 10 Sick Leave

The Research Organisation will be compensated at the end of the grant to cover any additional net costs, that cannot be met within the cash limit, of paid sick leave for staff within the Directly Incurred and Exceptions fund headings (excluding the principal and co-investigators, unless they are also Research Fellows or Research Assistants funded by the grant) who fulfil the qualifying conditions of the Research Organisation. The net cost is the amount paid to the individual less the amount the Research Organisation can recover from HMRC.

Sick pay is payable by the Research Council only for directly incurred staff that are funded for 100% of their contracted time on the grant (apart from staff acting as principal or co-investigators unless they are also research fellows or research assistants funded by the grant).

Grant funds, within the announced cash limit, may be used to meet the approved costs of making a substitute appointment and/or extending the grant to cover a period of sick leave for staff within the directly incurred and exceptions fund headings (excluding the principal and co-investigators, unless they are also research fellows or research assistants funded by the grant). The duration of a grant will be extended only if the period can be accommodated within the maximum period allowed for extensions. Directly Allocated and Indirect funds will not be increased as a result of such extensions.

Research Grants: Research Grant funds may be used to meet the costs of paid sick leave only to the extent that it is taken during the original period of the grant. The Research Organisation will be responsible for any liability for sick leave pay for staff supported by the grant outside the original period of the grant.

Where there is a continuous period of sick leave in excess of 3 months, the Research Organisation may apply to the Research Council to discuss the possibility of a substitute appointment to safeguard progress on the project. Where a Research Assistant has been on sick leave in excess of 3 months the Research Organisation must comply with all their obligations to consider reasonable adjustments before making a substitute appointment. Where a Research Assistant has been on sick leave for an aggregate (not necessarily continuous) period in excess of 3 months, where this is due to a single condition or a series of related conditions, the Research Organisation may request an extension to the duration of the project.

Fellowship Grants: Fellows are entitled to take sick leave in accordance with the Research Organisation's terms and conditions. If requested, consideration will be given to allowing a fellowship grant to be placed in abeyance during the absence of the Research Fellow due to sick leave, and the period of the fellowship extended by the period of sick leave. The additional salary costs for the fellow (pro rata to their percentage FTE on the fellowship) should be claimed, as necessary, at the end of the extended period.

RGC 11 Equipment

RGC 11.1 Procurement of Equipment

The procurement of equipment, consumables and services, including maintenance, must comply with all relevant national and EU legislation and the Research Organisation's own financial policy and procedures. Accepted procurement best practice in the higher education sector must be observed. For all equipment and services where the contract value is more than £25,000, excluding VAT, professionally qualified procurement staff must be consulted before the procurement process begins, and, where appropriate, at the market research stage, and must approve the order/contract before it is placed with a supplier.

RGC 11.2 Ownership of Equipment

Equipment purchased from grant funds is primarily for use on the research project for which the research grant was awarded, and belongs to the Research Organisation. In certain circumstances the Research Council may wish to retain ownership throughout the period of the grant and possibly beyond. In such cases, the grant will be subject to an additional condition.

The Research Council must be informed if, during the life of the research grant, the need for the equipment diminishes substantially or it is not used for the purpose for which it was funded. The Research Council reserves the right to determine the disposal of such equipment and to claim the proceeds of any sale.

Any proposal to transfer ownership of the equipment during the period of the grant is subject to prior approval by the Research Council. After the research project has ended, the Research Organisation is free to use the equipment without reference to the Research Council, but it is nevertheless expected to maintain it for research purposes as long as is practicable.

RGC 11.3 Use of Equipment

Where there is spare capacity in the use of the equipment, the Research Council expects this to be made available to other users. Priority should be given to research supported by any of the Research Councils and to Research Council-funded students.



RGC 11.4 Use of Equipment Funds

Any proposal to purchase an item of equipment in the last 6 months of the grant is subject to prior written approval by the Research Council. The Research Council will wish to be assured that the item of equipment is essential to the research.

Equipment funding is ring-fenced and transfers into or out of the equipment headings, whether under Directly Incurred or Exceptions, is not permitted.

RGC 11.5 Equipment Data

In line with the recommendation made in the "Efficiency, effectiveness and value for money" report www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/efficiency-effectiveness-summary.pdf all new equipment purchased over £138,000 (£115,000 ex VAT) using public funding sources should be registered on the national database to be discoverable and enable greater sharing.

RGC 12 Transfer of a Grant to another Research Organisation

The Research Organisation must send a request via the Grant Maintenance facility in Je-S if the Grant Holder intends to transfer to another organisation. If this organisation is eligible to hold grants, and is able to provide a suitable environment to enable the project to be successfully completed, the expectation is that the grant would be transferred with the Grant Holder. Written agreement to this is required from both the relinquishing and receiving organisations? this will normally be triggered automatically by the initial request to Je-S.

The Research Council will wish to be assured that satisfactory arrangements have been agreed that will enable the project to be undertaken, or to continue, in accordance with its research objectives. If suitable arrangements cannot be agreed, the Research Council will consider withdrawing its support or terminating the grant.

Where there is a basis for continuing involvement by the relinquishing organisation, agreement should be reached between both organisations on the apportionment of work and the distribution of related funding. Grants will not be re-costed following transfer. The unspent balance of Directly Incurred and Exceptions costs will be transferred to the receiving Research Organisation. In the case of Directly Allocated and Indirect costs, a pro rata share, based on the time elapsed on the grant at the point of transfer, will be transferred to the receiving research organisation. The receiving organisation will be required to confirm, by return of an offer acceptance, that it will provide any additional resources needed to complete the project.

RGC 13 Change of Grant Holder

Research Grants: The Research Organisation must consult the Research Council via the Grant Maintenance facility in Je-S if it is proposed to change the Grant Holder, for example, following retirement or resignation. Where the Grant Holder is transferring to another organisation eligible to hold a grant, the provisions of RGC 12 Transfer of a Grant to another Research Organisation will apply. In other circumstances, the Research Organisation may nominate a replacement Grant Holder. The Research Council will wish to be assured that the replacement meets the eligibility criteria and has the expertise and experience to lead the project to a successful conclusion, in accordance with its research objectives.

Fellowship Grants: A fellowship grant is awarded on the basis of a named individual's suitability to undertake and benefit from the period of research therefore changes to the Grant Holder are not permitted. The resignation of the Research Fellow, or the termination of their employment, constitutes the end of the grant for the purpose of submitting a final report and the Council's financial liabilities.

RGC 14 Annual Statement

The Research Organisation may be sent a statement to return each year showing payments made by the Research Council during the previous financial year for all the grants it holds. Where a statement is required, the Research Organisation must certify, by returning the statement, that:

- Expenditure has been incurred in accordance with the grant conditions
- Those grants shown as current are continuing.

No further payments will be made until the annual statement has been received and accepted by the Research Council.

RGC 15 Expenditure Statements

The Research Organisation is accountable for funds dispersed and must complete and return an expenditure statement within 3 months of the end date of a grant. If it is not returned within this time then the terms stated in RGC 18.2 Organisation Sanctions will apply. Once an expenditure statement has been received and the expenditure incurred has been reconciled against payments made, it will be considered as final. Any unspent funds will be recovered.

Expenditure shown in the Directly Incurred and Exceptions headings must show the actual expenditure incurred by the project. Settlement by the Research Council will reflect the proportion of FEC stated in the award letter applied to actual expenditure, within the cash limit.

For the Directly Allocated and Indirect Costs headings, the Research Council will pay the amount shown as spent, within the cash limit, provided that the grant ran its full course. Where a grant is terminated more than 6 months before the planned end date, a pro rata share will be paid. Where a grant terminates within 6 months of the planned end date, estates and Indirect Costs will be paid in full, but Investigators' costs and Other Directly Allocated Costs will be paid pro rata.

Costs arising from parental or sick leave should be identified in the Absence heading of the statement.

The Research Council reserves the right to require the Research Organisation to complete and submit a statement of expenditure at any time during the course of a grant, or to provide supplementary information in support of an interim or final expenditure statement.



If there are exceptional reasons that will prevent submission of the expenditure statement within the period allowed, a written request may be made via the Grant Maintenance facility in Je-S, before the due date passes, for the submission period to be extended.

RGC 16 Disclosure and Inspection

The Research Council reserves the right to have reasonable access to inspect the records and financial procedures associated with grants or to appoint any other body or individual for the purpose of such inspection. This includes expenditure by third parties. Research Councils shall be entitled to request and/or have access to any financial records and reports that are deemed appropriate to demonstrate the regularity and propriety of expenditure, including but not limited to:

- Annual report & accounts
- External audit management letter
- ISA260 - Communication with those charged with governance
- Related internal audit reports

The Research Organisation must report to the Research Council:

-Any investigations (and their outcomes) into research misconduct associated with the grant at the stage that it is decided to undertake an informal inquiry; and
-on request provide information on:

- a) its management of research integrity and ethics as described at:
<https://www.ukri.org/about-us/policies-and-standards/research-integrity/>
 - b) Details of any retractions or withdrawal of submissions/publications
- Any allegations, proven or not, of any cases of fraud.

The Research Organisation must, if required by the Research Council, provide a statement of account for the grant, independently examined by an auditor who is a member of a recognised professional body, certifying that the expenditure has been incurred in accordance with the research grant terms and conditions.

Research Councils will undertake periodic reviews of Research Organisations within the Funding Assurance Programme to seek assurance that grants are managed in accordance with the terms and conditions under which they are awarded.

RGC 17 Reporting on the conduct and results of research

The Research Councils use an online system to collect information during the lifetime of the grant and for some years afterwards on the outputs and outcomes of research, and provide guidance on the timing and scope of reporting that is required. The Research Organisation must ensure that the system is used in accordance with the guidance provided. Exceptionally, the Research Council may require a separate final report on the conduct and outcome of the project. If so, it must be submitted by the Research Organisation within three months of the end of the grant, on the form provided. No further application from a Grant Holder will be considered while a final report is overdue.

RGC 18 Sanctions

The Research Councils reserve the right to impose financial sanctions and/or additional measures where they identify areas of non-compliance with these terms and conditions of grant.

RGC 18.1 Contact Sanctions

If outputs and outcomes are not reported as directed the Research Councils collectively will not consider further proposals where the grant holder is named as the Principal or Co Investigator. In addition the Research Councils will suspend payments for the associated grant.

RGC 18.2 Organisation Sanctions

If the final report or the financial expenditure statement is not received within 3 months of the end date of the grant, the Research Council will recover 20% of expenditure incurred on the grant. All payments will be recovered if the report or statement is not received within 6 months of the end of the grant. Research Organisations may appeal against a sanction, but must do so within 60 days of the pay run in which the sanction was imposed.

The Research Council shall be entitled to suspend payments or recover funds on grants in the event that the Research Organisation does not comply with the terms and conditions of grant.

In relation to the current Quality Assurance and validation project for TRAC implementation in universities, the Research Councils reserve the right to apply sanctions of 75% of the non-compliant rate where an institution is found to be using rates which are materially inaccurate (>10% variance on any single rate). These sanctions would only apply to future applications although Councils may exercise a higher sanction where there has been evidence of significant overpayments to research organisation based on inaccurate rates.

RGC 19 Public Engagement

It is the responsibility of the Research Organisation and the Grant Holder and Co-Investigators to communicate the research to the public at both local and national level, and to raise awareness of the role of science and research in any related issues of public interest. Special schemes exist in some Research Councils providing additional support for these activities.

RGC 20 Exploitation and Impact

It is the responsibility of the Research Organisation, and all engaged in the research, to make every reasonable effort to ensure that the intellectual assets obtained in the course of the research, whether protected by intellectual property rights or not, are used to the benefit of society and the economy. Research outcomes should be disseminated to both research and more widespread audiences, for example to inform potential users and beneficiaries of the research.



Unless stated otherwise, the ownership of all intellectual assets, including intellectual property, and responsibility for their application, rests with the organisation that generates them.

Where the grant is associated with more than one research organisation and/or other project partners, the basis of collaboration between the organisations, including ownership of intellectual property and rights to exploitation, is expected to be set out in a formal collaboration agreement. It is the responsibility of the Research Organisation to put such an agreement in place before the research begins. The terms of collaboration agreements must not conflict with the Research Councils' terms and conditions.

Arrangements for collaboration and/or exploitation must not prevent the future progression of research and the dissemination of research results in accordance with academic custom and practice. A temporary delay in publication is acceptable in order to allow commercial and collaborative arrangements to be established.

The Research Council may, in individual cases, reserve the right to retain ownership of intellectual assets, including intellectual property (or assign it to a third party under an exploitation agreement) and to arrange for it to be exploited for the national benefit and that of the Research Organisation involved. This right, if exercised, will be set out in an additional grant condition.

There should be suitable recognition and reward to researchers who undertake activities that deliver benefit through the application of research outcomes. The Research Organisation must ensure that all those associated with the research are aware of, and accept, these arrangements.

RGC 21 Research Monitoring and Evaluation

While it is the responsibility of the Research Organisation to manage the research, the Research Council reserves the right to call for periodic information on progress or to visit the project team. The Grant Holder may also be asked to attend meetings to exchange information and ideas with others undertaking research in the same or similar fields.

The Grant Holder must make all reasonable efforts, if so invited, to respond to requests for information or to attend events or activities organised by the Research Council concerning the research undertaken. Such events may be held after a grant has finished.

RGC 22 Publication and Acknowledgement of Support

The Grant Holder should, subject to the procedures laid down by the Research Organisation, publish the results of the research in accordance with normal academic practice and the RCUK policy on open access.

Publications and other forms of media communication, including media appearances, press releases and conferences, must acknowledge the support received from the Research Council (or Councils, in the case of grants funded by more than one) quoting the grant reference number if appropriate. Journal publications should acknowledge the funding source using the standard format agreed by funders and publishers and detailed in the additional information accompanying this grant.
www.ukri.org/files/legacy/oadoes/ukri-open-access-principles-and-high-level-policy-pdf/

RGC 23 Disclaimer

The Research Councils accept no liability, financial or otherwise, for expenditure or liability arising from the research funded by the grant, except as set out in these terms and conditions, or otherwise agreed in writing.

Where studies are carried out in an NHS Trust, the Trust has a duty of care to its patients. The Research Council does not accept liability for any failure in the Trust's duty of care, or any negligence on the part of its employees.

The Research Councils reserve the right to terminate the grant at any time, subject to reasonable notice and to any payment that may be necessary to cover outstanding and unavoidable commitments.

Further to 'RGC 3 Use of Funds', the Research Councils reserve the right to amend the payment profile at their discretion. The Research Organisation will be advised, in advance, of any such a change. Changes to payment profiles may affect the overall value of the grant.

If a grant is terminated or reduced in value, no liability for payment or redundancy or any other compensatory payment for the dismissal of staff funded by the grant will be accepted, but, subject to the provisions of RGC 15 Expenditure Statements, negotiations will be held with regard to other contractual commitments and concerning the disposal of assets acquired under the research grant.

RGC 24 Status

These terms and conditions will be governed by the laws of England and Wales? all matters relating to the terms and conditions will be subject to the exclusive jurisdiction of the courts of England and Wales.

If any provision of these terms and conditions is found by a court or other legitimate body to be illegal, invalid or unreasonable, it will not affect the remaining terms and conditions which will continue in force.

These terms and conditions, together with any additional conditions set out in the grant? contain the whole agreement between the Research Council and the Research Organisation in relation to the stated research grant. The Research Council and the Research Organisation do not intend that any of these terms and conditions should be enforceable by any third party.

RGC 25 Transfer to UK Research & Innovation

The parties acknowledge that United Kingdom Research and Innovation (UKRI) will be established as a body corporate in accordance with the Higher Education and Research Act 2017 and that the property, rights and liabilities of the awarding Research Council will be acquired by United Kingdom Research and Innovation in accordance with the provisions of that Act.



The parties agree that on and with effect from the date on which the UKRI Property Transfer Scheme becomes effective in accordance with its terms (the Scheme Effective Date):

- all rights and benefits of the awarding Research Council arising out of or in connection with this agreement; and
- all obligations and liabilities of the awarding Research Council arising out of or in connection with this agreement,

-shall (in each case) be transferred to, and assumed by, United Kingdom Research and Innovation on the basis set out in the UKRI Property Transfer Scheme.

The grant awardee undertakes that, at any time and from time to time on or after the Scheme Effective Date, it will execute such documents and take such other action as the awarding Research Council may reasonably request in order to implement and give effect to (i) the transfer of the rights, benefits, obligations and liabilities of the awarding Research Council arising out of or in connection with this agreement to United Kingdom Research and Innovation; and (ii) the release and discharge of the awarding Research Council in respect of such obligations and liabilities.

In this clause UKRI Property Transfer Scheme means a property transfer scheme made by the Secretary of State in accordance with the provisions of Schedule 10 to the Higher Education and Research Act 2017 and references to transfer and transferred shall be construed as references to assignment, novation or to the steps which are necessary to give effect to the arrangements

MRC Additional Terms and Conditions

The MRC additional terms and conditions of funding supplement those of UKRI. These conditions set out operational, legislative and ethical requirements relating to medical research. The MRC reserves the right to vary these additional terms and conditions.

Research organisations and award holders have absolute responsibility for ensuring all required licenses, approvals, permissions and consent are in place before any research is undertaken and that these are followed.

Award Holders are all MRC Grant Holders and recipients of MRC Unit and Institute funding (programme leaders).

MRC reserves the right to audit at any time without prior notice:

- That required licenses, approvals, permissions and consent are in place, or were in place when the activity occurred.
- Compliance with the terms and conditions set out here.

AC1 Responsibilities of the Research Organisation: Clinicians

The research organisation is responsible for ensuring all clinicians supported by MRC funding are aware they are individually responsible for maintaining appropriate professional indemnity insurance. This should be with a professional defence organisation for any activities not covered by NHS indemnity arrangements or by additional provision made by the research organisation. MRC will not meet the costs of such cover.

The research organisation is responsible for ensuring any honorary clinical contracts required by clinical staff have been obtained prior to the start of the research.

The MRC expects the research organisations to abide by the 'UK clinical academic training in medicine and dentistry: principles and obligations' (mrc.ukri.org/documents/pdf/clinical-principles-and-obligations-report/).

AC2 Clinical Responsibilities

Clinical Fellowship holders (Clinical Research Training Fellowships, Clinician Scientist Awards or Senior Clinical Fellowships) may not work more than the time commitment for clinical duties stated in their proposal. For the majority, this will equate to up to 20% (on average over the lifetime of the grant) of their normal working hours, which they may choose to spend on NHS clinical sessions, teaching and demonstrating, or research activities beyond the scope of their fellowship. Exceptions are made for surgeons and fellows undertaking patient-oriented research, who may undertake up to 40% of their time on these duties. This is not in addition to the six hours per week all research staff supported full-time by an MRC grant or fellowship may undertake under RGC 8 of the Research Council Terms and Conditions of Research Council FEC Grants (www.ukri.org/funding/information-for-award-holders/grant-terms-and-conditions/).

AC3 Publicity for MRC-Funded Research

All research results and achievements should be communicated to the MRC Press Office (press.office@mrc.ukri.org) before publication.

Award holders must inform the MRC Press Office as soon as a paper presenting MRC-funded research is accepted for publication. The MRC reserves the right to lead on publicity when the MRC is the majority funder. The MRC Press Office must be notified at least 5 working days in advance of any publicity arising from MRC funding, and any press releases referencing the MRC must be approved by the MRC Press Office before it is released to the media.

AC4 Use of Animals

The MRC supports the principles of the 3Rs (Replacement, Reduction and Refinement). Research organisations and award holders are expected to abide by the core principles set out in the cross-funder guidance 'Responsibility in the use of animals in bioscience research: Expectations of the major research councils and charitable funding bodies' (available at www.nc3rs.org.uk) and RGC 2.2 of the Research Council Terms and Conditions (www.ukri.org/funding/information-for-award-holders/grant-terms-and-conditions/).

The provisions of the Animals (Scientific Procedures) Act 1986 must be observed. All MRC awards are made on the absolute condition that no work which is controlled by the act will begin until the necessary licences have been obtained from the Home Office. Any recommendations arising from the MRC peer review process with regards to animal use must be followed.

When animals are purchased from commercial suppliers, UK suppliers should be used wherever possible, to minimise the risk of suffering during transport.



All research involving non-human primates must comply with the NC3Rs Guidelines: Primate accommodation, care and use (available at www.nc3rs.org.uk).

Researchers should ensure that they report animal-based studies in accordance with the ARRIVE guidelines (www.nc3rs.org.uk/ARRIVE) as far as possible, taking into account the specific editorial policies of the journal concerned.

Any new procedure likely to replace the use of animals in research or testing, reduce the numbers used or refine animal use must be reported to the MRC and disseminated through the usual channels to all those who might make use of it.

MRC is a public body legally obliged to provide information on its work to parliament and to the public, and is committed to improving transparency in public communications on animal use. MRC will make public information about the animal experiments it funds when needed (for example as anonymous examples, or in response to direct queries). MRC will resist all requests for information that might lead to the identification of places or individuals, except with the express permission of the individuals concerned.

AC5 Mouse Strains

MRC supports a central repository of mouse strains - the MRC mouse Frozen Embryo and Sperm Archive (FESA) at the Mammalian Genetics Unit, Harwell. Award holders are expected to contact FESA to highlight mouse strains engineered, or characterised using MRC funds, and are encouraged to deposit these strains with the archive.

Depositors retain ownership of strains and there is currently no charge for depositing strains to make them freely available to the academic community.

FESA aims to ensure that valuable mouse strains are safeguarded, that the need to maintain colonies of live mice for long periods of time is reduced, and that the significant investment in engineering strains is capitalised upon fully. MRC award holders planning mouse research should contact FESA at the earliest opportunity.

For help with the requirements of AC6-AC13 please contact MRC Regulatory Support Centre: mrc.ukri.org/research/facilities-and-resources-for-researchers/regulatory-support-centre/

AC6 Health Departments' Research Governance Frameworks

Research involving NHS patients, their organs, tissues or data which falls within the scope of the UK Health Departments' Research Governance Frameworks (RGF, www.hra.nhs.uk/resources/research-legislation-and-governance/research-governance-frameworks/) must comply with MRC policy on the health departments research governance frameworks (mrc.ukri.org/research/policies-and-guidance-for-researchers/clinical-research-governance/health-departments-research-governance/).

MRC requires research organisations to ensure sponsorship responsibilities are clearly identified, the research undertaken complies with the requirements of the employing organisation set out in the RGF, and that agreements and systems are in place with NHS Trusts and other partner organisations, including commercial organisations, to comply with the RGF. Systematic documentation of key decisions and approvals, particularly in relation to work with patients, their organs, tissues and data is crucial.

AC7 Human Participants in Research

MRC expects all research involving human participants to be undertaken in accordance with its policies and guidance available from mrc.ukri.org/research/policies-and-guidance-for-researchers/#ethics. These include:

- Good Research Practice (2012);
- Medical research involving adults who cannot consent (2007);
- Medical Research Involving Children (2004);
- Human Tissue and Biological Samples for Use in Research (2014);
- Personal Information in Medical Research (2000)

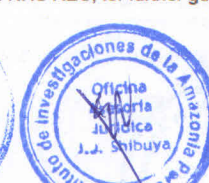
Research organisations and award holders have absolute responsibility for ensuring that investigations being undertaken within NHS premises, nursing or residential homes or NHS service establishments, schools, or any other organisations, do not take place without the explicit approval of the appropriate authority in advance.

Payments to healthy volunteers participating in clinical research are allowable, provided that the payment is for expense, time and inconvenience and is not at a level which would induce people to take part in studies against their better judgement. Further guidance on payments and incentives in research can be found at www.hra.nhs.uk/documents/2014/05/hra-guidance-payments-incentives-research-v1-0-final-2014-05-21.pdf

Independent Research Ethics Committee approval is required for research that involves human participants (whether patients or healthy volunteers) or records. In the case of research involving NHS patients, premises or records, this will be a NHS Research Ethics Committee (REC). Such approval is also required for certain studies of human tissues. Further guidance on when NHS REC approval is required can be found at www.hra-decisiontools.org.uk/ethics/

In England and Wales research involving individual patient data, where the patient's consent will not be obtained, is covered by "Section 251" of The National Health Service Act 2006, and requires additional approval via the Health Research Authority's Confidentiality Advisory Group (www.hra.nhs.uk/about-the-hra/our-committees/section-251/). In Scotland, decisions on disclosure of identifiable patient information are made by Caldicott Guardians (see www.informationgovernance.scot.nhs.uk/ for further details).

In the case of social science research, the MRC recommends that award holders follow the ESRC Framework for Research Ethics (revised 2015, esrc.ukri.org/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/) which highlights the responsibility of the research organisation for ensuring that the research is subject to appropriate ethics review. In some cases this review is required by an NHS REC, for further guidance please see www.hra.nhs.uk/research-community/



MRC requires the award holder to notify MRC if amendments required by a regulator or a REC will substantially affect the research question, methodology or cost previously approved.

Any serious incident arising in the course of research that has been approved by a REC should be reported immediately to the MRC, as well as to the REC. The research must be suspended until the REC has decided whether it may be continued or should be abandoned.

Research involving human participants in developing societies presents specific ethical challenges and the MRC guidelines Research Involving Human Participants in Developing Societies (mrc.ukri.org/publications/browse/research-involving-human-participants-in-developing-societies/) must be followed.

AC8 Clinical Trials

When research involves MRC-funded clinical trials, award holders must act in accordance with MRC policy on UK clinical trials regulations (mrc.ukri.org/research/policies-and-guidance-for-researchers/clinical-research-governance/clinical-trials-regulations/) in relation to ethical, sponsorship, reporting, monitoring and publication requirements.

- An independent Trial Steering Committee and Data Monitoring and Ethics Committee must be set up to oversee the conduct of the trial, with an MRC representative acting as an observer.
- MRC-funded trials must be registered with an International Standardised Randomised Control Trial Number (ISRCTN) on the ISRCTN Registry (www.isrctn.com). The unique identification number must be used in publications and provided to MRC by adding it to Researchfish within a year of the trial starting. Failure to provide this number will result in suspension of funding.
- Results of MRC-funded trials (whether positive or negative) must be published without unreasonable delay following the conclusion of the study (generally within a year of completion). Results should be reported in accordance with the recommendations in the CONSORT statement (www.consort-statement.org/). Before results are published they must be discussed by the Trial Steering Committee.
- Any contribution to an MRC-funded trial by another body, such as a pharmaceutical company (donation of drugs etc.), must be the subject of a collaboration agreement between the parties (see AC20).

AC9 Data Sharing

Award holders must comply with the MRC policy on research data sharing (mrc.ukri.org/documents/pdf/mrc-data-sharing-policy/) along with the MRC policy on sharing of research data from population and patient studies (mrc.ukri.org/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/).

AC10 Human Fertilisation

When research involves the use of human gametes, embryos or human admixed embryos researchers must act in accordance with the Human Fertilisation and Embryology Act 1990 as amended in 2008 and 2015 (the Human Fertilisation and Embryology (Mitochondrial Donation) Regulations). This includes obtaining a research licence to undertake activities covered by the Act. Further information can be obtained from www.hfea.gov.uk/

AC11 Medical Records

When research involves the use of medical records, the award holder must act in accordance with the principles set out in the Data Protection Act 1998 and the NHS requirements to protect patient confidentiality. Advice on these requirements is available from the MRC Regulatory Support Centre.

All researchers handling personal data must have clearly established obligations to maintain confidentiality (eg formalised within policy written by their research organisations or through professional codes of conduct).

All NHS bodies should routinely inform patients that medical information may be used in research statistics, etc., and should give patients who wish to discuss any concerns an opportunity to do this (Section 251 of NHS Act 2006). Identifiable data should not be used in research if a patient has made clear that they do not wish it to be.

AC12 Removal, Use or Storage of Human Tissue

Award holders whose research involves the removal, use or storage of human tissue as specified in the relevant legislation must:

- comply with the appropriate legislation, ie the Human Tissue Act 2004 and/or the Human Tissue (Scotland) Act 2006;
- follow the relevant standards and Codes of Practice issued by the Human Tissue Authority (HTA) (the MRC Regulatory Support Centre (mrc.ukri.org/research/facilities-and-resources-for-researchers/regulatory-support-centre/) has summarised these);
- follow the MRC guidance detailed in Human Tissue and Biological Samples for Use in medical Research (2014, mrc.ukri.org/publications/browse/human-tissue-and-biological-samples-for-use-in-research/).

Where research involves the use of human tissues and cells to treat patients (human application), award holders must also:

- comply with the Human Tissue (Quality and Safety for Human Application) Regulations 2007;
- work within the applicable regulations and standards as dictated by the Human Tissue Authority, Medicines and Healthcare products Regulatory Agency (MHRA), Human Fertilisation and Embryology Authority and Health Research Authority. The UK Stem Cell Tool Kit (www.sc-toolkit.ac.uk/home.cfm) gives guidance on applicable regulatory routes, and the MHRA Innovation Office (www.gov.uk/government/groups/mhra-innovation-office) provides a regulatory advice service for regenerative medicine.

When research involves the use of human fetal tissue, or non-fetal products of conception (ie amniotic fluids, umbilical cord, placenta or membranes), researchers should follow the guidance set out in relevant Codes of Practice issued by the HTA (in particular see paragraphs 171-175 in the Code of Practice on Consent at www.hta.gov.uk/).



When research involves procedures for the removal of human tissue at post-mortem examination, researchers must also follow guidance issued by the Health Departments and Local Health Authorities.

AC13 Stem Cells

Award holders whose research involves human stem cell lines (both embryonic and adult) must:

-Abide by the UK Code of Practice for the use of Human Stem Cell lines (mrc.ukri.org/documents/pdf/code-of-practice-for-the-use-of-human-stem-cell-lines/)

-Ensure that they hold all relevant licenses, accreditations and approvals from, and abide by the Codes of Practice issued by, but not limited to, the Human Fertilisation and Embryology Authority (HFEA; see AC10), the Human Tissue Authority (HTA; see AC12), the Health Research Authority (HRA; for research ethics, gene therapy and confidentiality; see AC6, AC7, AC8), the Medicines and Healthcare products Regulatory Agency (MHRA; see AC6, AC7, AC8), the EU Tissue and Cells Directive (where applicable).

In the case of research involving human embryonic stem cells:

-Deposit a sample of every human embryonic stem cell line derived with MRC funding in the UK Stem Cell Bank; applications to deposit or access banked stem cell lines must be approved by the Steering Committee for the UK Stem Cell Bank and for the Use of Stem Cell Lines (mrc.ukri.org/research/policies-and-guidance-for-researchers/uk-stem-cell-bank-steering-committee/).

-Not pass samples of human embryonic stem cell lines to third parties other than those approved by the Steering Committee for the UK Stem Cell Bank and for the Use of Stem Cell Lines and/or the HFEA.

-Not take human embryonic stem cell lines out of the UK unless approved by the Steering Committee for the UK Stem Cell Bank and for the Use of Stem Cell Lines and/or the HFEA.

-Scientists from overseas wishing to conduct human embryonic stem cell research in the UK as visiting workers must provide a written statement from their home institution, outlining that as the employer of the visiting worker they take on the responsibilities of ensuring their employee works to and complies with the requirements of the UK Governance landscape, set out in the UK Code of Practice.

-Send copies of publications to the UK Stem Cell Bank, and agree that the UK Stem Cell Bank may post summaries of published results on their web site.

-Assist the MRC and the UK Stem Cell Bank, on request, with public engagement activities.

AC14 Use of Radioactive Substances and Neutron Irradiation in Humans

When research requires the administration of radioactive medicinal products (including in vivo neutron activation analysis in humans), researchers must follow the guidance issued by the Administration of Radioactive Substances Advisory Committee (ARSAC, www.gov.uk/government/organisations/administration-of-radioactive-substances-advisory-committee/about) and seek the relevant approval(s) as appropriate.

AC15 Genetic Modification

In accordance with the Genetically Modified Organisms (Contained Use) Regulations 2014, research organisations and individuals undertaking genetic modification must be registered with the Health and Safety Executive (HSE), undertake risk assessment and seek consent where appropriate.

Researchers who carry out genetic modification should be familiar with the legislative requirements and with the Scientific Advisory Committee on Genetic Modification (Contained Use) guidance. Advice can be obtained from HSE Head Office or from your nearest HSE Office and Knowledge Centre (www.hse.gov.uk/contact/maps/index.htm).

AC16 Dangerous Pathogens

Research organisations accommodating projects involving the use of dangerous pathogens must comply with the safeguards recommended by the Advisory Committee on Dangerous Pathogens in their guidance 'Infection at work: controlling the risk' (www.hse.gov.uk/pubns/infection.pdf), 'Biological Agents: the principles, design and operation of containment in a level 4 facility' (www.hse.gov.uk/pubns/web09.pdf) and 'Biological agents: Managing the risks in laboratories and healthcare premises' (www.hse.gov.uk/biosafety/biologagents.pdf).

AC17 Controlled Drugs

When research requires the use of one or more of the drugs controlled under the Misuse of Drugs Act, 1971 and its subsequent amendments, researchers must hold an appropriate Home Office licence in accordance with the most up to date Regulations.

AC18 Open Access Policy - Publication Repositories

To comply with the RCUK Policy on Open Access (see RGC 22 of the Research Council Terms and Conditions) the MRC requires all publications to be deposited at the earliest opportunity, and certainly within six months of publication, in Europe PubMed Central (europepmc.org/). This applies both during and after the period of funding. The condition is subject to compliance with publishers' copyright and licensing policies. Whenever possible, the article deposited should be the published version. For more information see mrc.ukri.org/research/policies-and-guidance-for-researchers/open-access-policy/

AC19 Commercial Exploitation

The research organisation should ensure that, wherever possible, the licensing of intellectual property generated from research funded by the MRC includes provision for research use by other MRC supported scientists.



Research organisations must respond to requests from the MRC to provide assurance that appropriate systems and capabilities are in place to exploit and manage intellectual property generated from MRC-funded research.

AC20 MRC Industry Collaboration Agreement

It is a condition of MRC Industry Collaboration Agreement (MICA) awards that the PI/research organisation must provide MRC Head Office with a copy of the collaboration agreement, signed by all partners, within 3 months of the date of this letter and prior to the award start date. The agreement must be consistent with the Heads of Terms submitted with the application. The grant cannot be activated, and payments, made until this document has been submitted and approved by the MRC.

AC21 Peer Review

Peer review is an integral part of the application process and ensures research of the highest calibre is funded. MRC-funded researchers are expected to contribute to this process when invited to do so, unless they have a conflict of interest (see Reviewers Handbook, mrc.ukri.org/documents/pdf/reviewers-handbook/), or where the research proposed is outside their expertise. We would typically expect an MRC-funded researcher to provide at least three reviews per year.



APPENDIX II

Peru Head Terms

ACRONIMOS

FN	Fondo Newton
CAP	Coordinador Adjunto del Proyecto
CGP	Coordinador General del Proyecto
CONCYTEC	Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica
CTI	Ciencia, Tecnología e Innovación
CUT	Cuenta Unica de Transferencias
EA	Entidad asociada
ES	Entidad Solicitante
USM	Unidad de Seguimiento y Monitoreo
EE	Entidad Ejecutora
UPP	Unidad de planeamiento y presupuesto (FONDECYT)
UD	Unidad de Desarrollo
UES	Unidad de Evaluación y Selección
FONDECYT	Fondo Nacional de Desarrollo Científico, Tecnológico y de Innovación Tecnológica
I+D	Investigación y Desarrollo
I+D+i	Investigación, Desarrollo e Innovación
IF	Informe Financiero
IFR	Informe final de Resultados
IPI	Instituto Público de Investigación
IT	Informe Técnico
ITF	Informe Técnico Financiero
MP	Monitor del proyecto
MO	Manual Operativo
POP	Plan Operativo del proyecto
RENOES	Registro de No Elegibles
RIFR	Reporte del Informe Final de Resultados
RITF	Reporte del Informe Técnico Financiero
IP	Investigador Principal del Proyecto
RUD	Responsable de la Unidad de Desarrollo
RUES	Responsable de la Unidad de Evaluación y Selección
RUPP	Responsable de la Unidad de Planeamiento y presupuesto
RUSM	Responsable de la Unidad de Seguimiento y Monitoreo
SIAF	Sistema Integrado de Administración Financiera
SIG	Sistema Integral de Gestión del FONDECYT
SINACYT	Sistema Nacional de Ciencia, Tecnología e Innovación Tecnológica
SUNEDU	Superintendencia Nacional de Educación Superior Universitaria



PRINCIPALES DOCUMENTOS EN EL PROCESO DE SEGUIMIENTO Y

MONITOREO

N°	Documento	Breve Descripción
1	Bases de Concurso (BC)	Establece los principales lineamientos y criterios sobre los cuales se postula, así como determina los parámetros a ser considerado en la ejecución.
2	Contrato/Convenio de Subvención (CS)	Establece entre otros aspectos el marco legal de la subvención, periodo de ejecución, las obligaciones, estructura del presupuesto y tipo de aporte.
3	Guía de Seguimiento y Monitoreo (GSM)	Detalla los procedimientos con los cuales el equipo de monitores del BM FONDECYT realiza las actividades de Seguimiento y Monitoreo de los Subproyectos con la finalidad de asegurar el éxito del proyecto.
4	Plan Operativo de Proyecto (POP)	Comprende un cronograma de actividades para todo el periodo de ejecución del subproyecto, su inicio estará indicado por el contrato firmado con FONDECYT, y es aprobado durante la Primera Visita.
5	Cronograma de Desembolsos (CD)	Que constituye parte integrante del POS, establece los importes y periodicidad de los aportes monetarios y no monetarios.
7	Informe Técnico-Financiero (ITF)	Informa respecto a la ejecución del subproyecto, se compone de dos partes, el informe técnico (IT) y el informe financiero (IF), su elaboración es encargo del ES y la data está vinculada al cumplimiento de los indicadores de Hito programados en el POP; se presentan durante la ejecución del proyecto, al finalizar cada hito; (Formato SIG).
8	Reporte del Informe Técnico-Financiero (RITF)	Reporta un breve análisis de los avances y logros del proyecto respecto a las metas físicas como financieras del subproyecto, su elaboración es labor del Monitor de USM. (Formato SIG).
10	Informe Final de Resultados (IFR)	Presenta al final del proyecto y de manera consolidada los resultados obtenidos, el presupuesto utilizado y analiza a los factores que contribuyeron favorable y-desfavorablemente en la ejecución del Proyecto.(Formato SIG)
11	Reporte del Informe Final de Resultados (RIFR)	Es elaborado por el Monitor del proyecto tomando como base la información proporcionada en el IFR, respaldan su evaluación con lo evidenciado durante las visitas de seguimiento, este reporte otorga la conformidad al IFR presentado por la Entidad Ejecutora considerando lo informado respecto al cumplimiento de indicadores entre ellos los considerados. (Formato SIG)
12	Oficio de Cierre (OC)	Oficio emitido por la USM, donde se indica el cierre formal de los convenios.

CAPITULO I: ASPECTOS GENERALES

El Fondo Nacional de Desarrollo Científico, Tecnológico y de Innovación Tecnológica, FONDECYT es una iniciativa del CONCYTEC que tiene como objetivo gestionar recursos para fomentar el desarrollo y competitividad del país a través de la Ciencia, Tecnología e Innovación Tecnológica.

El Newton Fund es una iniciativa del Gobierno del Reino Unido de Gran Bretaña e Irlanda del Norte, cuyo objetivo es construir vínculos de colaboración en investigación e innovación con países aliados, a fin de contribuir a su desarrollo económico y bienestar social, así como desarrollar sus capacidades en investigación e innovación para el crecimiento sostenible a largo plazo. El Newton Fund es gestionado por el Departamento de Negocios, Energía y Estrategia Industrial del Reino Unido y se ejecuta en 18 países alrededor del mundo.

El presente concurso es producto de la alianza entre Medical Research Council (MRC) y el CONCYTEC con participación del FONDECYT. El MRC es uno de los socios del CONCYTEC en el Fondo Newton-Paulet, creado con el objetivo de apoyar la capacidad de investigación e innovación del Perú para su crecimiento sostenible a largo plazo.

La Guía de Postulación (el documento oficial publicado por MRC, a través de su portal web: <https://mrc.ukri.org/funding/browse/uk-peru/uk-peru-relationship-between-food-nutrition-and-health/> como 'UK-Peru: Relationship between Food, Nutrition and Health - Guidance for Applicants. La guía de postulación establece las condiciones que norman las interacciones entre los participantes y el concurso a nivel internacional, constituyendo un documento de cumplimiento obligatorio. Las Bases son complementarias a la Guía de Postulación y aplican a las personas naturales y/o jurídicas domiciliadas en el Perú que participen en el presente concurso.



Un Círculo de Investigación es un grupo de investigadores de diferentes entidades que trabaja en forma colectiva en diferentes disciplinas, quienes desarrollarán investigaciones en el desafío de entender mejor el fenómeno de retrocesos de los glaciares y sus potenciales impactos. Su conformación deberá ser acorde con los puntos 1 y 2 de las bases.

El presente documento tiene como objetivo orientar a la Entidad Solicitante (ES) en los procedimientos de seguimiento y monitoreo que implementará el FONDECYT para el acompañamiento del cofinanciamiento otorgado a los Círculos de Investigación en Salud 2018-01. Asimismo, precisar las obligaciones y compromisos que deberán cumplir durante este proceso, acorde con el punto 2. de las bases: "Sobre las condiciones del concurso".

El proceso de seguimiento y monitoreo de proyectos tiene por objetivo supervisar el cumplimiento de lo establecido en los documentos emitidos previamente por el FONDECYT: Bases, Bases integradas de ser el caso y demás documentos integrantes de la convocatoria, así como en el contrato

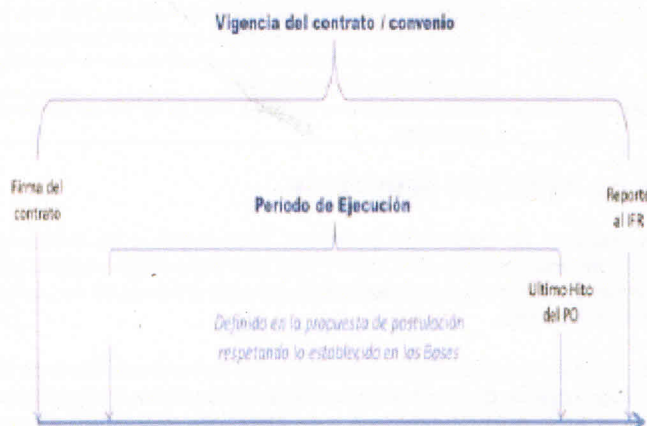
CAPITULO II: PUESTA EN MARCHA DEL PROYECTO

2.1 Vigencia del Convenio o contrato

El inicio del convenio o contrato se computa desde el día siguiente de su suscripción, y culminará con la emisión del Reporte al Informe Final de Resultados (RIFR), emitido por el monitor.

2.2 Duración del Proyecto

El inicio de la ejecución del proyecto debe ser coordinado y definido entre la Entidad Solicitante Peruana (ES) y la Entidad Ejecutora UK a fin de programar los hitos de manera sincronizada, esta fecha debe ser considerada en la elaboración del POP, a partir del cual se calcularán hasta los 36 meses de ejecución, sin posibilidad de ampliación.



2.3 Sobre las comunicaciones relacionadas a los Proyectos

Toda comunicación remitida a FONDECYT relacionada al proyecto, deberá ser dirigida a la responsable de la USM con atención al Monitor del Proyecto (MP), quién representa al FONDECYT en todas las coordinaciones y actividades relacionadas al seguimiento del proyecto.

Por parte de la ES, es el Investigador Principal Peruano y el Investigador Principal UK quienes deberán representar para las comunicaciones referidas al proyecto ante el FONDECYT y el MRC.

Las comunicaciones que estén relacionadas a cambios en el convenio o contrato, deberán ser dirigidas por las personas que firmaron dicho documento o el que haga sus veces.



2.4 Reconocimiento de gastos

Se podrán reconocer gastos luego de la firma del Contrato, en los casos en que la ES justifique el adelanto de la ejecución de actividades antes de recibir el 1er Desembolso del FONDECYT. Los gastos serán reconocidos a partir de la firma del contrato, hasta el final del plazo de ejecución del proyecto. La ES realizará los pagos desde la cuenta exclusiva del proyecto.

CAPITULO III : DEL SEGUIMIENTO Y MONITOREO DE LOS PROYECTOS

3.1 Seguimiento y monitoreo del cofinanciamiento otorgado

El proceso seguimiento y monitoreo del proyecto tiene por objetivo verificar el cumplimiento del avance de la ejecución del proyecto, lo planificado a los hitos, el avance de los indicadores del proyecto así como el uso de los recursos monetarios de acuerdo al Plan Operativo del Proyecto, que forma parte del Convenio o Contrato firmado con las Entidades Ejecutoras.

La metodología de monitoreo que realiza el FONDECYT diferencia tres niveles de objetivos con sus respectivos indicadores:

1. El Propósito u objetivo general del proyecto que evidencia a través de sus indicadores los resultados que se lograrán al finalizar la ejecución del proyecto.
2. Los objetivos específicos que a través de los indicadores de producto evidencian los logros que se buscan alcanzar con los diversos componentes del proyecto.
3. Las actividades que se llevarán a cabo a lo largo del proyecto y sus respectivos indicadores al hito, o momentos en la ejecución del proyecto que permiten verificar los avances en la ejecución del mismo.

A continuación presentamos un cuadro que muestra los niveles de objetivos, el nombre de los indicadores en cada nivel, el momento de su verificación y el instrumento de monitoreo.

Indicadores para Proyectos con Monitoreo Presencial

Objetivos del Proyecto	Indicadores del Proyecto	Cumplimiento	Formato de Monitoreo
Propósito o objetivo General del Proyecto	Indicadores de Resultado	Al culminar el proyecto o durante la ejecución.	Informe Final de Resultados (IFR) Presentación de Taller de difusión de resultados o visitas inopinadas
Objetivos Específicos	Indicadores de Producto	Durante y al culminar el proyecto.	Informe Técnico y Financiero (ITF) e Informe Final de Resultados (IFR).
Actividades	Metas de las Actividades	Durante el proyecto	Acta de seguimiento del proyecto. Informe Técnico y Financiero (ITF). Informe Final de Resultados (IFR)

3.2. Etapas del monitoreo de Proyectos

a) Taller de inducción

El Taller de Inducción de los Proyectos, es un taller donde se reunirá a los diversos ganadores de cada uno de los concursos. Este taller es informativo y permitirá establecer un contacto directo entre la ES, los funcionarios del FONDECYT, y representantes de las entidades asociadas (EA).



El objetivo de este taller es informar sobre los lineamientos de la gestión técnica, administrativa y financiera, así como capacitar en el manejo del Sistema Integrado de Gestión (SIG), para la ejecución del proyecto, a fin de facilitar y agilizar el proceso de ejecución y monitoreo técnico-financiero y responder a las consultas de los proyectos. En el Taller de Inducción es obligatoria la participación del Investigador Principal Peruano y Coordinador Administrativo de cada proyecto. Esta actividad es obligatoria para todos los proyectos, y podrá ser presencial o no presencial.

Previo al Taller de Inducción, los ganadores del concurso recibirán capacitación virtual para el manejo del SIG.

b) Primera visita de monitoreo

La primera visita de supervisión se realizará en la sede de la ES hasta los 60 días de firmado el Contrato o Convenio, la Entidad Ejecutora Británica podrá participar de manera presencial o no presencial, esta reunión tiene por objeto verificar sus competencias para la ejecución del proyecto, lograr un conocimiento a detalle del proyecto por parte del Monitor del Proyecto e inicie la elaboración /revisión conjuntamente con la Entidad Ejecutora del Plan Operativo del Proyecto – POP- que se conforma de la Programación Técnico-Financiera, Cuadro de Hitos, Formato de Presupuesto y Cronograma de Desembolsos.

En la primera visita, el Investigador Principal Peruano (IP) presentará al equipo peruano de la Entidad Solicitante y las Entidades Asociadas (EA), lo propio hará el Investigador Principal UK del equipo británico, así mismo se realizará una presentación del Proyecto contemplando: La problemática y justificación para el financiamiento, la hipótesis, los objetivos del proyecto con los respectivos indicadores y los resultados esperados. Así mismo, explicará la metodología de intervención y la estrategia para minimizar los riesgos del proyecto en términos de costo, tiempo y alcance.

Esta presentación tiene por objetivo que el Monitor Responsable logre un cabal conocimiento del proyecto, tenga claridad de los resultados del proyecto y de su programación técnica y financiera para un mejor acompañamiento.

Si por alguna razón y de manera no justificada las Entidades Solicitantes o Entidades Asociadas no se presentaron o no respondieron a los requerimientos para realizar la Primera Visita, el FONDECYT se reservará el derecho de no continuar con el apoyo para la ejecución del proyecto y gestionar la interrupción del mismo.

c) Visitas de monitoreo según la programación de hitos

Las visitas de monitoreo al proyecto serán realizadas por el MP u otro personal que la USM designe, esta se desarrollará en las instalaciones de la ES con la participación presencial de los miembros del equipo de las Entidades Asociadas (EA) y la participación presencial o no presencial de los miembros de la Entidad Ejecutora Británica. El monitoreo del proyecto podrá ser dirigido a un aspecto específico de la ejecución del proyecto o para verificar in situ los avances reportados por las ES. De ser necesario el FONDECYT contratará un experto en el tema para acompañar en la revisión técnica del proyecto.

La ES deben brindar facilidades de acceso e información necesaria para el monitoreo del proyecto durante la visita, y convocar a las EA para la visita anunciada. El no brindar las facilidades y/o acceso se entenderá como falta grave, y llevará a una calificación desaprobatória.

El FONDECYT podrá realizar visitas de monitoreo al proyecto anunciadas y no anunciadas para verificar los avances del proyecto. En ambos casos elaborará el Acta de la visita, la cual debe ser firmada por los participantes del monitoreo.



Las visitas de monitoreo incluirán los siguientes aspectos:

- Revisión de los avances técnicos y financieros del proyecto con la verificación de avance de los indicadores correspondientes al hito en ejecución.
- Evaluar el nivel de participación de los involucrados en la ejecución de los proyectos.
- Constatar el cumplimiento de recomendaciones realizadas en el último RITF.
- Revisar aleatoriamente la documentación contable original de los gastos realizados por el proyecto.
- Elaborar y firmar el Acta de visita incluyendo las recomendaciones a ser implementadas de carácter obligatorio.

d) Calificaciones de los proyectos

En base al resultado de cada ITF presentado por las Entidades Ejecutoras y los resultados de evaluación y calificación técnica del proyecto, el monitor encargado elaborará un Reporte al Informe Técnico y Financiero (RITF) el que contendrá el análisis de los avances del proyecto, observaciones y recomendaciones e incluirá una calificación del desempeño del proyecto. Las calificaciones emitidas por el MP en el RITF serán de tres tipos:

Aprobado cuando se ha tenido un cumplimiento mayor o igual al 70% de los indicadores planificados al hito en el POP. Aprobado con reserva, cuando ha habido alguna demora sustantiva y no se ha cumplido con algunos indicadores programados al hito de acuerdo a las metas e hitos planificados en el POP, que significan un cumplimiento mayor o igual al 50% y menor al 70%. Desaprobado cuando el cumplimiento de los indicadores programados al hito es menor al 50%, o se evidencia uso indebido de los fondos del proyecto.

El porcentaje de cumplimiento del proyecto se calculará de acuerdo al número de indicadores establecidos en cada hito, es decir el cumplimiento del número total de indicadores dará un cumplimiento del 100%, teniendo todos los indicadores programados el mismo peso.

El incumplimiento de algún indicador planificado deberá ser subsanado en el siguiente hito y excepcionalmente en el plazo establecido por el monitor, salvo en el caso de que sea imposible cumplirlo, en el cual se deberá adjuntar la justificación respectiva antes del final del proyecto.

Cabe señalar que una vez al año o en los casos necesarios el MP hará la visita con un especialista, cuyos insumos serán tomados para la realización del RITF respectivo.

3.3. Documentos de Gestión

a) El Plan Operativo del Proyecto (POP)

El Plan Operativo del Proyecto de la Entidad Solicitante (ES) constituye el principal instrumento de gestión del Proyecto y comprenderá un cronograma de actividades durante toda la duración del proyecto, pudiendo iniciarse y concluir en cualquier mes del año, de acuerdo a la fecha de inicio o fin del Proyecto. El POP detalla las metas físicas por actividades dentro de cada componente, precisando los costos y los indicadores de propósito, producto e hito. En este documento se pueden realizar modificaciones técnicas y presupuestales que coadyuven al cumplimiento de los resultados del proyecto, considerando los límites establecidos en las bases. Asimismo, contiene un cronograma de desembolsos y un cuadro de hitos. Se recomienda que los desembolsos e hitos se programen entre los meses de Mayo a Octubre.

El Plan Operativo del proyecto de la Entidad Ejecutora Peruana debe manejar las mismas fechas que la Entidad Ejecutora UK, de tal manera que coincidan el Inicio y la finalización del periodo de ejecución del Proyecto.

En el POP se identificará hitos según la naturaleza del proyecto (alcance y duración). Un hito es un momento en el tiempo en el que las Entidades Ejecutoras reportará los avances técnicos y financieros programados en el POP del proyecto

El POP y de ser el caso, sus versiones actualizadas, deben ser enviadas por la Entidad Solicitante (ES) al FONDECYT, debidamente firmado por el IP peruano y por el Monitor del FONDECYT.



b) Línea de base del proyecto

Cada proyecto deberá elaborar la línea de base con indicadores en las dimensiones establecidas (recursos humanos, investigación / innovación, bibliométrico, económico y ambiental) para determinar la situación inicial del proyecto para que éstos puedan ser comparados posteriormente con la línea de salida que será medida a la finalización de la ejecución del proyecto.

La línea de base del proyecto, debe ser presentada a más tardar al final del primer hito. Las Entidades Ejecutoras deberán registrar los indicadores iniciales requeridos por FONDECYT en el formato que para éste fin les será proporcionado por el Monitor y debe ser enviado adjunto en el primer ITF.

c) Informes de la ejecución del proyecto

Manejo de los aspectos financieros del proyecto

Los recursos monetarios que aporta el FONDECYT sólo podrán ser utilizados para financiar actividades y acciones del Proyecto sujetándose al cumplimiento de las obligaciones estipuladas en el convenio y/o contrato suscrito entre FONDECYT y las Entidades Ejecutoras, en concordancia con los objetivos del Proyecto y su respectivo Plan Operativo del proyecto (POP) aprobado por el monitor, así como lo establecido en esta guía y en el punto 2.4 "Financiamiento" de las bases.

Los comprobantes deberán ser emitidos como fecha límite en la fecha correspondiente al último hito.

Los gastos de la cuenta y los impuestos a las operaciones financieras, si hubiese, deben ser asumidos por la ES, excepto los indicados en las bases.

En caso que la cuenta bancaria: i) se cancele por falta de fondos, ii) se realicen cambios de nómina de firmantes; u otro, la ES deberá realizar los trámites correspondientes a fin de no afectar la liquidez financiera del Proyecto.

En caso la ES se trate de una Institución Pública los aportes efectuados por ésta, y por las entidades asociadas, deberán ser efectuados de acuerdo a su normatividad y controles vigentes.

Los aportes monetarios tienen el mismo tratamiento de recursos destinados y no podrán ser empleados en usos distintos a los convenidos en el convenio o contrato. De no poder cumplir con éste procedimiento la ES deberá informar al MP a fin de justificar la modalidad de aporte monetario.

La ES está obligada a contratar a una institución auditora o tener un sistema de control interno que anualmente realice una auditoría contable-financiera de todos los gastos incurridos en el proyecto, cuyo reporte formará parte del ITF y deberá ser presentada a FONDECYT en el siguiente hito al año auditado.

Todos los comprobantes de pago que se rindan como gasto en el marco de la ejecución del Proyecto, deberán ser emitidos a nombre de la ES.

Los aportes no monetarios deben ser evidenciados con la presentación de declaraciones juradas de valorización del uso de equipos y bienes, así como la prestación de servicios, considerando los importes y valores referenciales utilizados al momento de realizar el cálculo en la elaboración del proyecto y la proporción correspondiente a lo aportado dentro del periodo del hito. Dichos documentos deberán ser suscritos por el prestador de servicio y en el caso de equipos y bienes por el IP en representación de la ES.

Es obligación de la ES mantener los estados de cuenta de la cuenta bancaria o de la cuenta única del Tesoro Público para el caso de entidades Públicas y los originales de los comprobantes de pago, declaraciones juradas (para el caso de los aportes de la alianza) y documentos de los procesos para la adquisición de bienes y servicios que sustenten los gastos reportados, en los archivos de la ES hasta el cierre del Proyecto y por un período adicional no menor a 10 años. Estos podrán ser requeridos en cualquier momento por FONDECYT y/o por las firmas auditoras que FONDECYT designe. Para ello, cada proyecto deberá contar con un archivo interno que contenga copia de los documentos de sustento, para fines de auditoría externa.



Cuando se trate del ITF del último hito, la ES deberá realizar la liquidación financiera del 100% de los recursos usados para la ejecución del proyecto. Posteriormente, no será reconocido ningún gasto a cargo de los recursos de financiamiento y/o cofinanciamiento.

Los saldos no utilizados aportados por FONDECYT y consignados en el último ITF, deberán ser devueltos a la cuenta institucional del FONDECYT, según el procedimiento establecido. El Investigador Principal Peruano deberá asegurarse de que los fondos no utilizados sean devueltos a la cuenta institucional de FONDECYT y adjuntar en el informe financiero el comprobante de depósito del mismo.

Adicionalmente, en cualquier momento que FONDECYT considere necesario remitirá a un monitor financiero quien deberá efectuar una revisión de la documentación sustentatoria de los gastos realizados en el marco de la ejecución del Proyecto, para lo cual la ES deberá brindar todas las facilidades.

La ES supervisará el cumplimiento de los derechos y obligaciones de las entidades asociadas y/o colaboradoras (EA) y asumirá la responsabilidad de subsanar, de corresponder, la deserción de alguna de éstas reemplazando con una nueva entidad o distribuyendo o asumiendo los compromisos respectivos entre las entidades restantes.

Informes Técnico-Financieros (ITF) y Reportes del proyecto

El Informe Técnico-Financiero (ITF) da cuenta del cumplimiento de los indicadores de Hito. Es presentado por la ES a través del SIG a más tardar en la fecha programada de cumplimiento del Hito aprobado en el Plan Operativo.

El IP tiene la responsabilidad de representar a las Entidades Ejecutoras para la presentación de dicho documento. El ITF se compone de dos partes, el informe técnico (IT) y el informe financiero (IF).

En el IT deberá precisar el cumplimiento de los indicadores al hito programados, de los indicadores de producto y propósito, se presentará a través del SIG, considerando las partidas presupuestales establecidas en las bases, cuyo reporte físico deberá estar firmado por el Investigador Principal Peruano.

El IF contendrá la rendición de gastos monetarios y no monetarios efectuados en el periodo, depósitos efectuados a la cuenta bancaria del proyecto, y los saldos monetarios por rubro financiable. El IF se presentará a través del SIG, cuyo reporte físico deberá estar firmado por el Investigador Principal Peruano y el contador de la ES.

Constituye un requisito obligatorio para recibir el siguiente desembolso de FONDECYT el encontrarse al día con la entrega de los ITF contando con la conformidad respectiva.

En el caso de que el Monitor encuentre observaciones al ITF, se dará un plazo máximo de hasta 45 días calendarios, para que el subvencionado levante las observaciones.

Luego de aprobado el ITF, el Subvencionado tiene hasta 15 días hábiles para la presentación del ITF en versión física con las firmas respectivas, y deberá ser ingresado por mesa de partes.

En caso de que el ITF físico no sea presentado formalmente por mesa de partes, o en caso de que el subvencionado no levante las observaciones al ITF vencidos los plazos, la USM variara una carta simple al subvencionado, de no obtenerse respuesta, el FONDECYT procederá a enviar una carta notarial dirigida al representante legal de la ES solicitando su atención.

Si la ES no cumple con el levantamiento de observaciones o no envía el ITF aprobado en versión física a FONDECYT en el periodo otorgado en la carta notarial, la Dirección Ejecutiva enviará una nueva Carta Notarial comunicando al Representante Legal de la ES, la resolución del Contrato/Convenio y solicitará la devolución total o parcial de los recursos financieros desembolsados.



Informe Final de Resultados (IFR)

El Informe Final de Resultados (IFR) es el documento que elabora la ES para informar sobre los resultados logrados en el proyecto. En el último hito del proyecto, la ES deberá iniciar la preparación del IFR de acuerdo al formato del SIG, para lo cual el MP dará la información e indicaciones necesarias a la ES. El IFR debe ser presentado a FONDECYT hasta 15 días calendario contados a partir de la fecha de aprobación del Informe Técnico Financiero del último hito.

En caso de que hubiera observaciones al IFR por parte del monitor, se dará un plazo máximo de 15 días calendarios para que el subvencionado levante las observaciones.

El plazo para la presentación en físico del IFR aprobado por el monitor y firmado por el subvencionado será de hasta 15 días hábiles, desde la aprobación y deberá ser ingresado por mesa de partes.

La no presentación del IFR dentro del plazo establecido tendrá lugar a:

- Recomendar la ejecución de la carta fianza en el caso de una Institución Privada.
- Recomendar la inclusión de la ES en el RENOES ² o el que haga sus veces.

Reporte sobre el Informe Final de Resultados (RIFR)

La USM emitirá un RIFR tomando como base la información proporcionada por la ES, asimismo calificará la gestión técnica y financiera de la ES. En el caso de una evaluación satisfactoria se emitirá un oficio formalizando el cierre del proyecto y autorizando el recojo de la Carta Fianza de corresponder.

Indicadores de propósito

Los indicadores de propósitos que deben ser incluidos en el IFR del proyecto tienen que estar alineados a la matriz de resultados determinados para la Ciencia, Tecnología e Innovación (CTI). La matriz de resultados, representa un conjunto de indicadores cuantitativos, llamados también indicadores de propósito, que permiten informar sobre los resultados obtenidos en proyectos y programas de CTI promovidos por CONCYTEC / FONDECYT. Para el caso de proyectos deberán estar alineados a uno o más de los siguientes indicadores:

- 1) Un grupo de investigación peruano funcionando ¹
- 2) Al menos un (1) artículo científico aceptado y un (1) artículo científico adicional presentado para publicación en revista indizadas en Scopus o Web of Science.
- 3) Al menos una (1) tesis de posgrado sustentada y aprobada en alguna universidad peruana.
- 4) Al menos un (1) evento público de difusión al cierre de la subvención, el cual será dirigido a los usuarios finales de los resultados del proyecto (por ejemplo, gobierno, autoridades regionales o locales, empresas, comunidades locales, entre otras).
- 5) Al menos una (1) ponencia en eventos científicos de alcance internacional.

De forma opcional, se espera que logre lo siguiente:

- 6) Una (1) solicitud de patente de invención o modelo de utilidad.
- 7) Elaboración de un documento breve de política (policy brief) considerando la evidencia generada.

Además de estos indicadores, la ES deberá determinar el cumplimiento de los indicadores de producto, los cuales representan los logros que se conseguirán en los componentes de un proyecto.

3.4 Cambios en la ejecución del proyecto

Cualquier requerimiento de cambio (tiempo, costo, gastos) durante la ejecución del proyecto que coadyuve al cumplimiento de los resultados debe solicitarse con anticipación y ser aprobados por FONDECYT a través de una comunicación escrita (e-mail, carta, oficio, etc.)



La reasignación de saldos dentro de las mismas partidas presupuestales pueden ser realizados directamente sin necesidad de aprobación del Monitor, siempre y cuando estos cambios no afecten lo estipulado en los documentos que norman lo indicado en el proyecto y no afecten el desarrollo de otras actividades.

La reasignación de saldos de una partida presupuestal a otra, será permitida hasta un máximo de 20% de la partida de destino, siempre que cumplan con los límites por partida presupuestal que se indican en las Bases del concurso. El pedido puede hacerse vía correo electrónico y a través del SIG con el sustento correspondiente y será válida cuando tenga la aprobación del monitor a través del SIG o por correo electrónico.

En caso de requerir ampliación del plazo del hito (excepto del Hito final) deberá solicitarlo por escrito al menos 7 días antes del cumplimiento del hito. El pedido puede hacerse vía correo electrónico y a través del SIG con el sustento correspondiente y será válida cuando tenga la aprobación del monitor a través del SIG o por correo electrónico.

¹ El funcionamiento efectivo de los grupos de investigación será verificado por constancia emitida por una autoridad competente de la institución a la que pertenece cada grupo (Entidades Solicitantes o Asociadas), una vez que culmine el periodo de ejecución del proyecto

² Resolución de Dirección Ejecutiva N° 088-2017-FONDECYT-DE, de fecha 10 de agosto del 2017. Registro de no elegibles RENOES

3.5 Desembolsos

El monto del primer desembolso lo establece FONDECYT al momento de la suscripción del convenio o contrato con la ES, y se hace efectivo al cumplimiento de las condiciones previstas en las bases de la convocatoria.

El primer desembolso será establecido por FONDECYT a la firma del Convenio/Contrato.

Los desembolsos a partir del segundo desembolso, serán realizados de acuerdo a lo establecido en el Plan Operativo del Proyecto (POP), previa presentación del ITF y se tomará en cuenta las siguientes consideraciones:

1. La emisión del Reporte Técnico Financiero al ITF y la calificación obtenida.
2. Si la ejecución del proyecto obtiene como calificación dos o más desaprobados consecutivos por hito en los RITF, la USM deberá comunicar el riesgo de continuidad del proyecto. Si el riesgo persiste, presentará el caso al FONDECYT a fin de considerar la suspensión y/o cancelación del proyecto.
3. Se considera como fecha de envío del ITF por parte del Subvencionado la fecha en la cual este envía el ITF completo en el SIG.
4. El plazo de ampliación para la presentación del ITF del Hito correspondiente, por parte del Subvencionado, será definido a criterio del monitor, siempre que no afecte el cumplimiento de los siguientes Hitos en las fechas establecidos. El Subvencionado tiene plazo para solicitar esta ampliación hasta la fecha de culminación del Hito, se considera como válida la solicitud mediante correo electrónico al monitor. Se podrá suspender el desembolso cuando un Proyecto no haya presentado su ITF por más de 45 días después de cumplido el hito sin expresión de causa.
5. El plazo para el levantamiento de observaciones realizadas al ITF por parte del Subvencionado, será no mayor de 45 días calendarios. El Monitor comunicará mediante correo electrónico al Subvencionado las observaciones y el plazo establecido para levantarlas.
6. FONDECYT podrá solicitar de cortes financieros excepcionales cuando observe un reiterado retraso en el envío de los informes o una baja ejecución del gasto previsto en sucesivos periodos.
7. Para instituciones privadas, la ES tiene la obligación de mantener vigente una carta fianza a favor del FONDECYT a efecto de garantizar los desembolsos del proyecto, en el caso de los proyectos cuya naturaleza demande mayor tiempo del establecido de la culminación del convenio para la entrega de resultados técnicos, la ES ampliará dicho plazo de vigencia hasta por 60 días calendario. En el caso de instituciones del estado no es obligatoria la emisión de esta carta fianza. La ES deberá solicitar la devolución de la carta fianza a la recepción del RIFR.



3.6 Ampliación de periodo del Proyecto

El plazo de ejecución del proyecto no podrá extenderse más allá del periodo establecido en el convenio. El periodo de vigencia del convenio podrá extenderse de manera excepcional a solicitud de la ES. En caso participen entidades asociadas o colaboradoras dicha solicitud deberá ser firmada también por el representante de la(s) EA (s).

Esta solicitud se deberá presentar por escrito por lo menos 7 días calendario antes de la fecha de término de vigencia del convenio, debidamente sustentada. Todos los gastos adicionales que irrogue la extensión del plazo y que no estén contemplados en el presupuesto aprobado del proyecto serán por cuenta de la ES, o EA, en caso de darse la ampliación deberá también ampliarse el periodo de vigencia de la carta fianza de ser el caso.

El MP deberá evaluar la pertinencia de la solicitud de extensión, y presentará en un Informe las causas del retraso y/o las razones que ameritan la extensión de ser el caso. La ampliación de la vigencia está sujeta a la suscripción de una adenda al convenio o contrato suscrito entre el FONDECYT y la entidad ejecutora.

CAPITULO IV: CIERRE DEL PROYECTO

El cierre técnico y financiero del proyecto por parte de la USM se dará con la remisión del RIFR dando conformidad al IFR, documento que será remitido a la ES mediante oficio emitido por la USM.

4.1 Propiedad intelectual y derechos de autor

FONDECYT y la ES en representación de las Entidades Asociadas, convienen en respetar los dispositivos legales vigentes en el país, los acuerdos y convenios internacionales suscritos por el Perú, y los acuerdos específicos que se suscriban en los convenios o contratos referente a los derechos de propiedad intelectual sobre los bienes tecnológicos, conocimientos, métodos, técnicas, metodologías de servicios y cualquier otro producto que se genere durante y como resultado de la ejecución del Proyecto.

Todas las publicaciones y/o eventos de divulgación derivados del proyecto deben reconocer a "CONCYTEC / FONDECYT", LA EMBAJADA BRITANICA, EL MRC Y EL FONDO NEWTON como entidad financiadora / auspiciadora, y para ello las entidades ejecutoras deberán utilizar los logos que serán remitidos por el MP.

FONDECYT se reserva el derecho de publicar los resultados de las investigaciones realizadas de acuerdo a la Ley de Repositorio N° 30035.

Si la propuesta incluye el uso de recursos de la biodiversidad, los seleccionados deberán comprometerse a iniciar el proceso de solicitud de la autorización de investigación antes del Hito 1, con o sin colecta y/o contrato de acceso a los recursos genéticos, de acuerdo a los procedimientos y normativas de las Autoridades Sectoriales de Administración y Gestión.

4.2 Presentaciones públicas del Proyecto

La ES están obligadas a difundir en todas sus actividades la participación de "CONCYTEC / FONDECYT" como entidad co-financiadora / auspiciadora del proyecto, mediante paneles, banner, entre otros, en los que se incluya los logos remitidos por FONDECYT.

La ES deberá realizar una presentación pública de resultados al finalizar el proyecto. Para ambas presentaciones se debe invitar a la comunidad científica y empresarial de la región o el país y reconocer las funciones de las entidades colaboradoras, y a la vez hacer participe a CONCYTEC y FONDECYT.

4.3 Obligaciones del subvencionado:

Se establece como obligaciones del subvencionado, lo siguiente:



- I. Cumplir las normas establecidas por FONDECYT que se apliquen a la ejecución de las actividades.
- II. Con los fondos recibidos, cubrir estrictamente las partidas presupuestales financiadas indicadas en las Bases, dentro del periodo de ejecución de actividades.
- III. Proporcionar datos fidedignos desde la postulación del proyecto.
- IV. Garantizar el cumplimiento de todo lo estipulado en el contrato y demás lineamientos de la convocatoria.
- V. Informar a FONDECYT de manera oportuna en caso surja algún problema que afecte el cumplimiento de lo estipulado en el convenio o contrato, para lo cual el subvencionado comunicará a FONDECYT adjuntando los documentos sustentatorios del caso. Esta solicitud de modificación no implicará incremento del cofinanciamiento otorgado por FONDECYT.
- VI. Presentar los Informes Técnico Financieros (ITF) de Hito a través del SIG y en físico.
- VII. Presentar el Informe Final de Resultados (IFR) a través del SIG y en físico.
- VIII. Devolver a FONDECYT los montos no rendidos, mediante depósito o transferencia en cuenta bancaria indicada por el área de tesorería de FONDECYT o directamente en la caja de FONDECYT, de correspondencia.
- IX. Ejecutar por lo menos una actividad de difusión del conocimiento adquirido según lo propuesto en la postulación.
- X. Hacer constar en forma y lugar visibles el patrocinio de CONCYTEC/FONDECYT en toda documentación relacionada a las actividades del proyecto, incluyendo afiches, trípticos, notas de prensa y avisos periodísticos, memorias o resúmenes de ponencias, posters, etc.
- XI. Presentar disponibilidad para entrevistas, presentaciones públicas a invitación del CONCYTEC/FONDECYT o registro de material de difusión basado en su experiencia en este concurso durante la vigencia del convenio.
- XII. Si la propuesta incluye el uso de recursos de la biodiversidad, los seleccionados deberán comprometerse a iniciar el proceso de solicitud de la autorización de investigación antes del Hito 1, con o sin colecta y/o contrato de acceso a los recursos genéticos, de acuerdo a los procedimientos y normativas de las Autoridades Sectoriales de Administración y Gestión.
- XIII. Cuando se realice investigación con seres humanos los postulantes deben comprometerse a que el estudio sea aprobado por un comité de ética e investigación, ya sea institucional o de otro lugar, y también deben obtener un consentimiento informado de sus pacientes de acuerdo a los procedimientos y normativas correspondientes de nuestro país. El IP debe someter el proyecto de investigación al Comité de Ética correspondiente, y enviar al FONDECYT la carta de aprobación hasta el primer hito.
- XIV. Mantener informado al FONDECYT en caso hubiera algún cambio en la información de la persona de contacto.
- XV. Los aspectos referentes al tema administrativo podrán seguir las normas y políticas de la ES respetando los lineamientos establecidos en las bases y la presente Guía.
- XVI. Comunicar oportunamente a FONDECYT sobre cualquier cambio técnico o financiero, que sea necesario realizar durante la ejecución del proyecto para su aprobación.
- XVII. Debe presentar los Informes Técnico-Financieros (ITF) y Reportes del proyecto dentro de los plazos señalados en el punto "3.3 Documentos de Gestión".
- XVIII. En caso de realizar modificaciones al Plan Operativo del Proyecto, se deben mantener las versiones con las firmas actualizadas.

Aspectos a tener en cuenta por el subvencionado en relación a sus obligaciones

Cumplidos los plazos de entrega del PO y/o IFR, el monitor realizará el requerimiento vía correo electrónico, de no obtener respuesta solicitará a la responsable de la USM la remisión de una carta simple, de no obtenerse respuesta se solicitará la emisión de la Carta Notarial.

4.4 Incumplimiento

- a) Al incumplimiento de cualquiera de las obligaciones estipuladas en esta guía y las bases, FONDECYT comunicará al IP o a la ES, a fin de resolver el contrato/convenio de acuerdo a sus lineamientos.
- b) El incumplimiento de las obligaciones puede acarrear consecuencias adicionales como la inclusión en el RENOES del FONDECYT o el que hiciera de sus veces.
- c) FONDECYT se reserva el derecho de solicitar la devolución total o parcial de la subvención otorgada.



d) El FONDECYT puede resolver el Convenio/Contrato a solicitud de la ES siempre y cuando devuelva el íntegro del monto otorgado como cofinanciamiento más los intereses de Ley.

4.5 Reconocimiento y uso de la marca institucional

La ES está obligada a reconocer y difundir en todas sus actividades que CONCYTEC y FONDECYT son la fuente de cofinanciamiento del proyecto. En ese sentido, la ES debe hacer constar en forma y lugar visible el auspicio de CONCYTEC y FONDECYT, siguiendo los lineamientos de la imagen corporativa señalados por el FONDECYT, quienes facilitarán a cada IP los logotipos y manual de marca para el correcto y adecuado uso de la marca institucional.

El reconocimiento y logos del CONCYTEC y FONDECYT se utilizará de manera obligatoria, en las siguientes situaciones:

- En los artículos científicos, tesis y libros publicados, donde se debe incorporar un párrafo de agradecimiento, indicando el número de convenio o contrato.
- En los equipos y bienes duraderos adquiridos con el cofinanciamiento, indicando en forma visible una etiqueta que muestre que dichos bienes forman parte del proyecto.
- En los letreros, rótulos o anuncios ubicados en los lugares o ambientes donde se lleva a cabo el proyecto de investigación, junto con la mención del título del proyecto y el número de convenio o contrato.

Cualquier otra forma de publicidad sobre el proyecto en medio digital o impreso debe ser informado a la USM y al MP responsable con copia al área encargada de comunicaciones del FONDECYT que es encargada de la imagen institucional.

4.6. Línea de salida del Proyecto

Con el mismo formato, la misma métrica y de procedimientos de elaboración de la línea de base, se elaborará la línea de salida con indicadores, y tiene el propósito de contrastar la situación inicial y final de los indicadores en las dimensiones de recursos humanos, investigación / innovación, bibliométrico, económico y ambiental. La línea de salida del proyecto debe ser presentada junto con el último Hito del proyecto. La ES deberá registrar los indicadores finales requeridos por FONDECYT en el formato que para este fin le sea proporcionado.

4.7 Transferencia de equipos y bienes duraderos

Al cierre del Proyecto la ES deberá adjuntar el documento legal de transferencia de los equipos y bienes duraderos, y los acuerdos establecidos con la EA, si fuera el caso. El documento legal de transferencia formará parte del expediente de cierre del Proyecto.

El Área de Bienes o Control Patrimonial o la que corresponda de la ES, remitirá copia del Inventario Físico de los Bienes Muebles al FONDECYT, a más tardar a los seis (6) meses después del cierre del proyecto.

